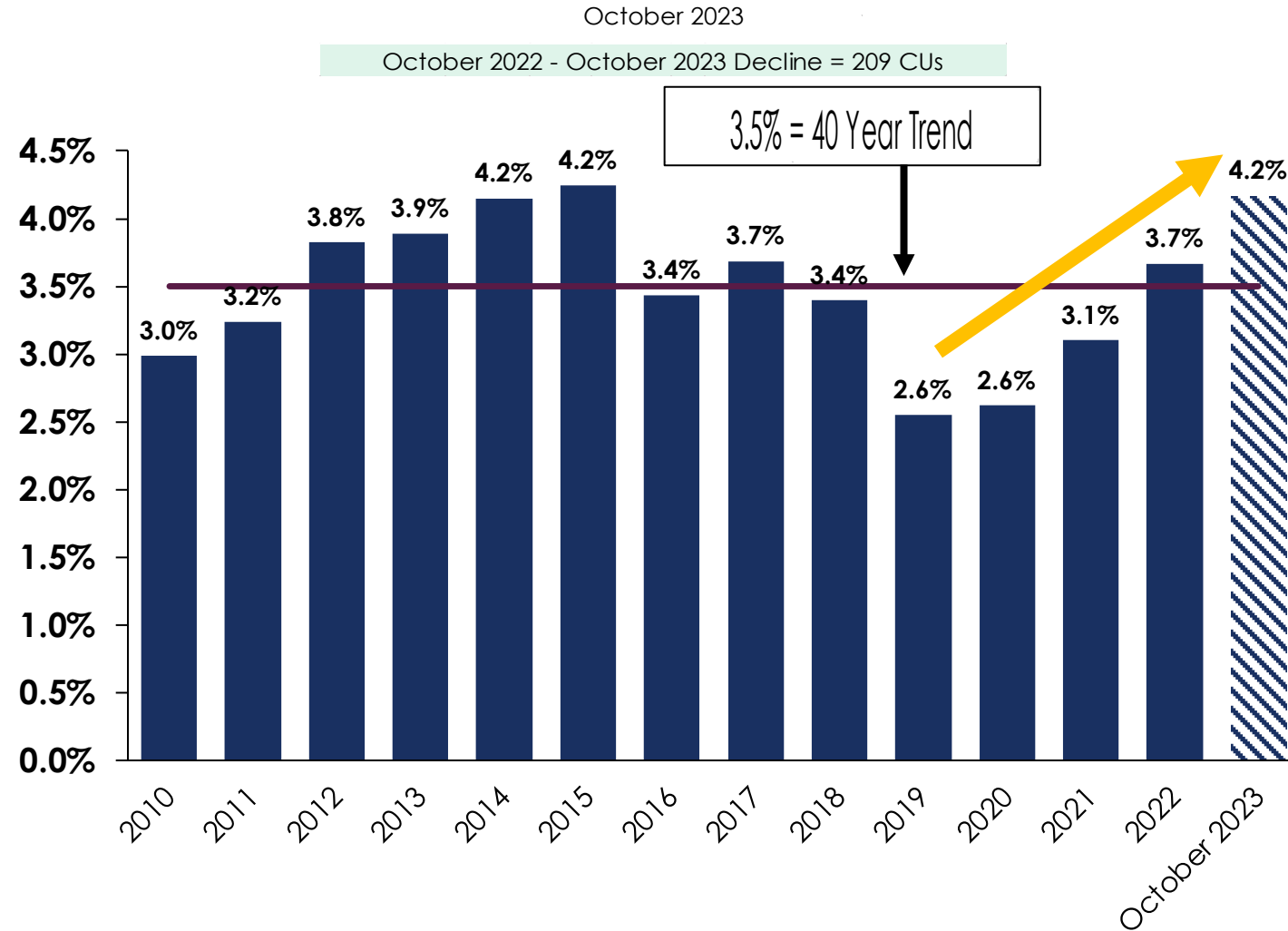


Economic and Credit Union Update

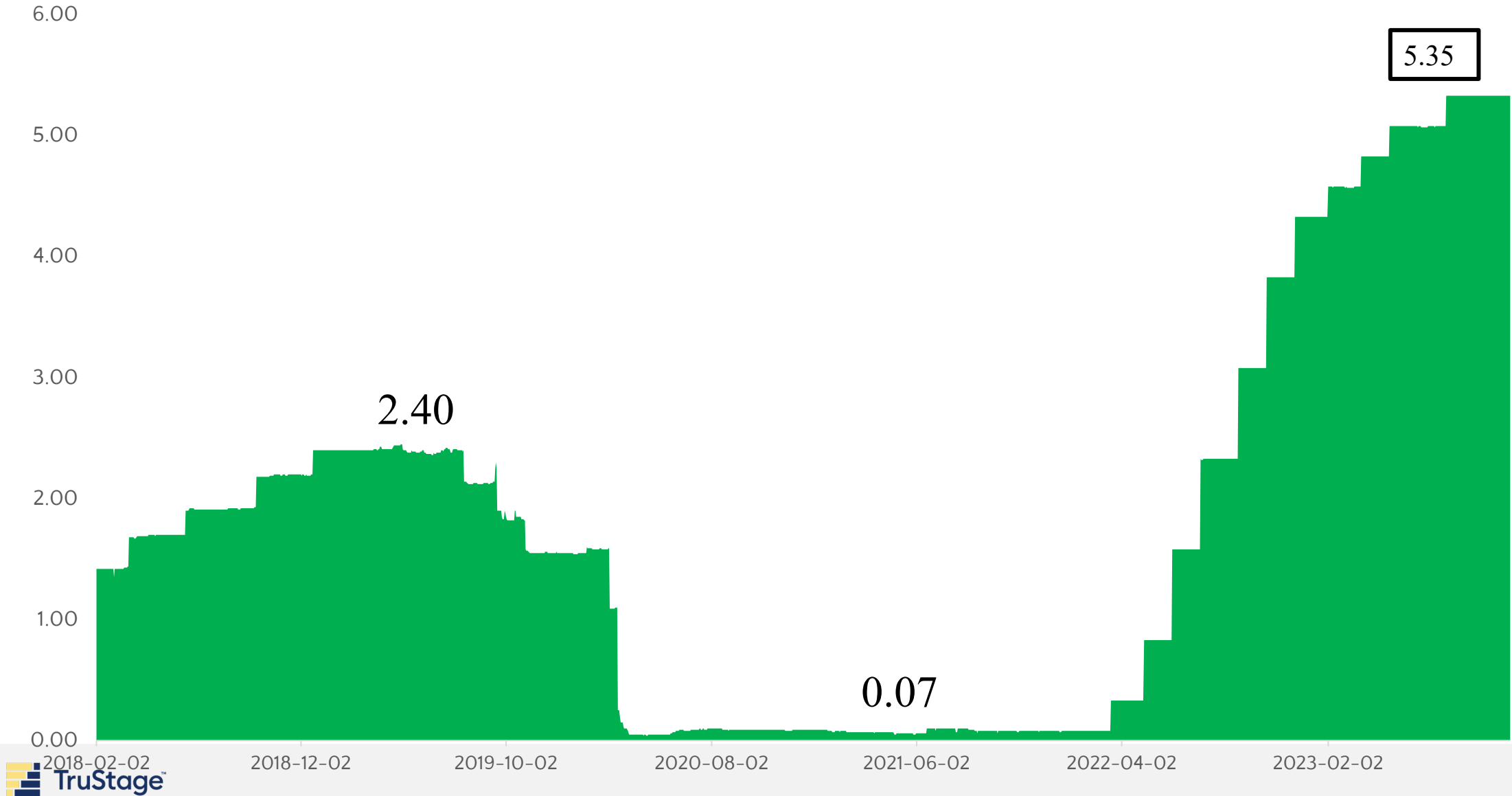
December 2023

If you have any questions or
comments, please contact:
Steven Rick, Chief Economist
Trustage - Economics
800.356.2644, Ext. 665.5454
Steve.rick@TruStage.com

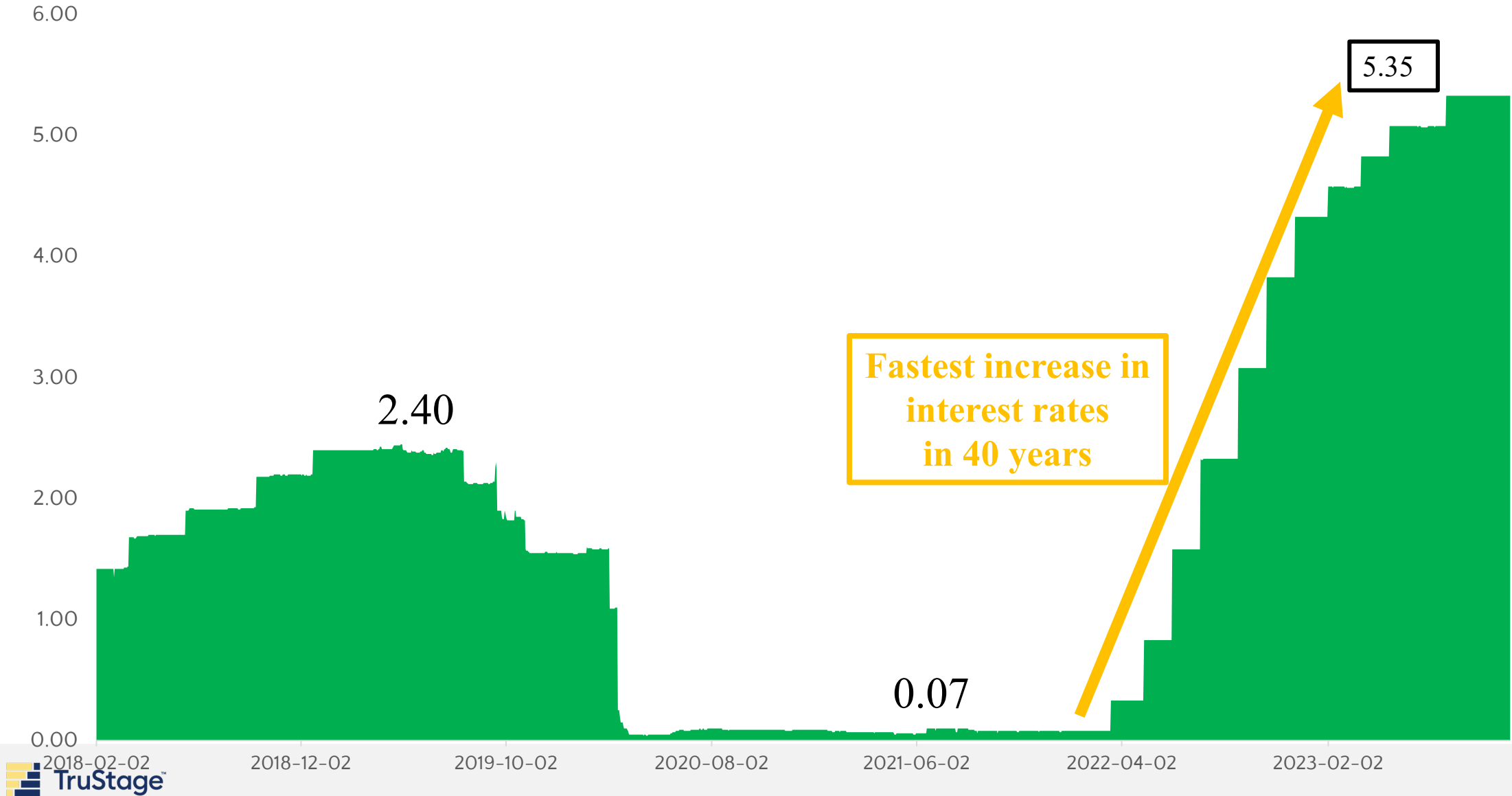
Annual Contraction Rate in CU Marketplace



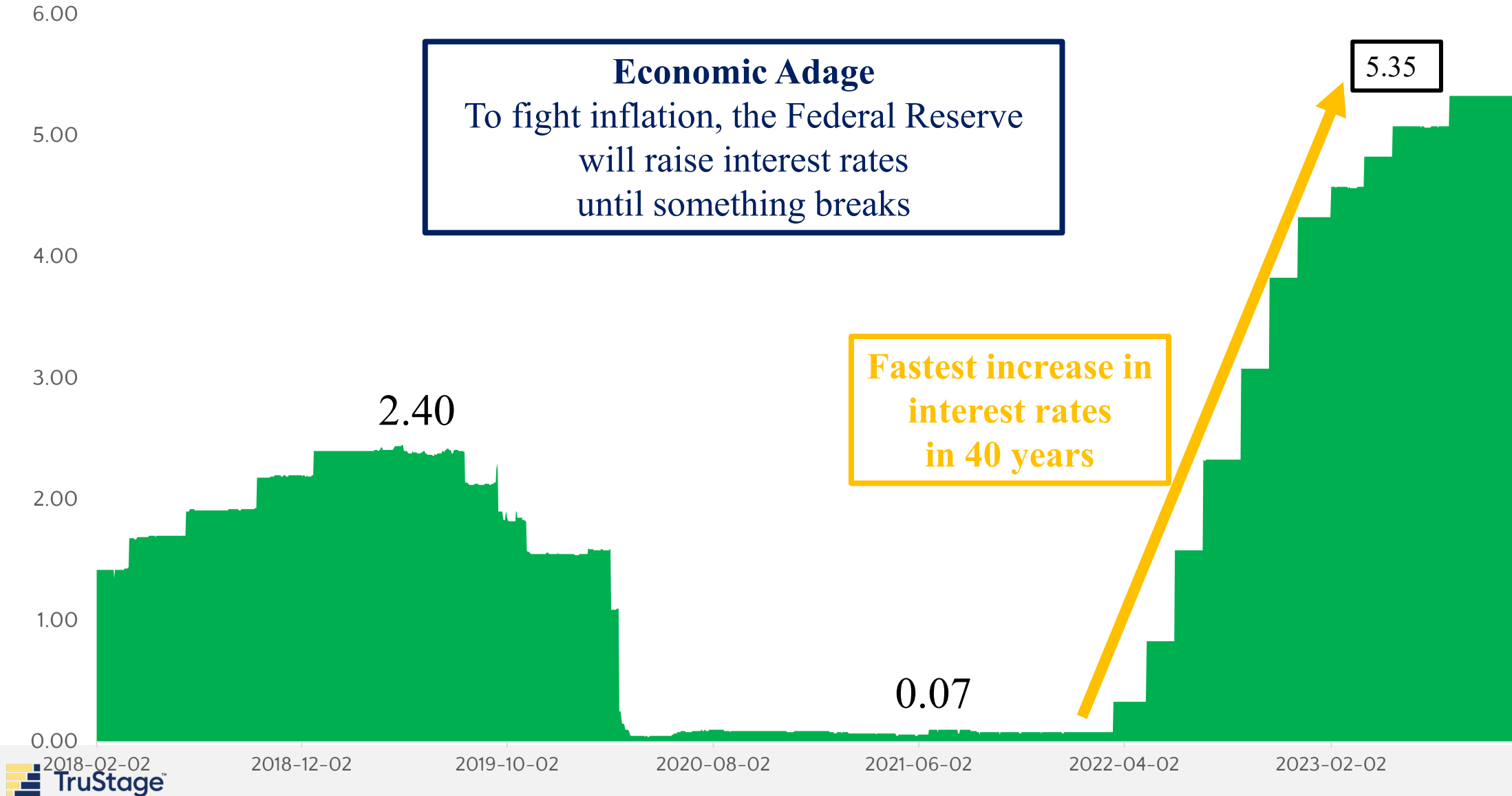
Federal Funds Rate, 2018 - 2023



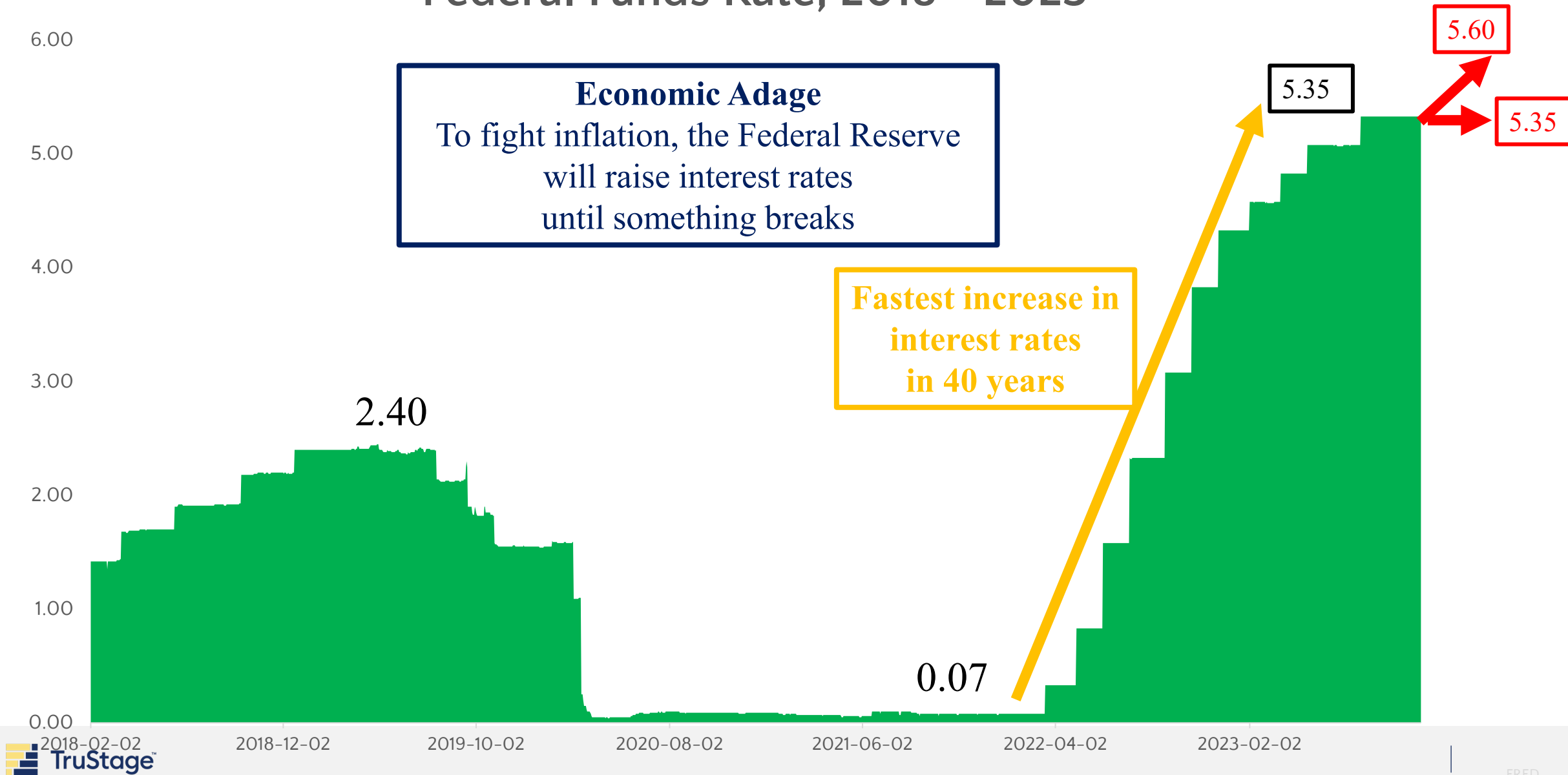
Federal Funds Rate, 2018 - 2023



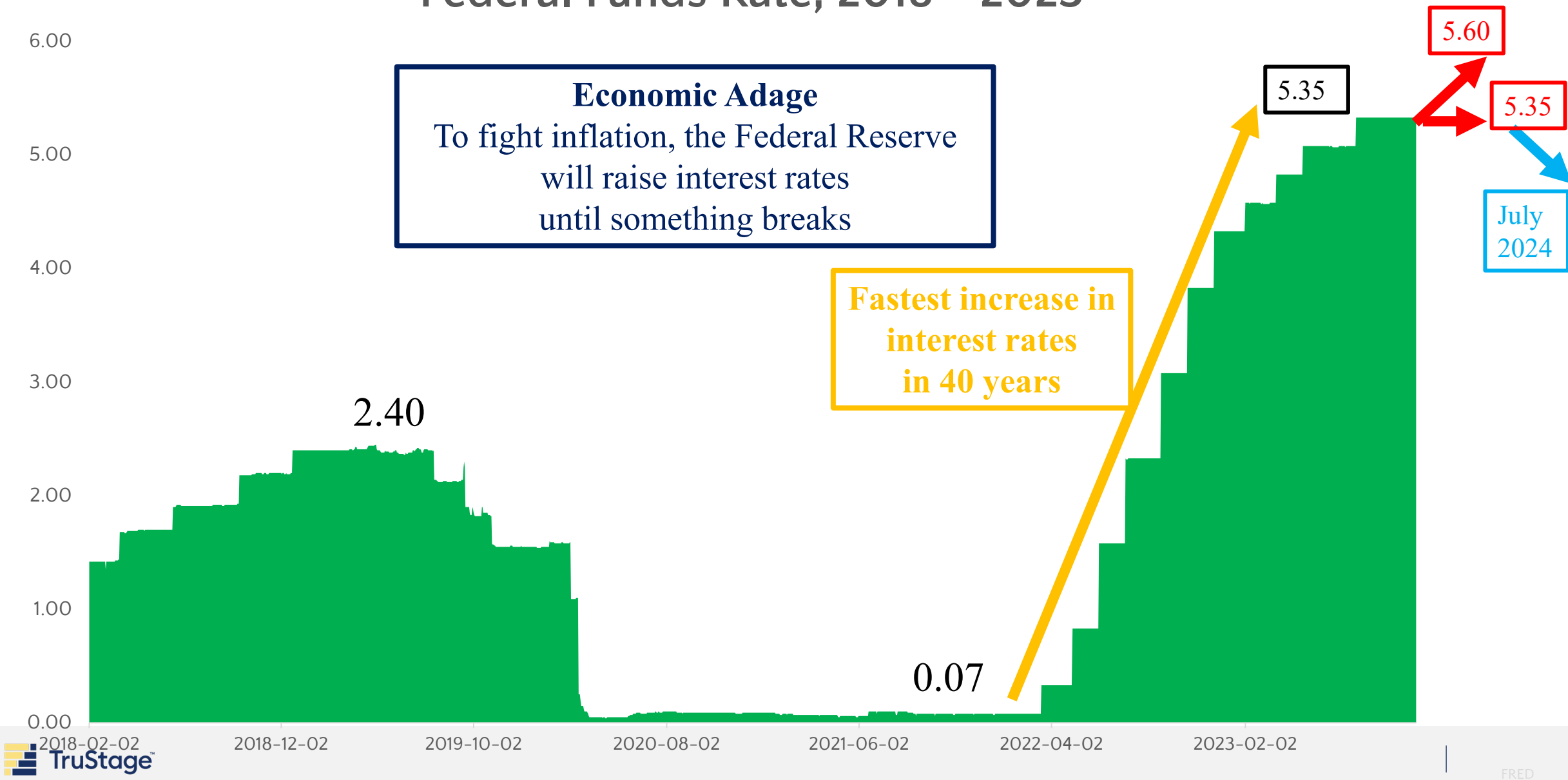
Federal Funds Rate, 2018 - 2023



Federal Funds Rate, 2018 - 2023



Federal Funds Rate, 2018 - 2023



Economic Adage
To fight inflation, the Federal Reserve
will raise interest rates
until something breaks

To fight inflation, the Federal Reserve
will raise interest rates
until something breaks

Fastest increase in interest rates in 40 years

2.40

0.07

5.35

5.60

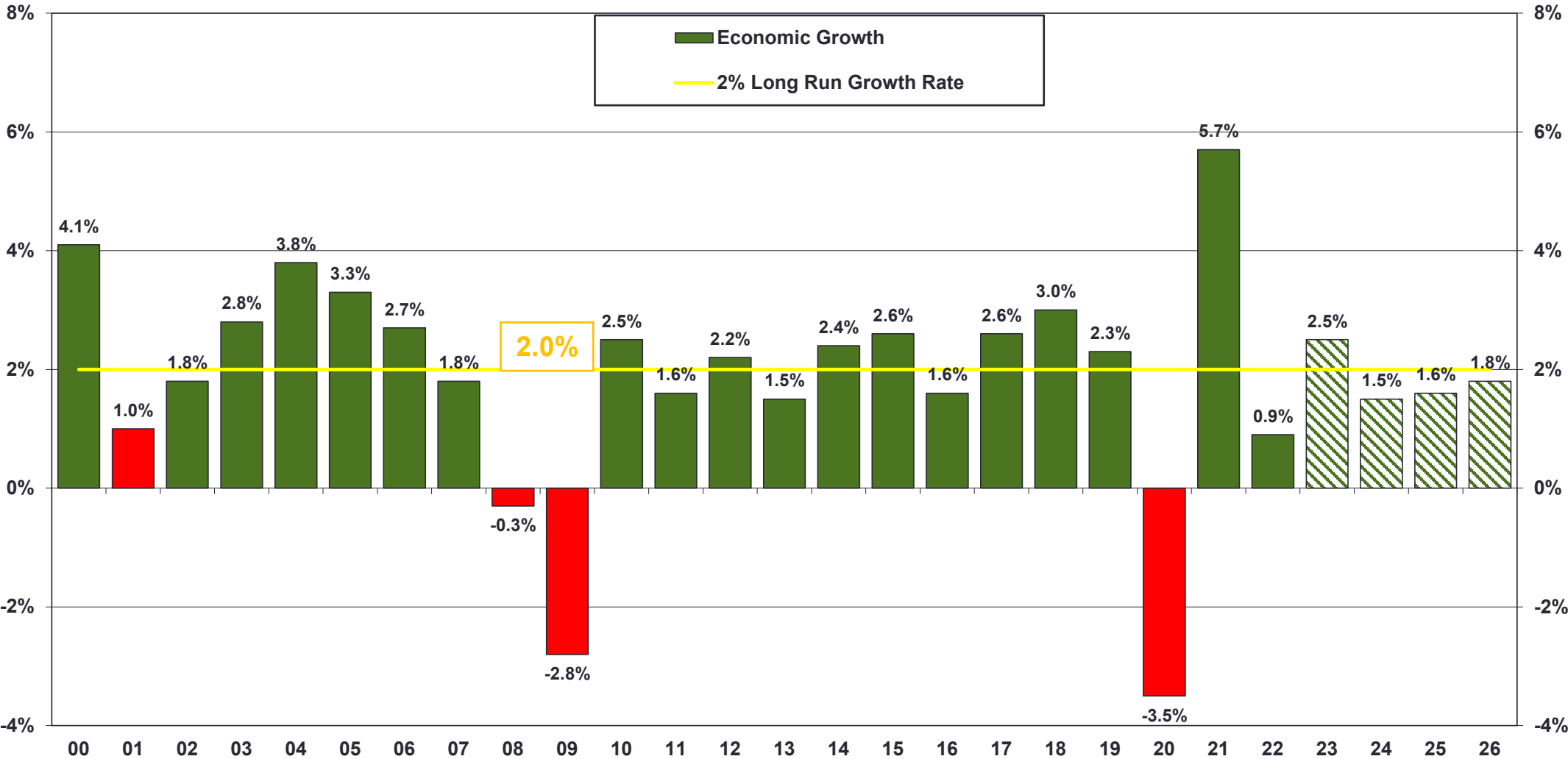
5.35

July
2024

2.5%
Long Run
Target

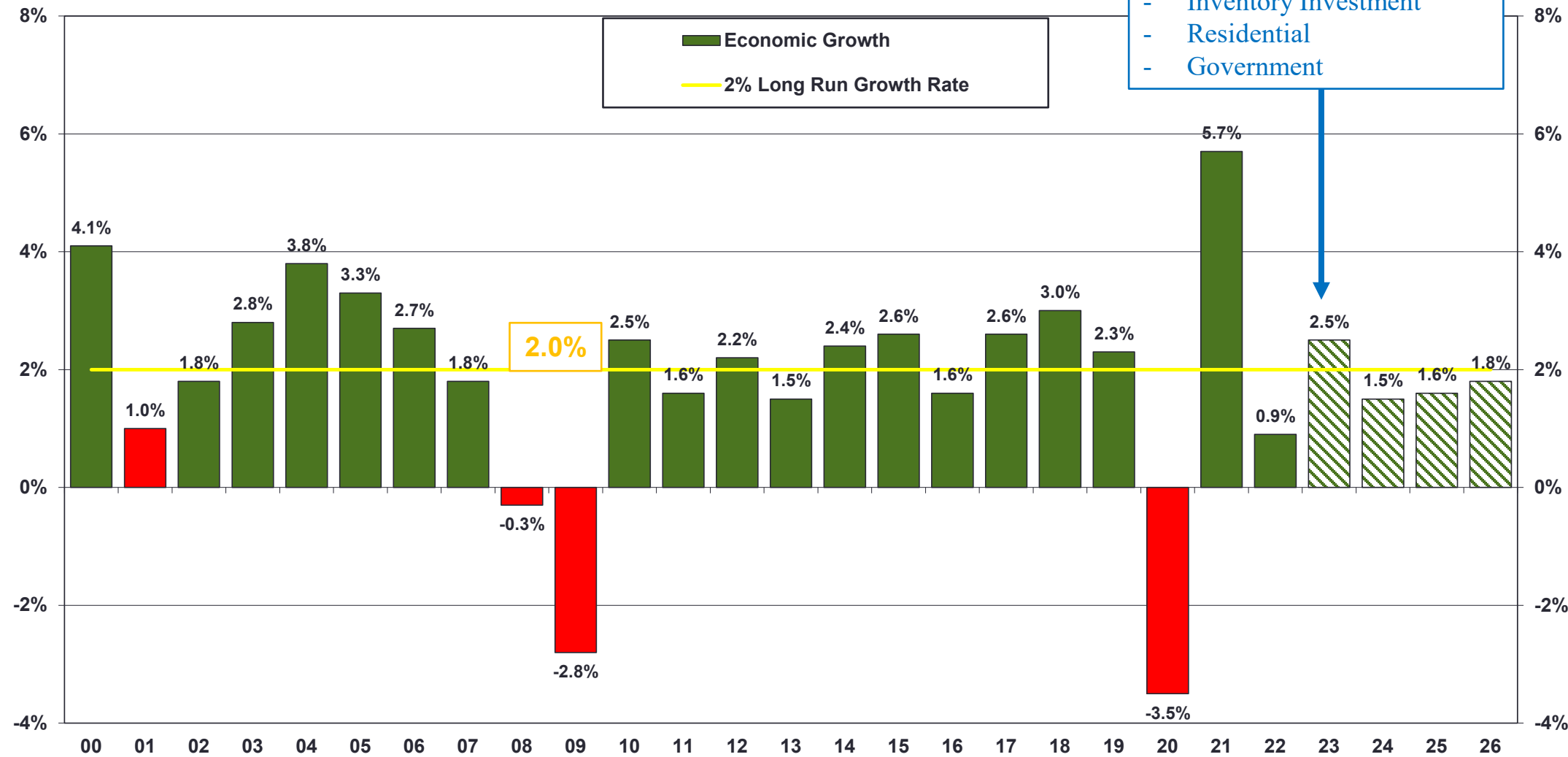
Weak Economic Growth for Next 2 Years

U.S. Economic Growth Rate



Weak Economic Growth for Next 2 Years

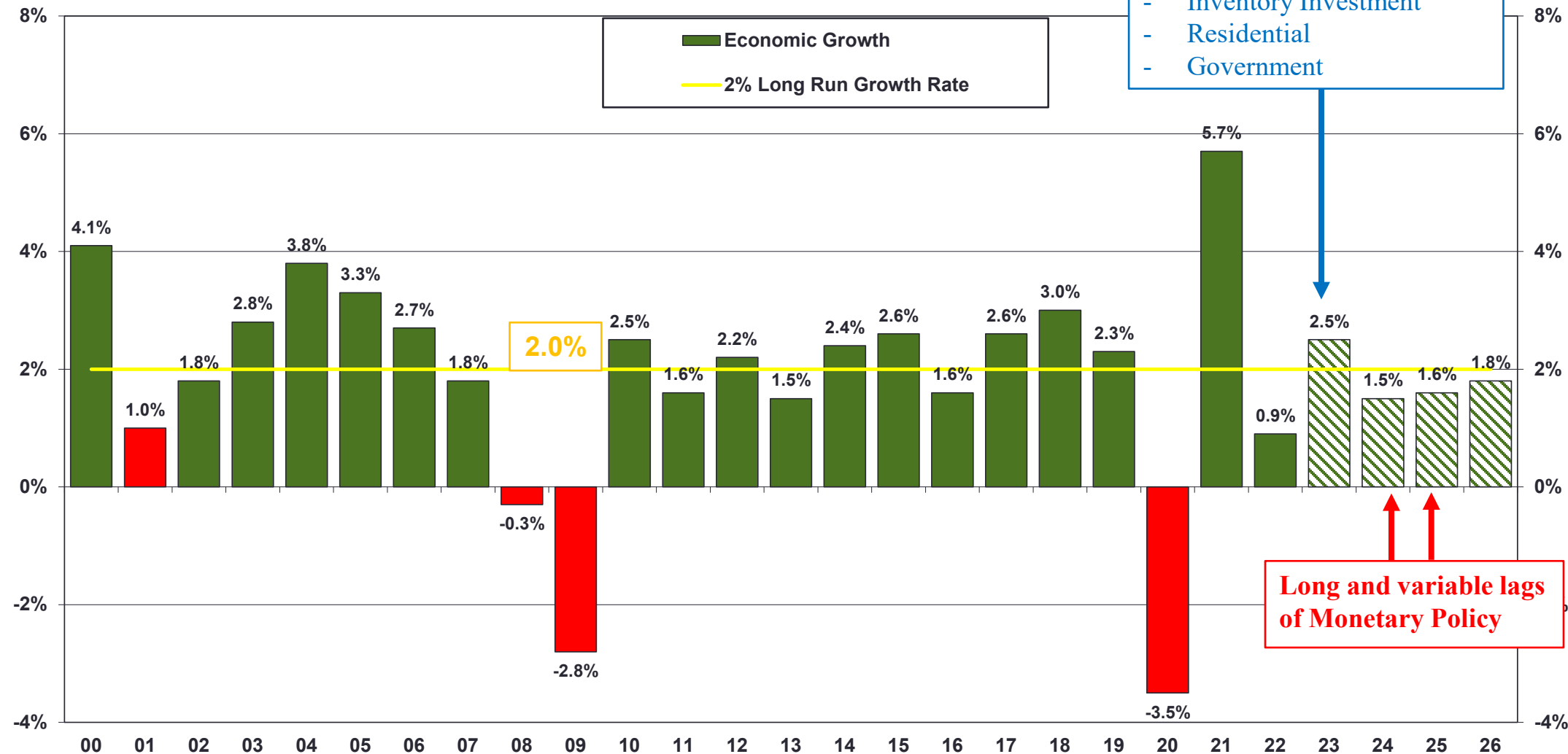
U.S. Economic Growth Rate



Source: Department of Commerce

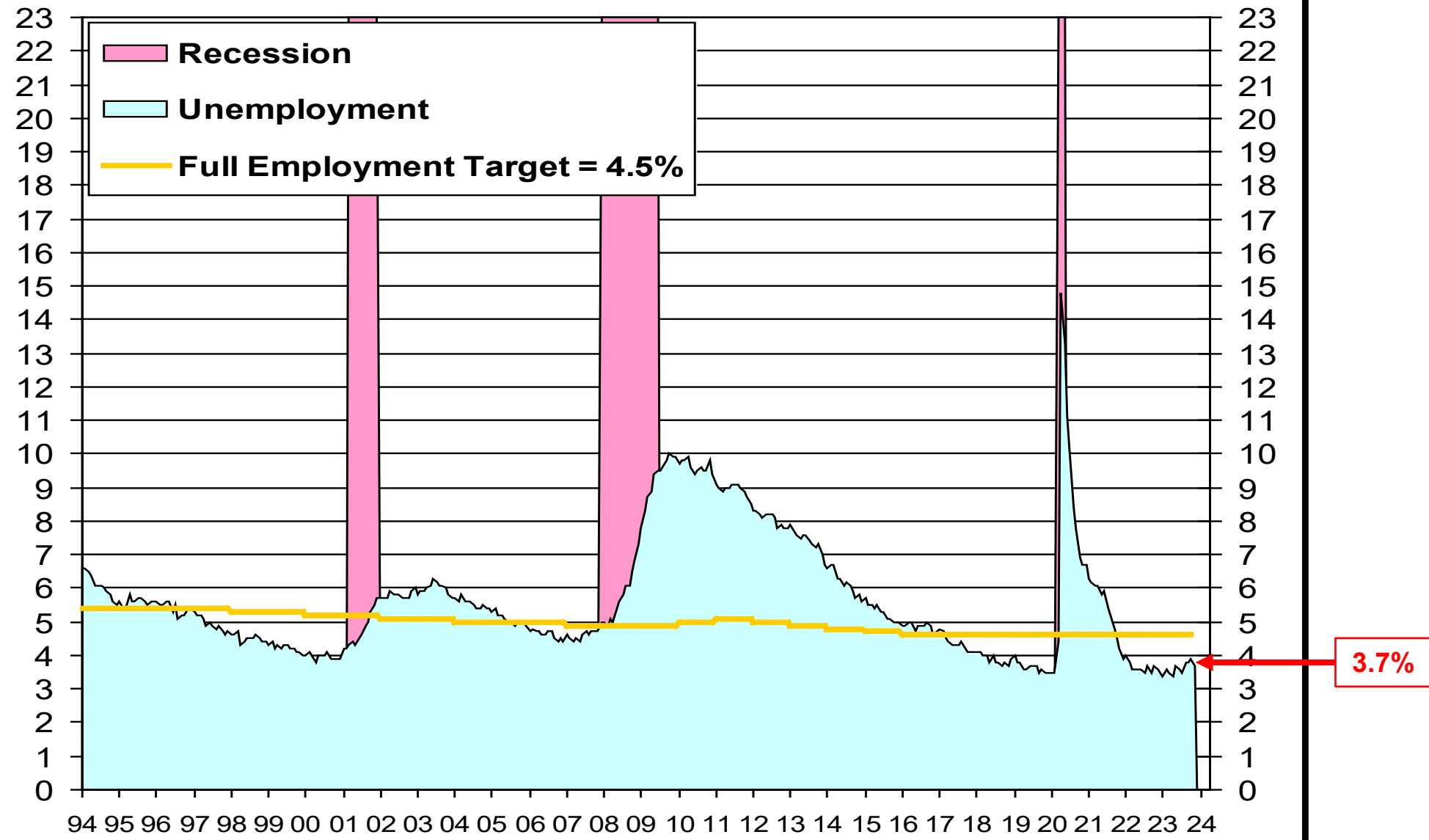
Weak Economic Growth for Next 2 Years

U.S. Economic Growth Rate



Source: Department of Commerce

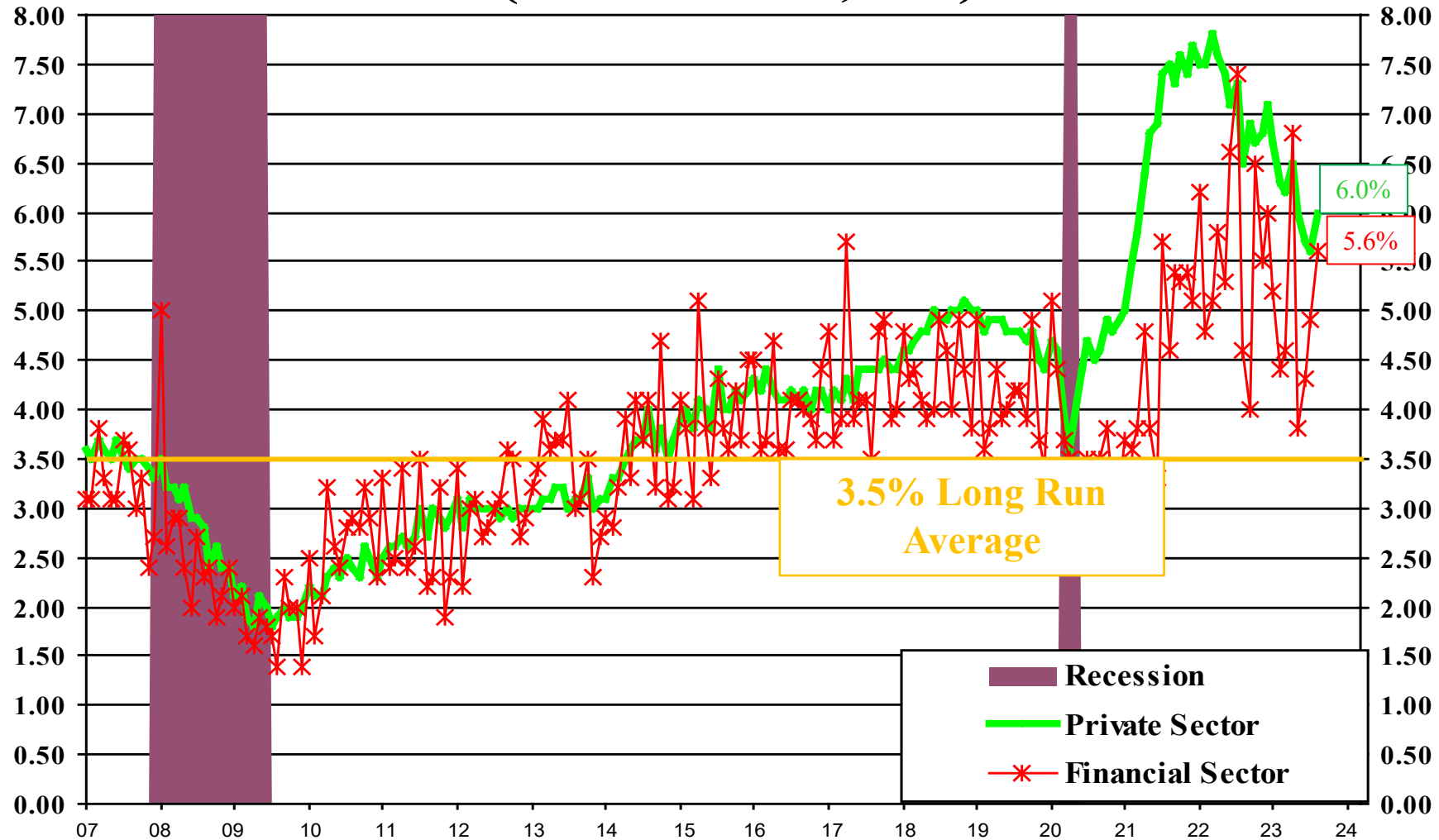
Unemployment Rate



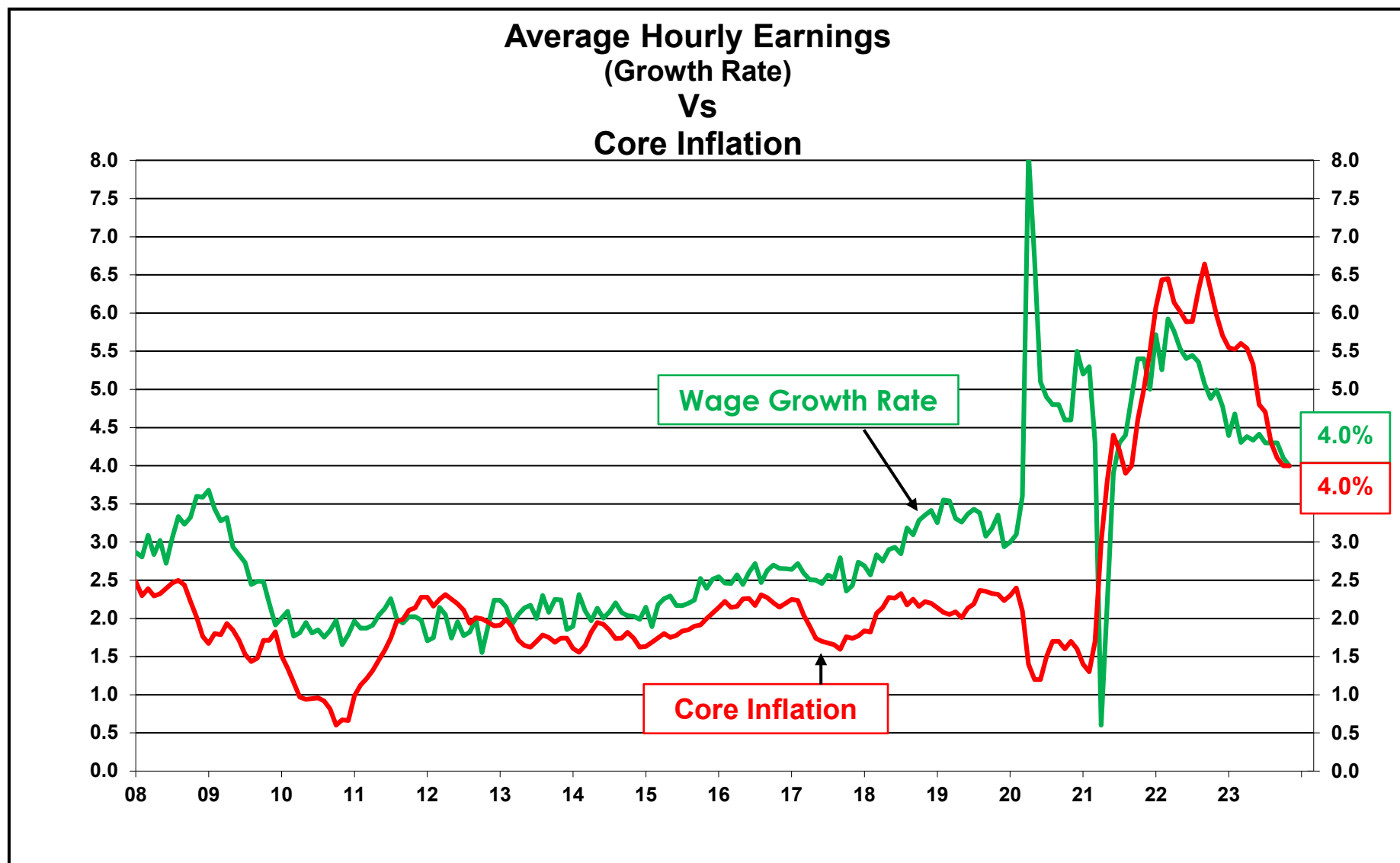
Source: Department of Labor.

Job Openings Rate is the number of job openings on the last business day of the month as a percent of total employment plus job openings.

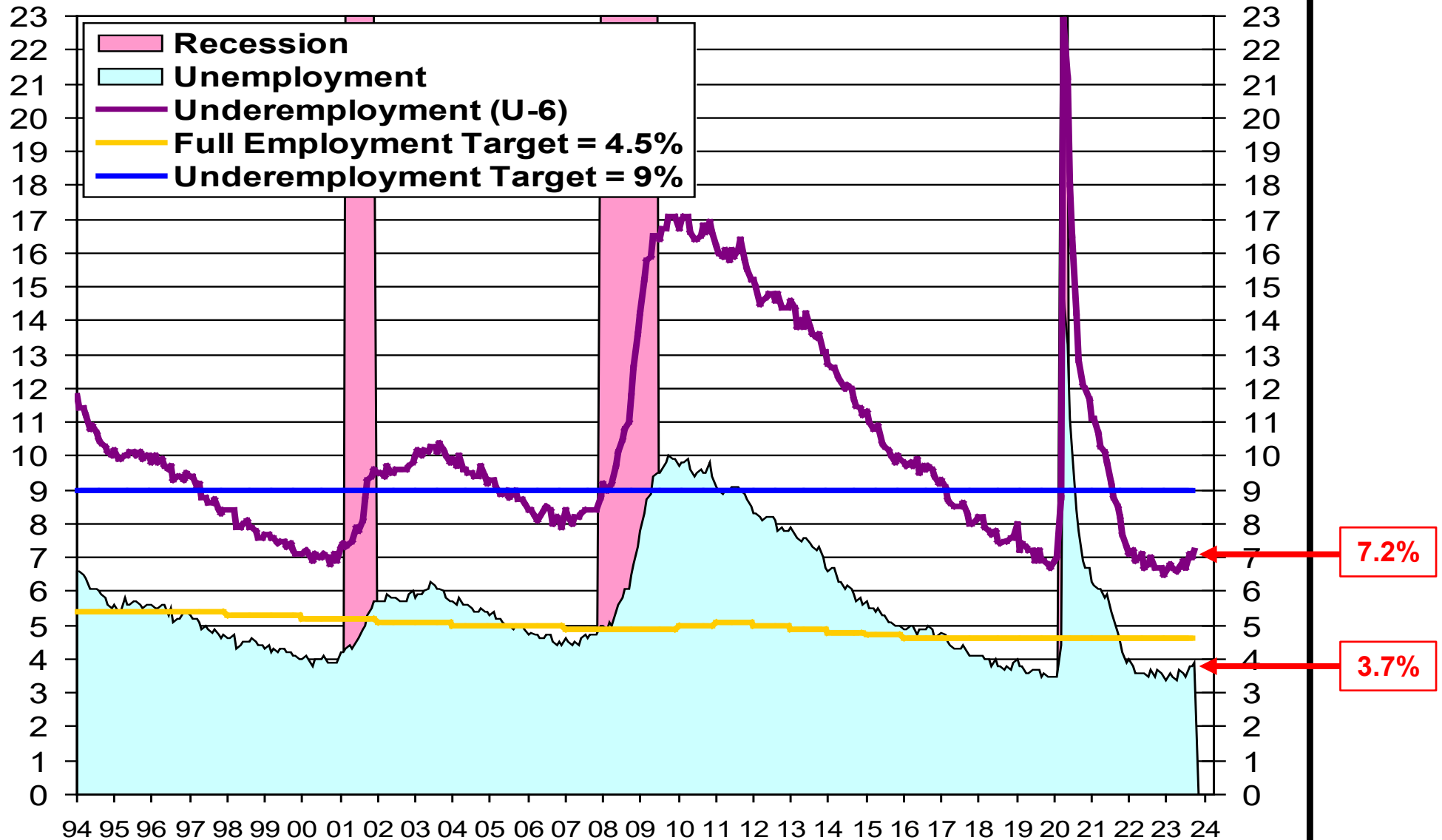
Job Openings Rate (Thousands, SA)



Wage Growth Slowing as Core Inflation Falls

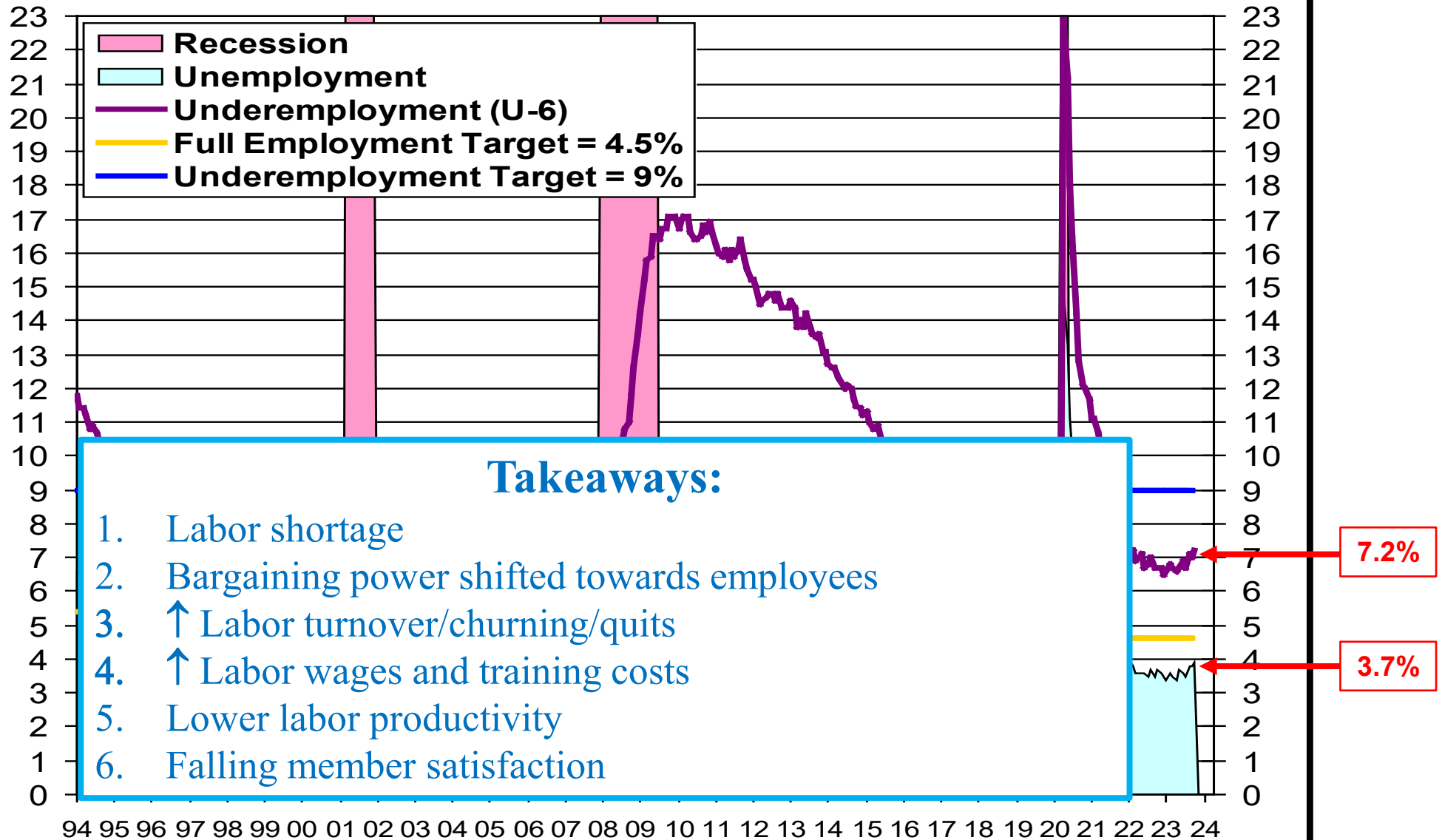


Unemployment Rate



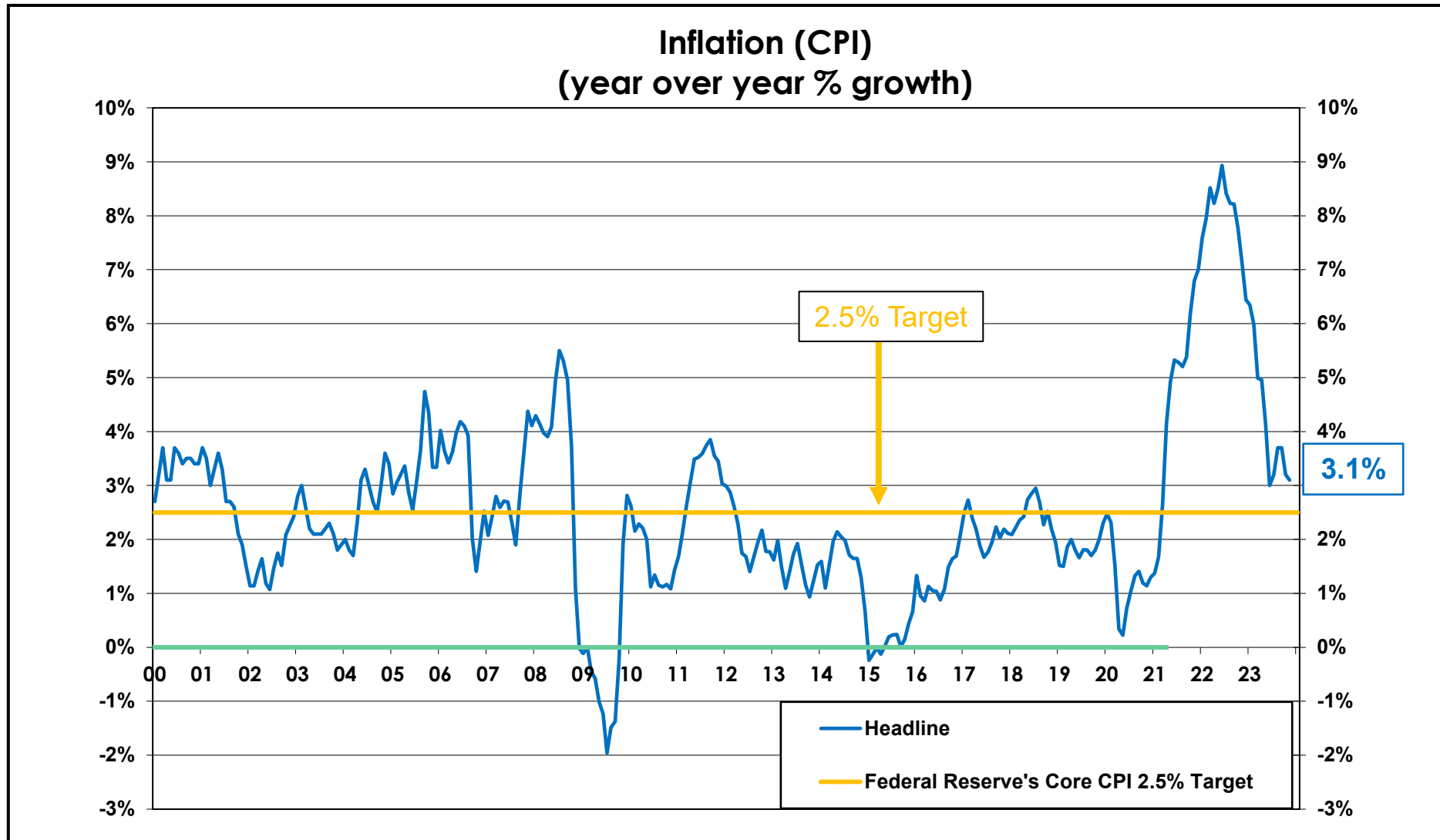
Source: Department of Labor.

Unemployment Rate

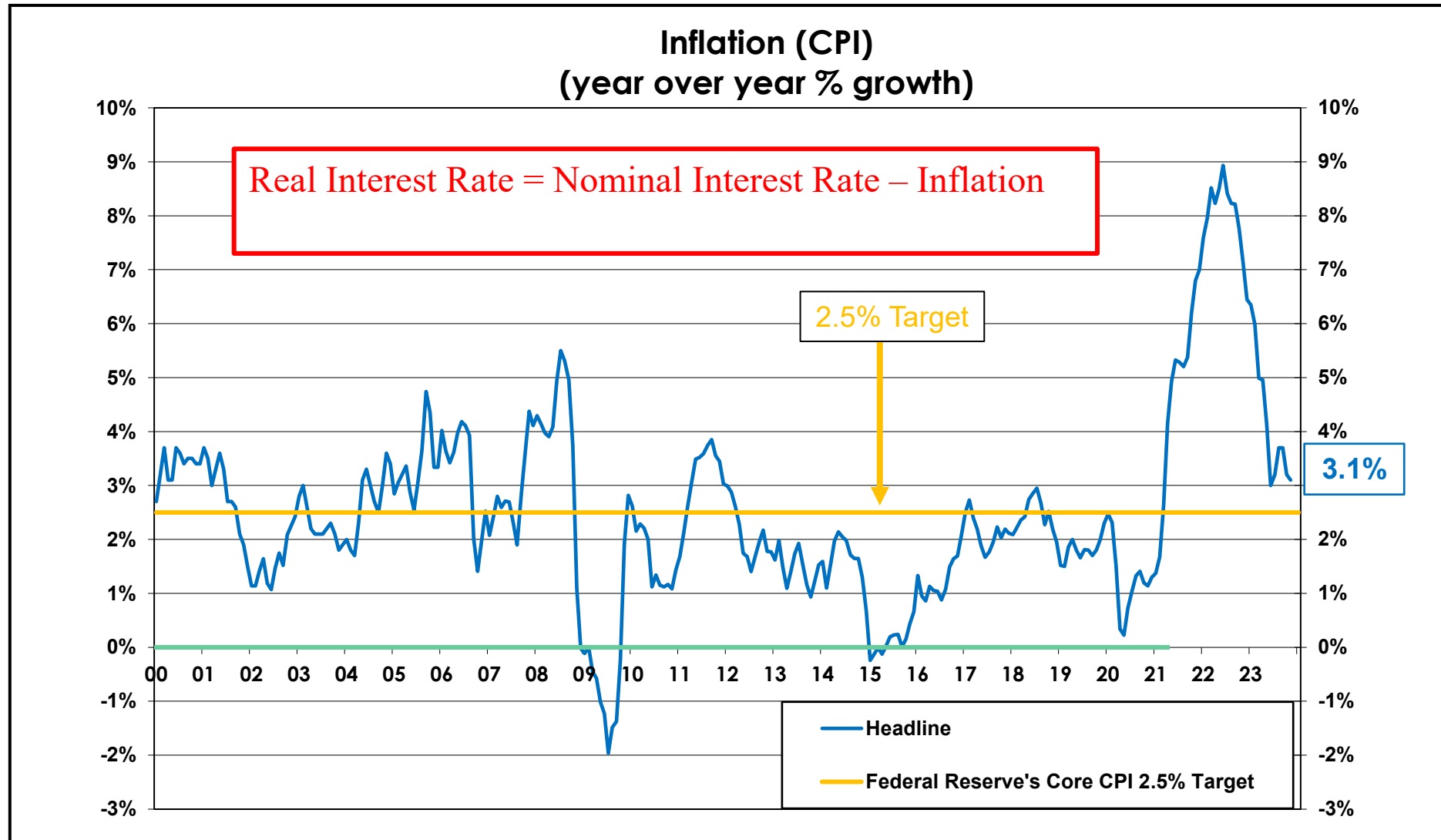


Source: Department of Labor.

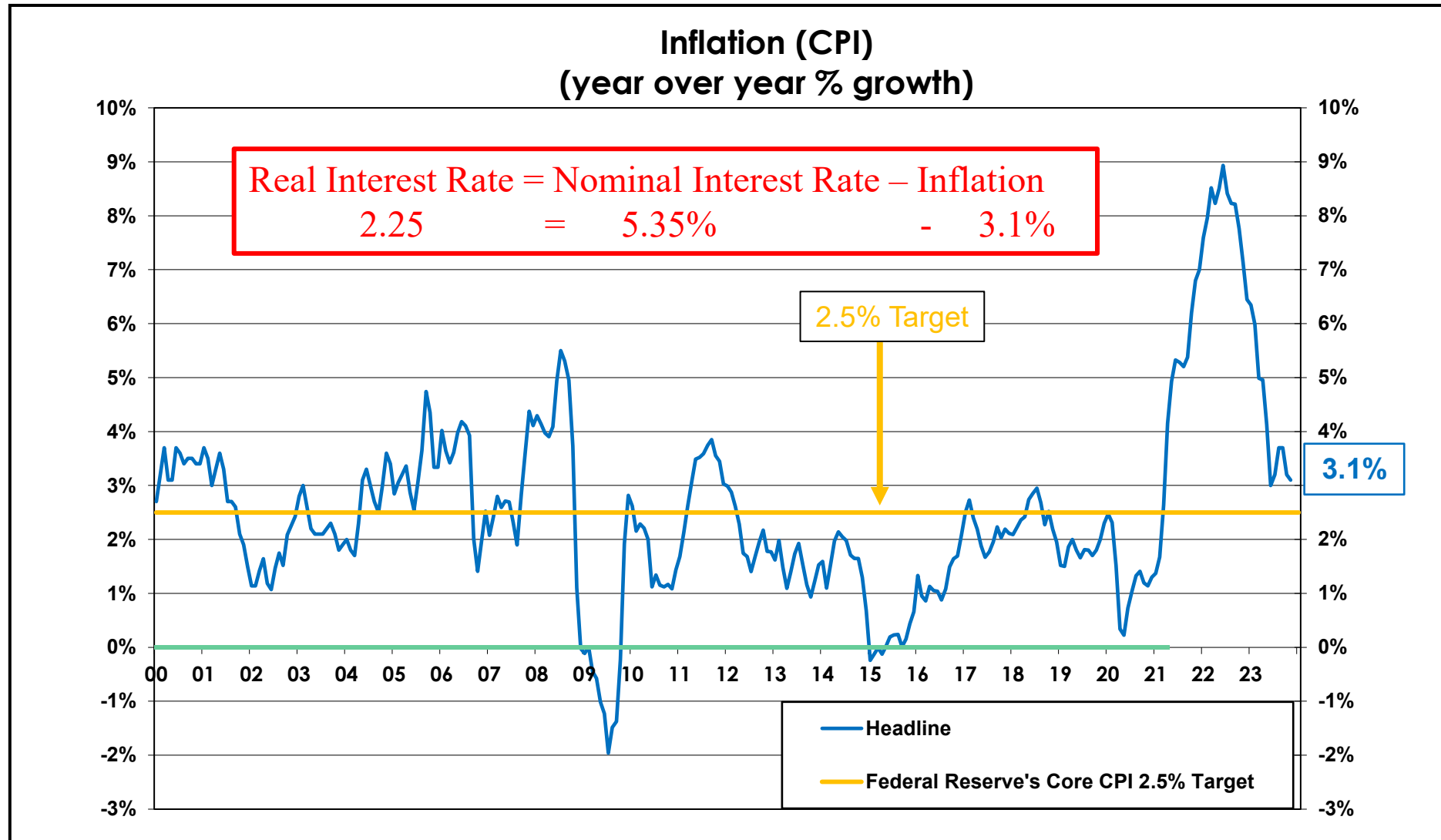
High Inflation for the Next Year



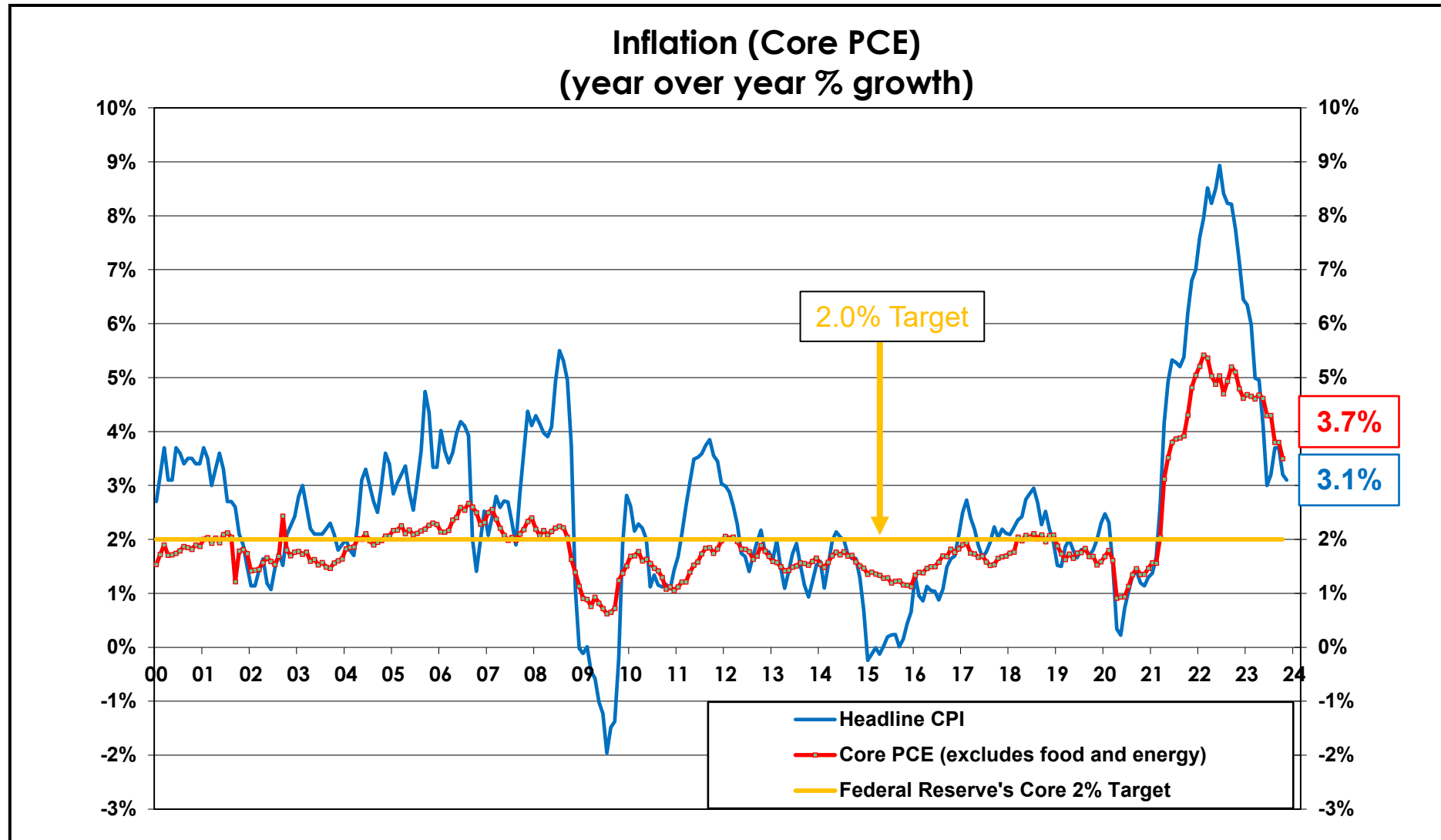
High Inflation for the Next Year



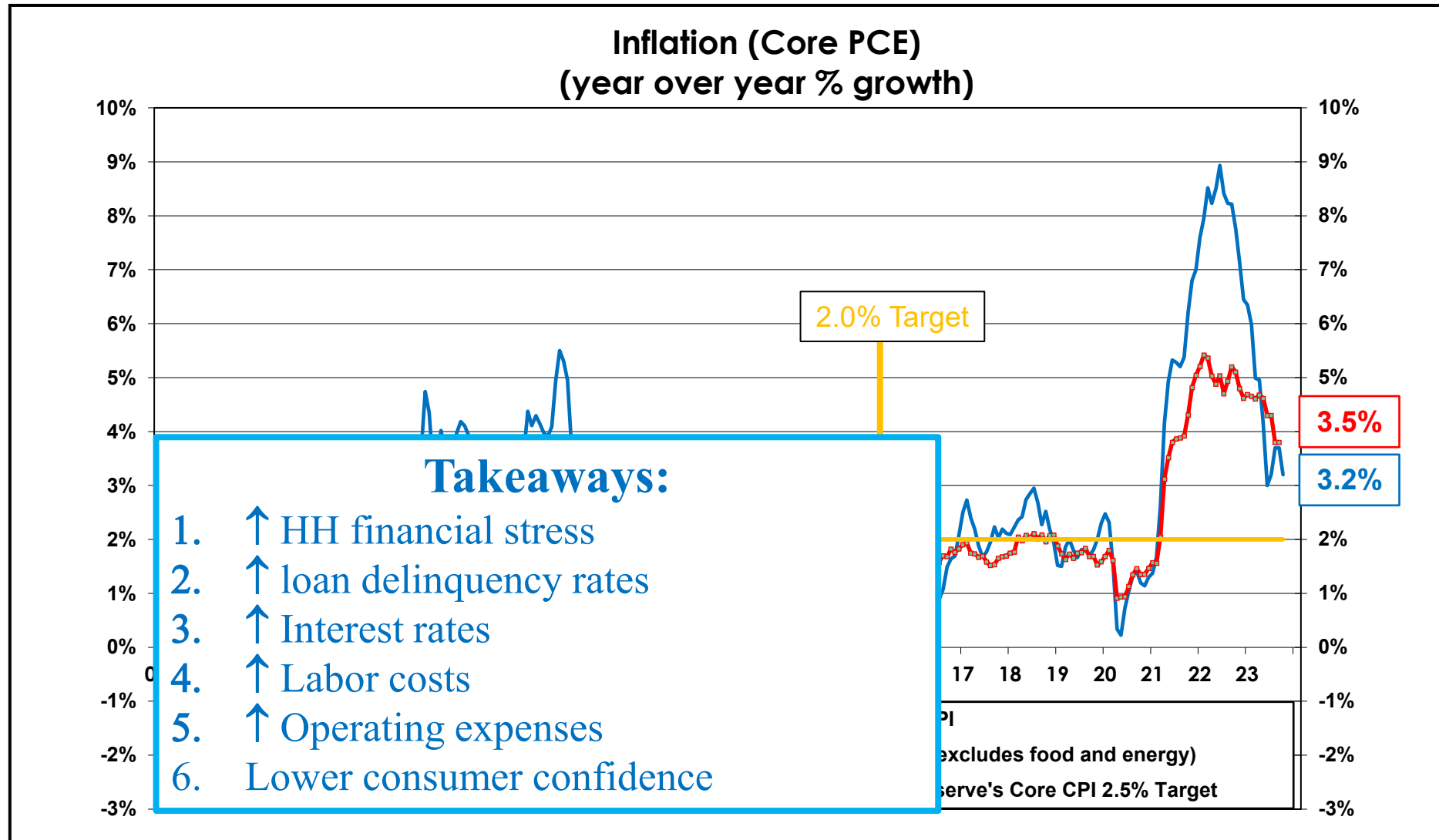
High Inflation for the Next Year



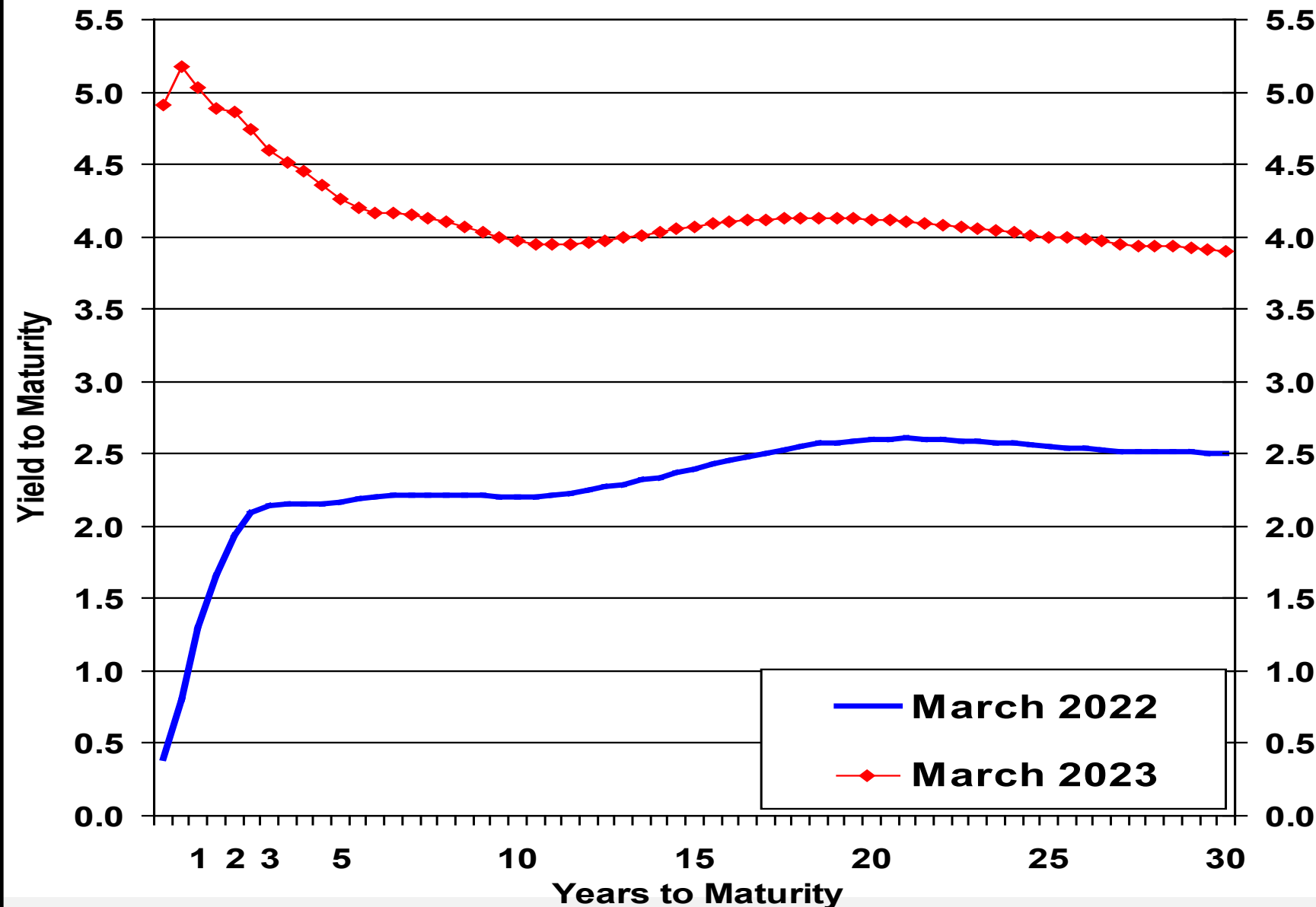
High Inflation for the Next Year



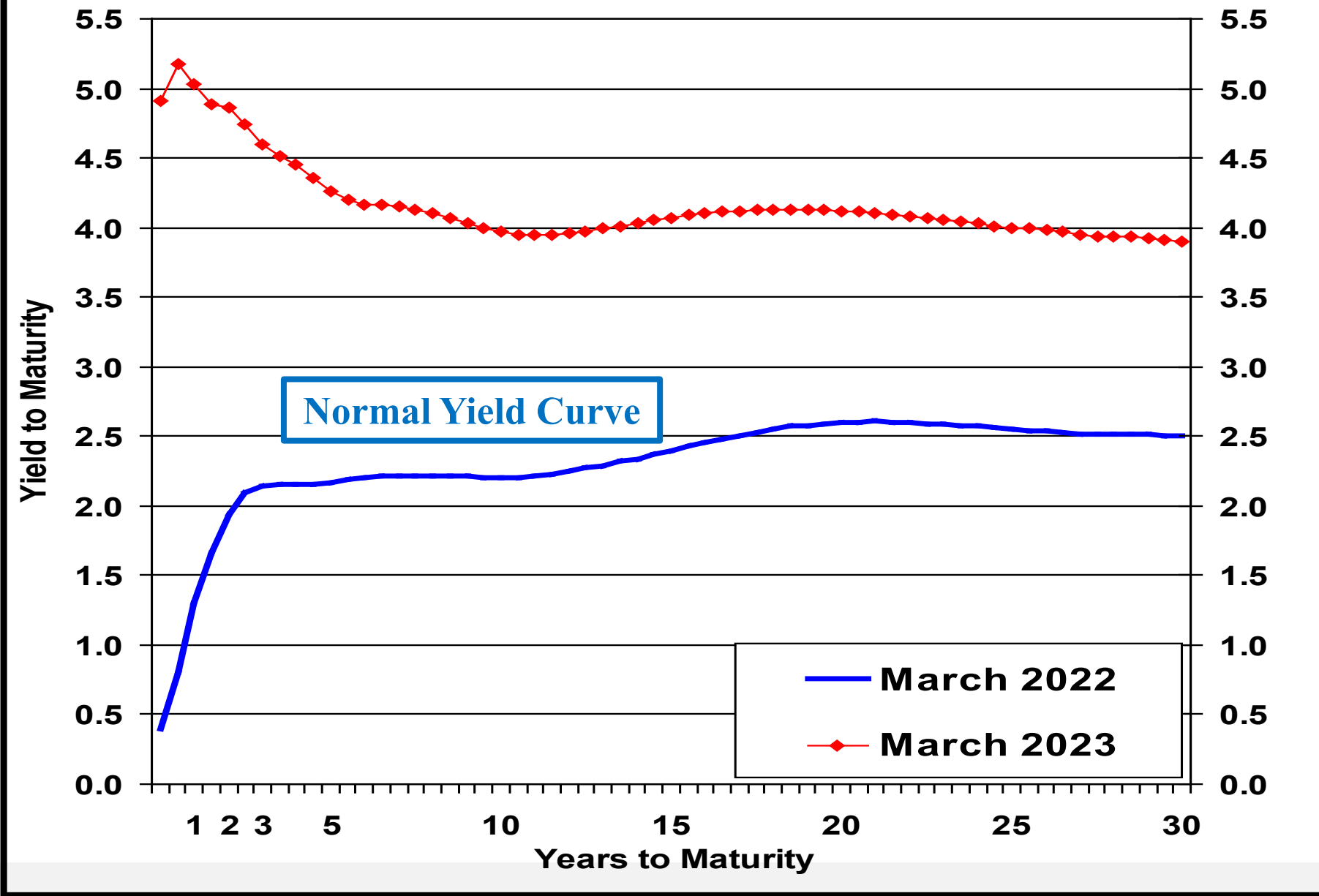
High Inflation for the Next Year



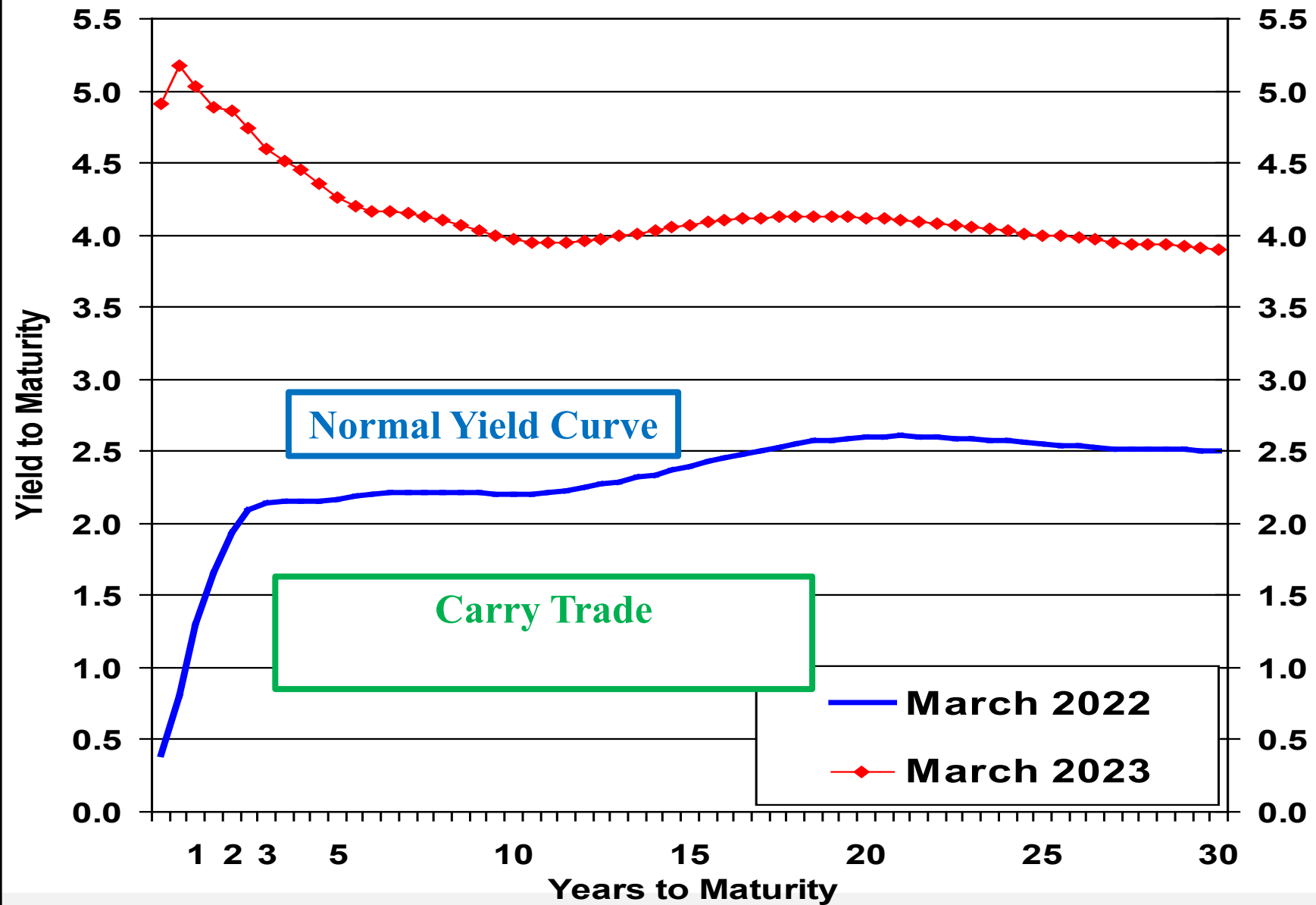
Treasury Yield Curves



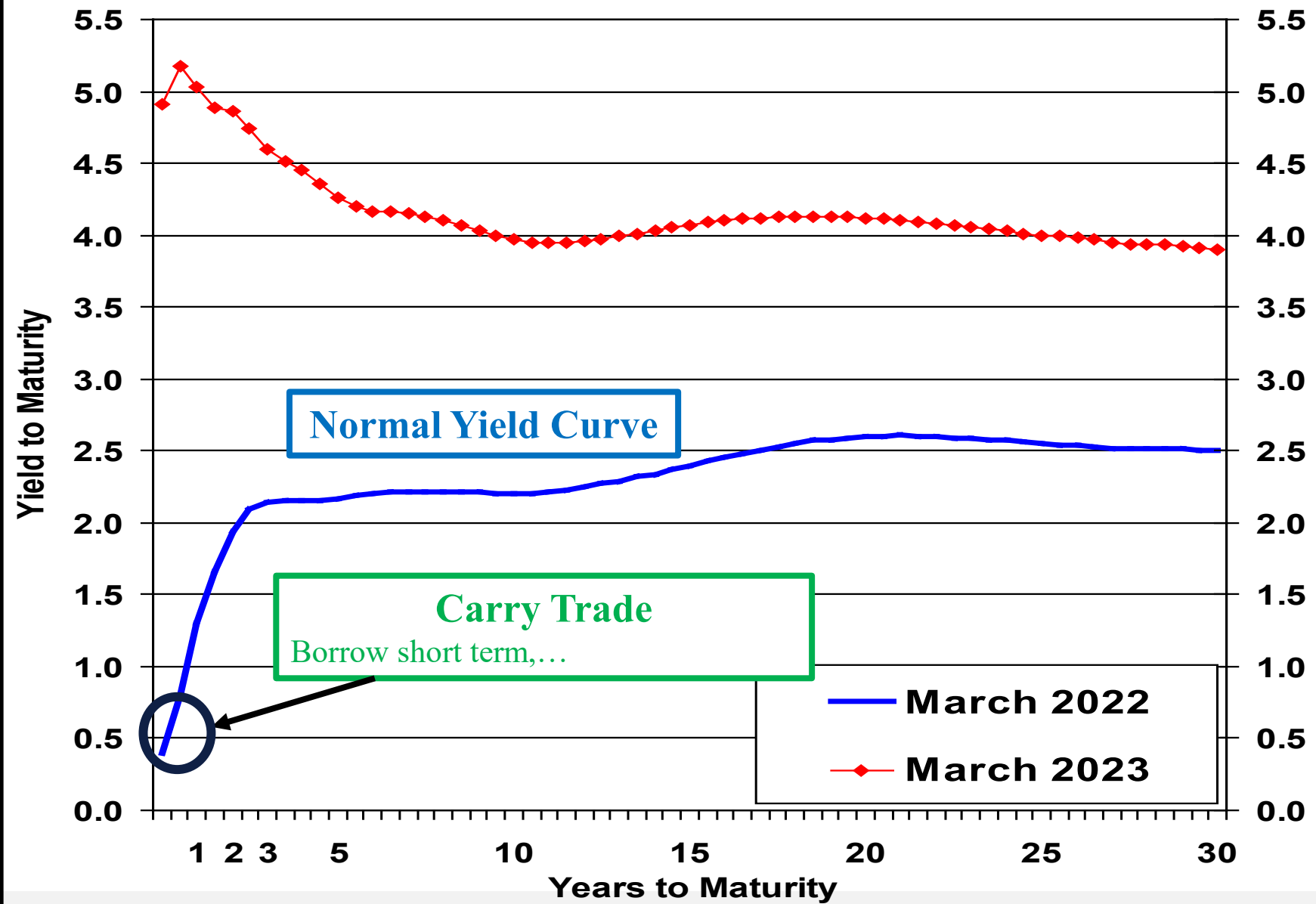
Treasury Yield Curves



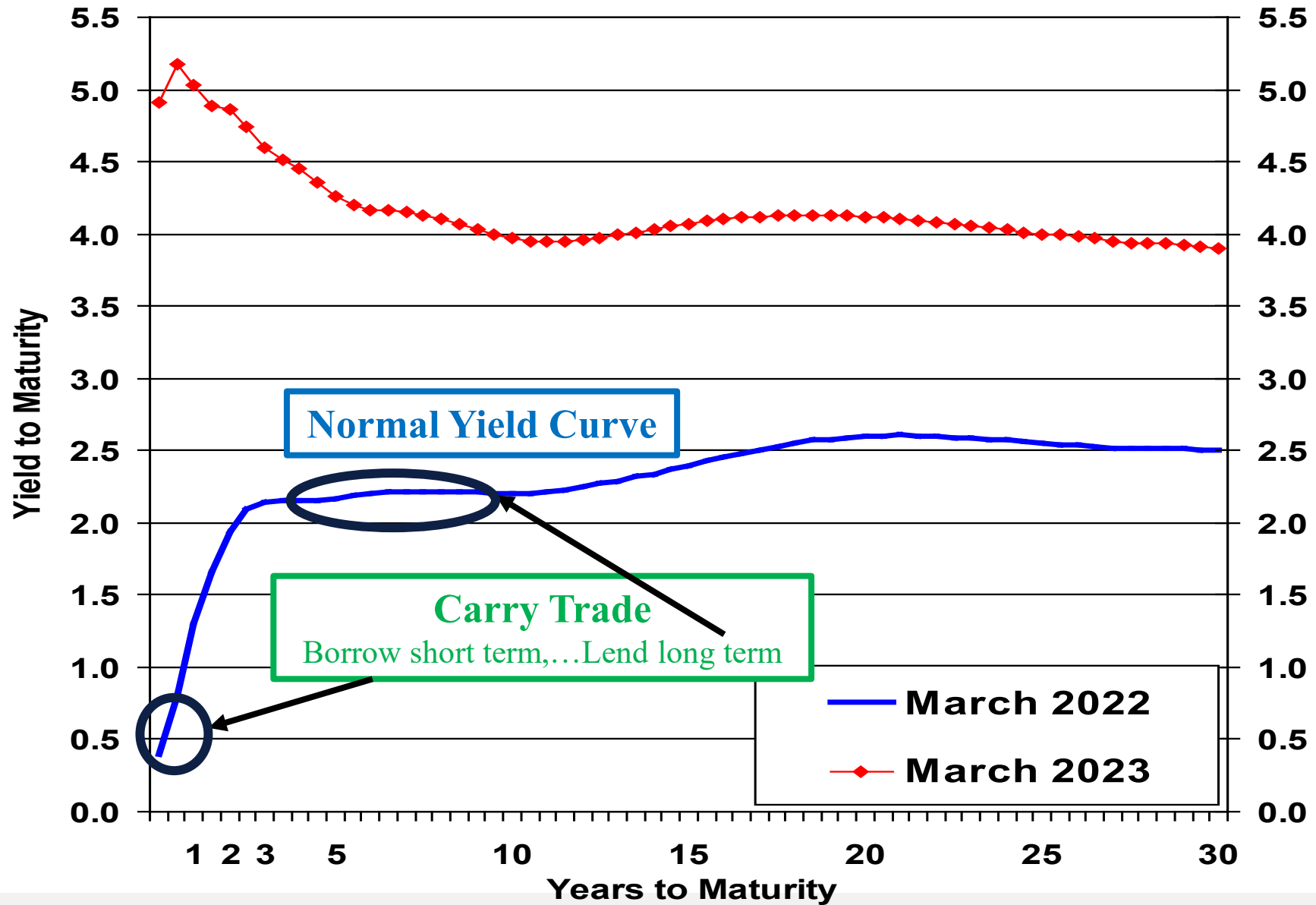
Treasury Yield Curves



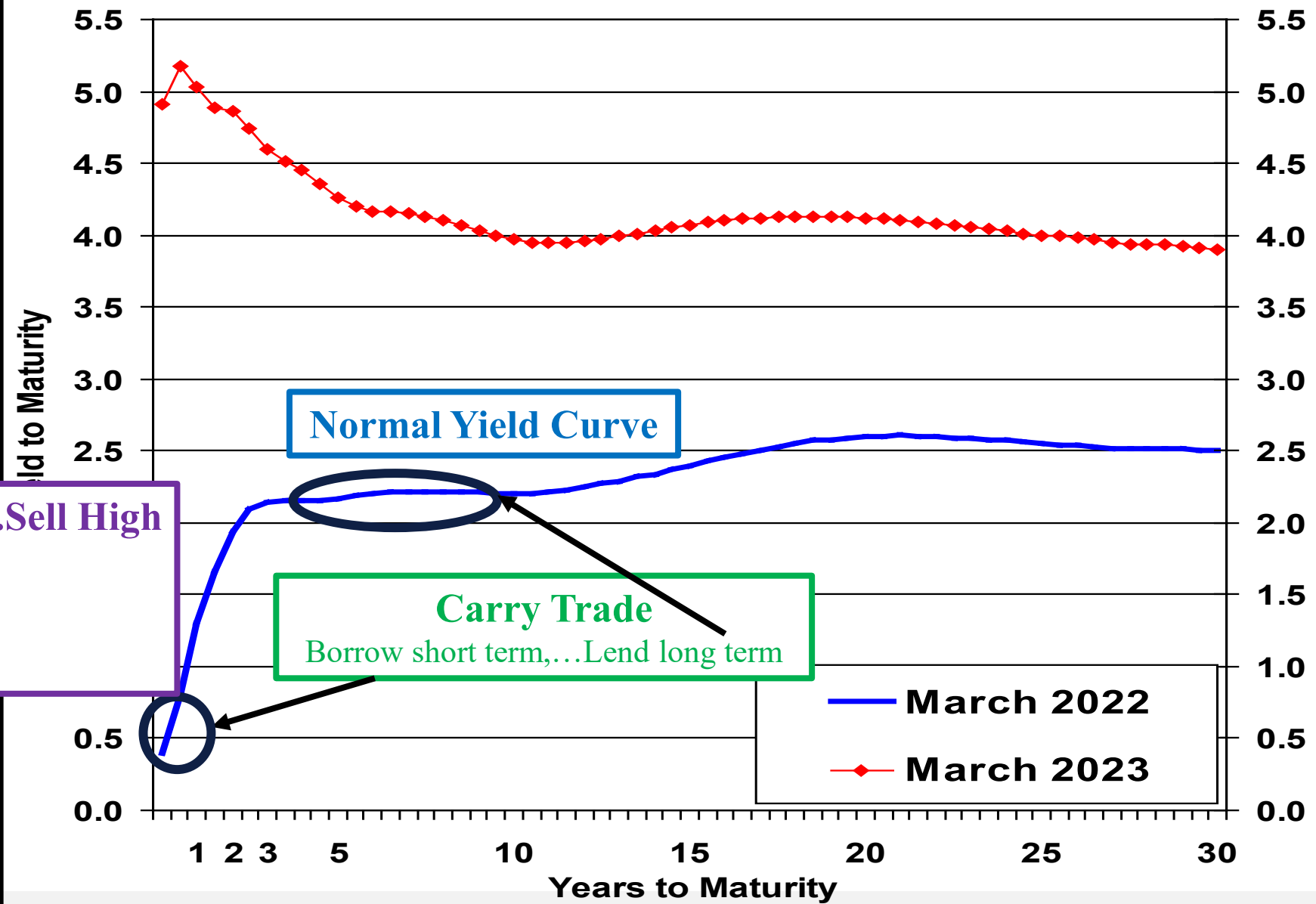
Treasury Yield Curves



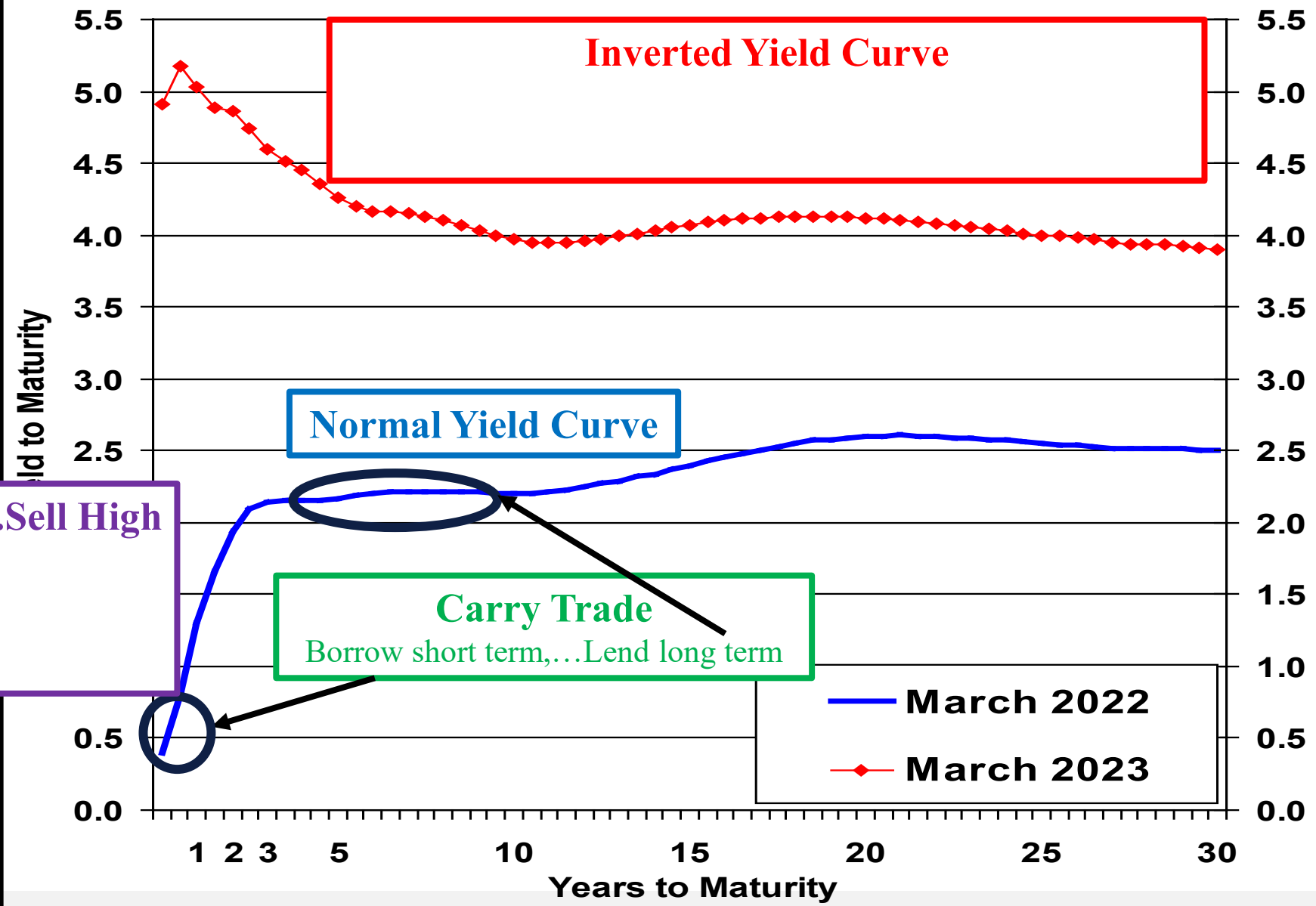
Treasury Yield Curves



Treasury Yield Curves



Treasury Yield Curves



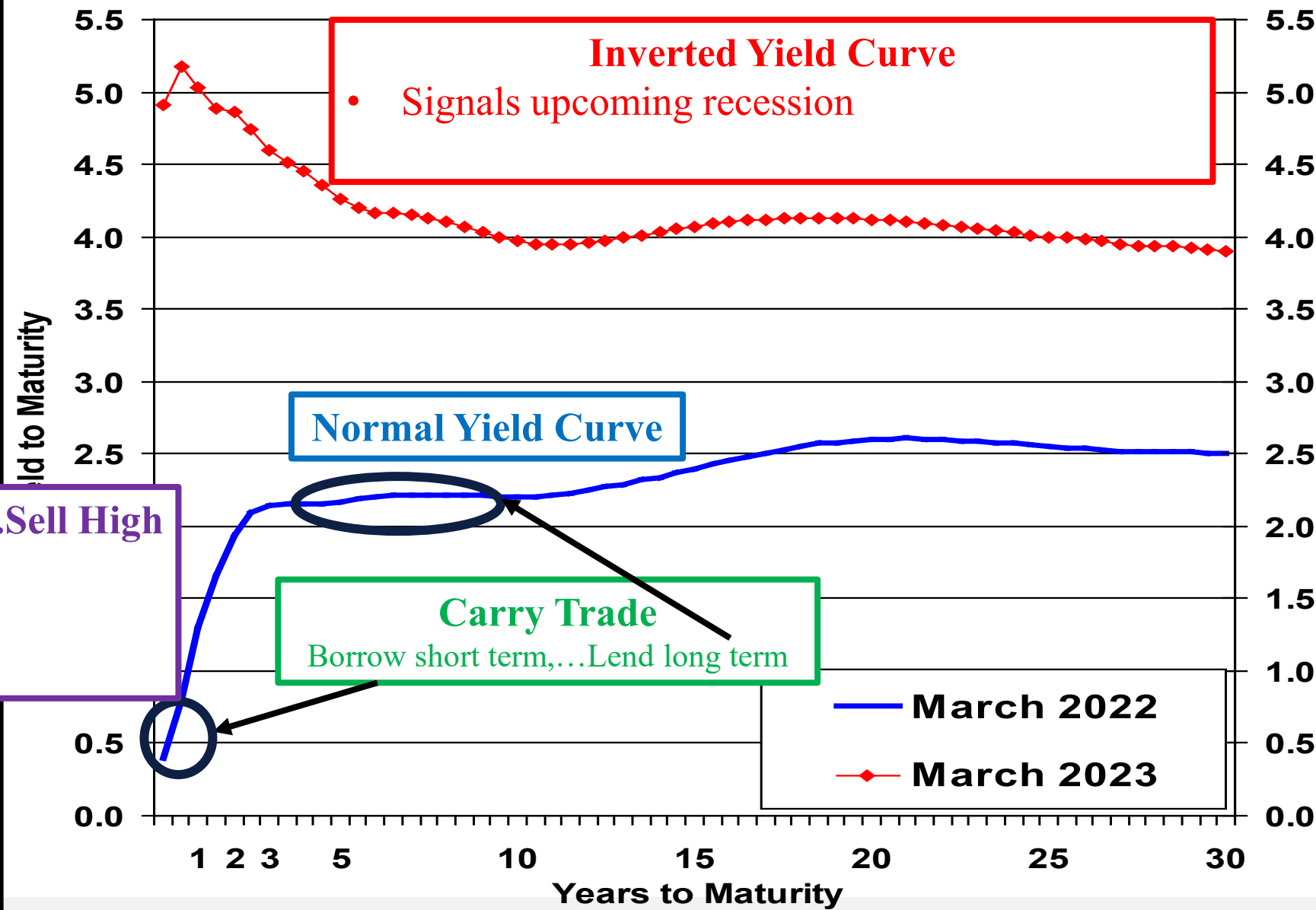
Buy Low...
...Sell High

Normal Yield Curve

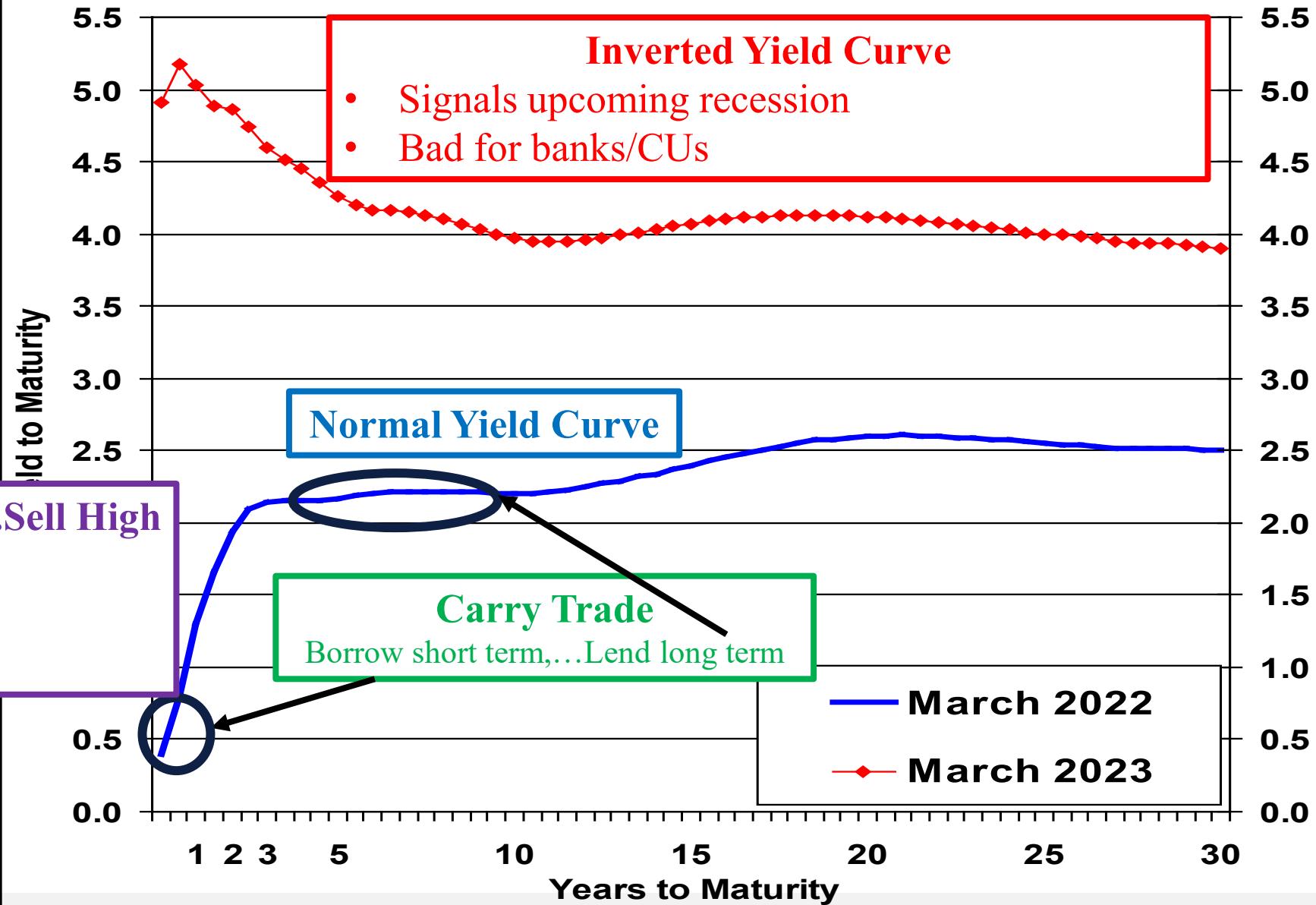
Carry Trade
Borrow short term,...Lend long term

March 2022
March 2023

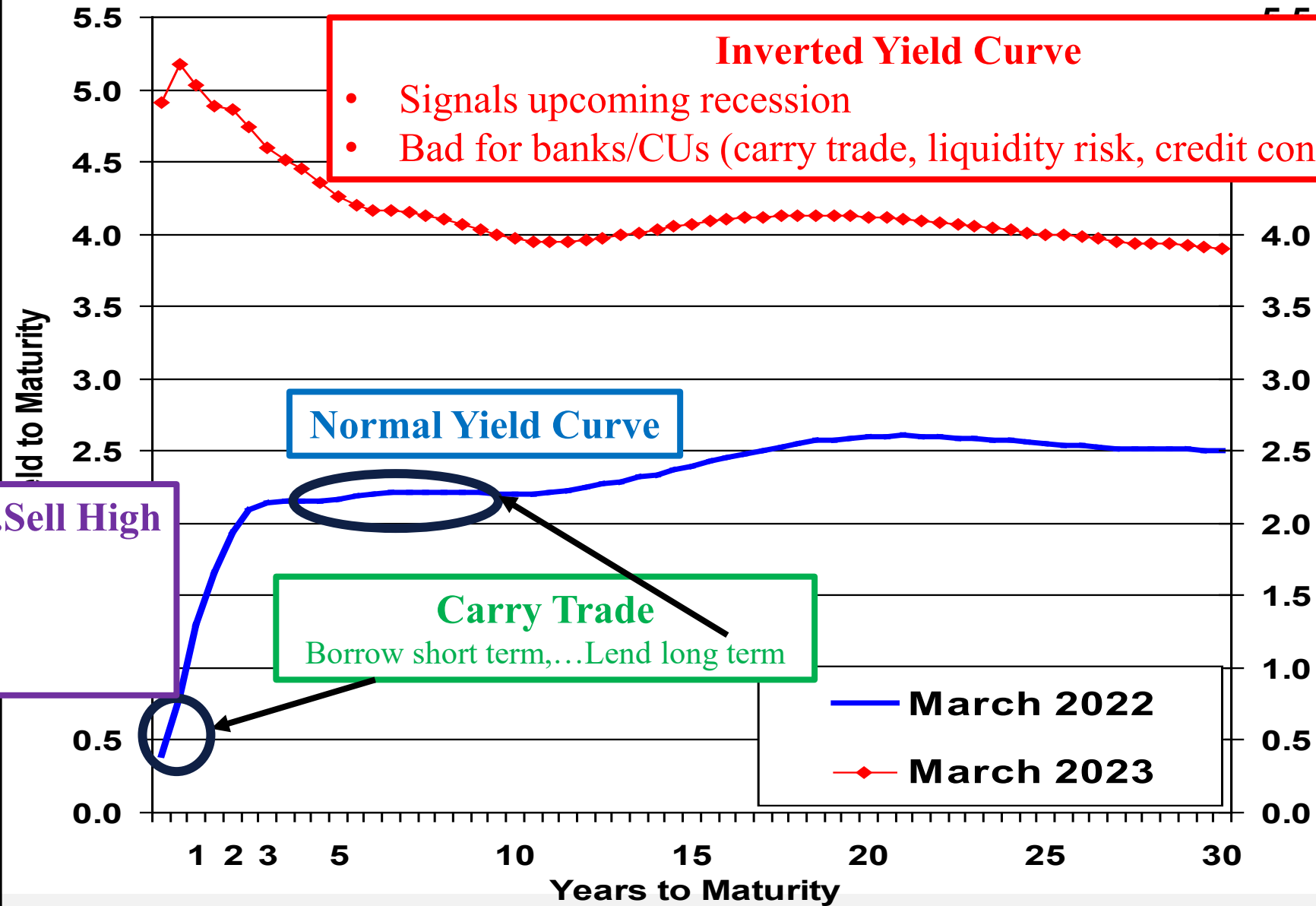
Treasury Yield Curves



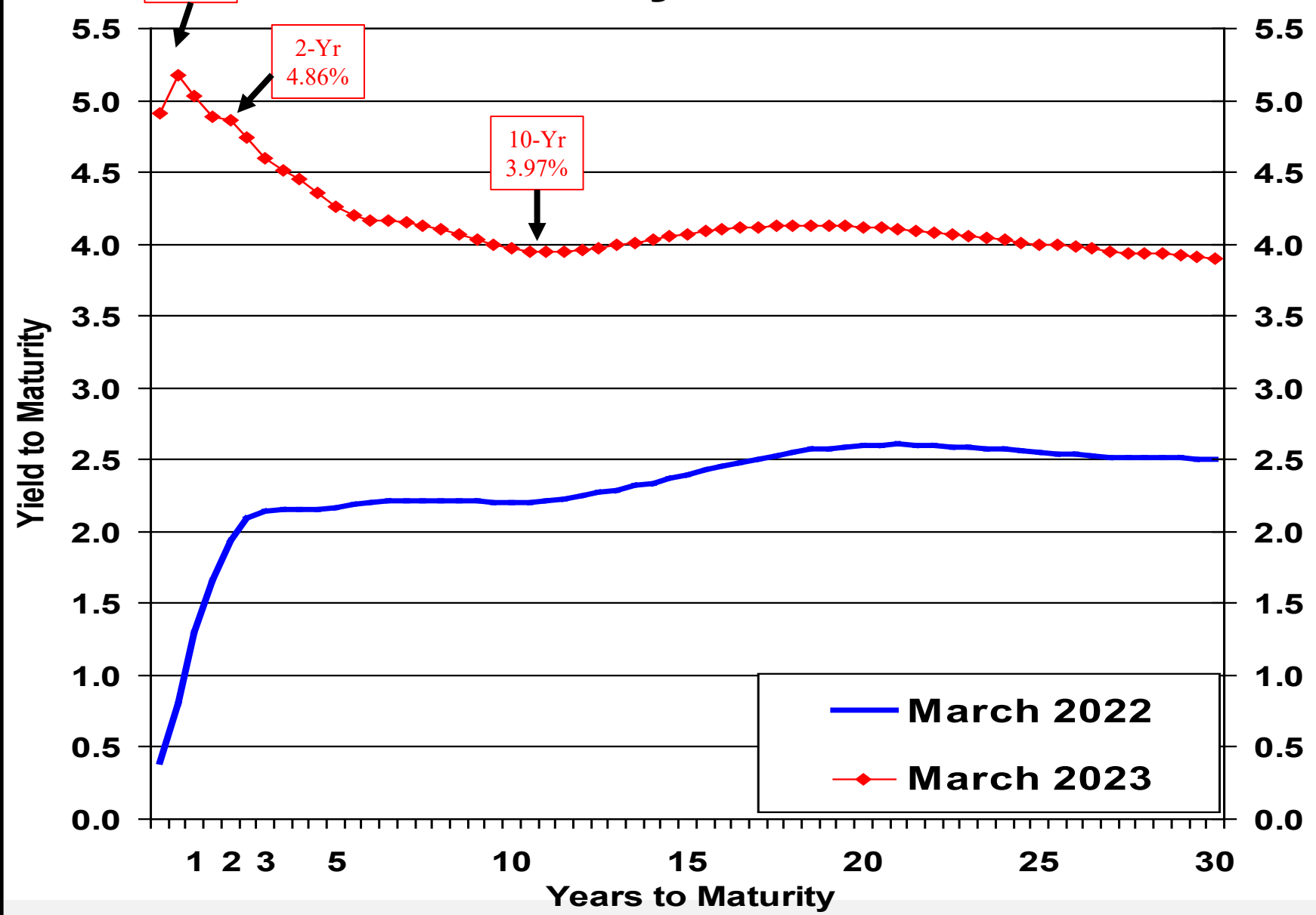
Treasury Yield Curves



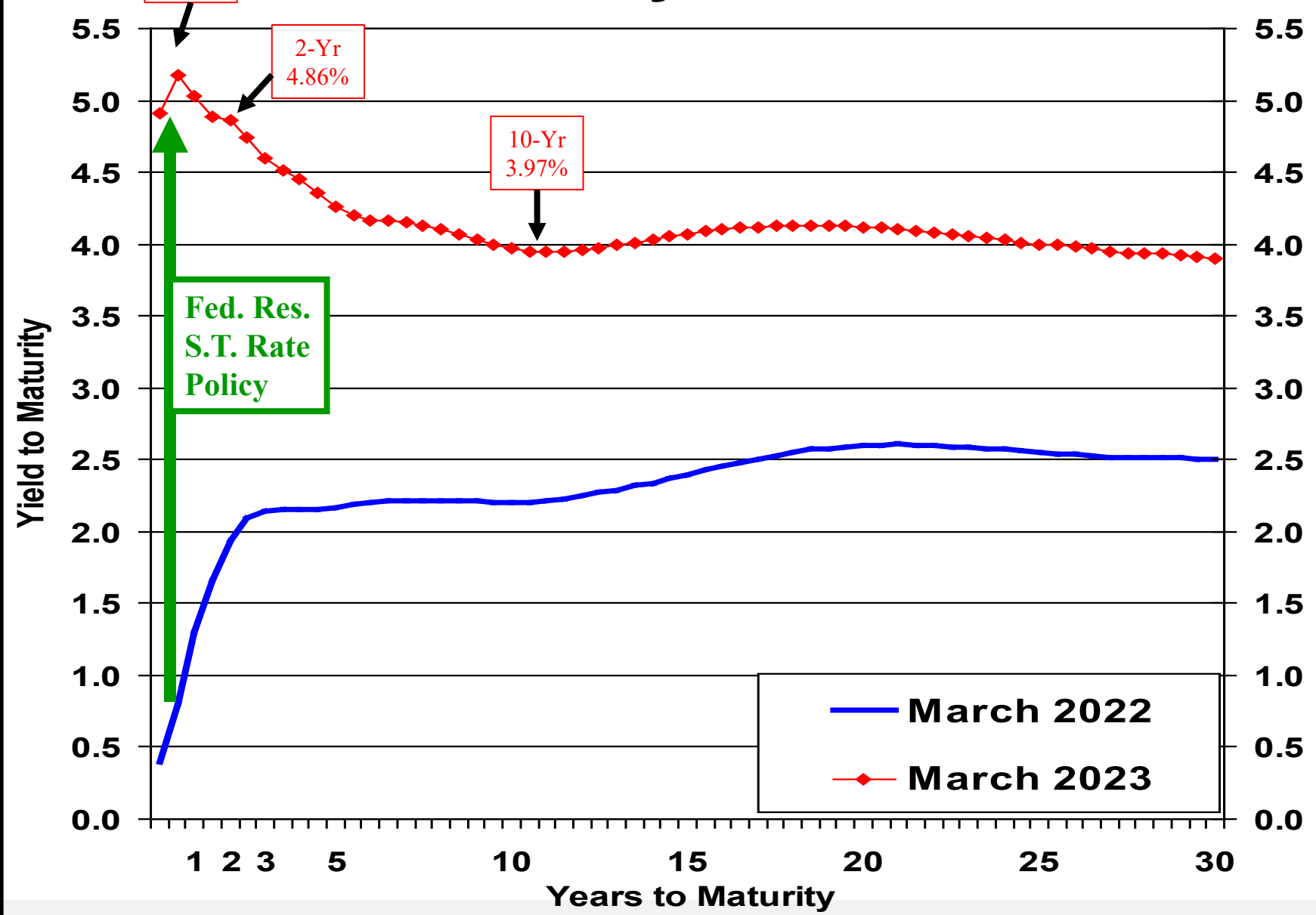
Treasury Yield Curves



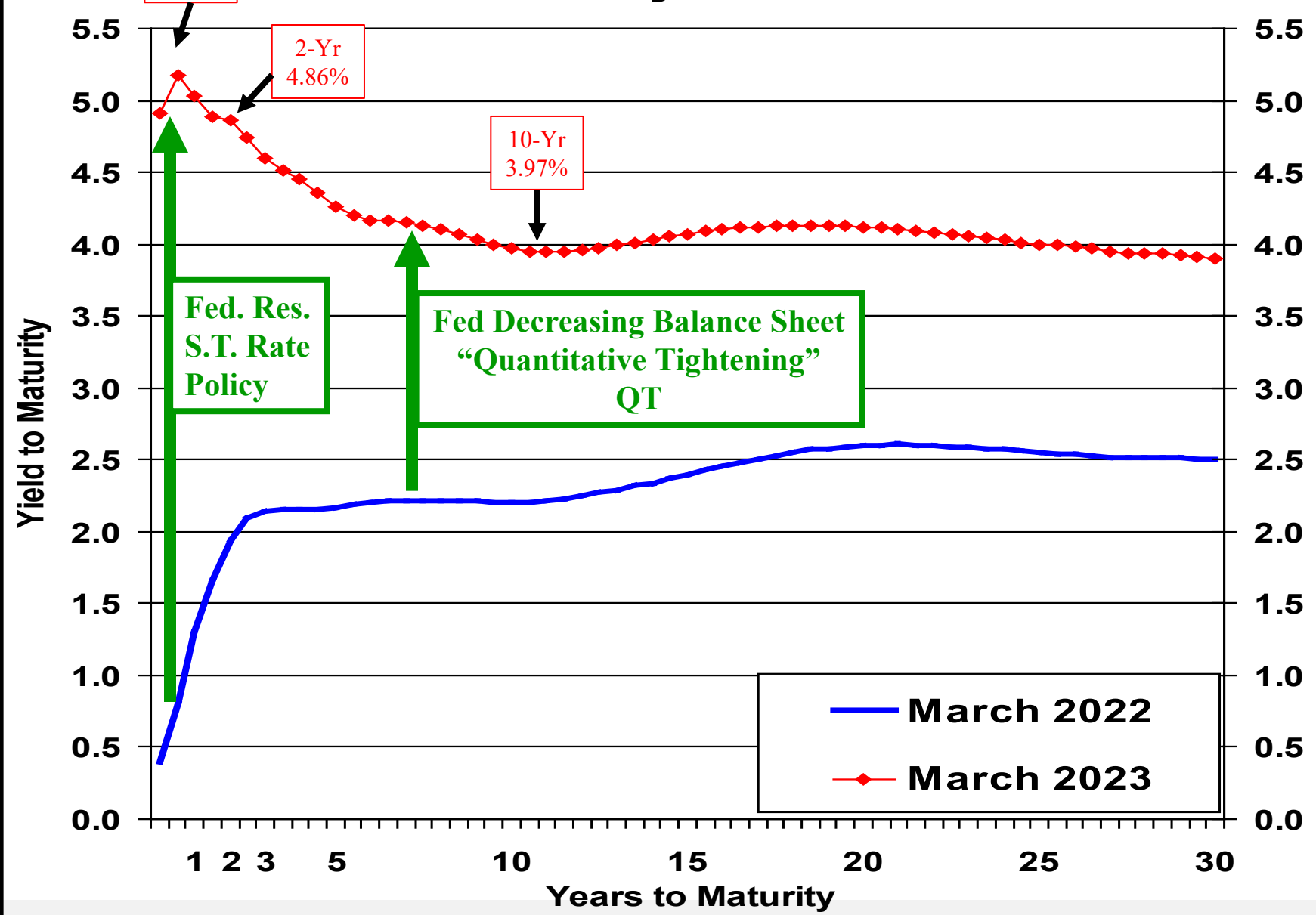
Treasury Yield Curves



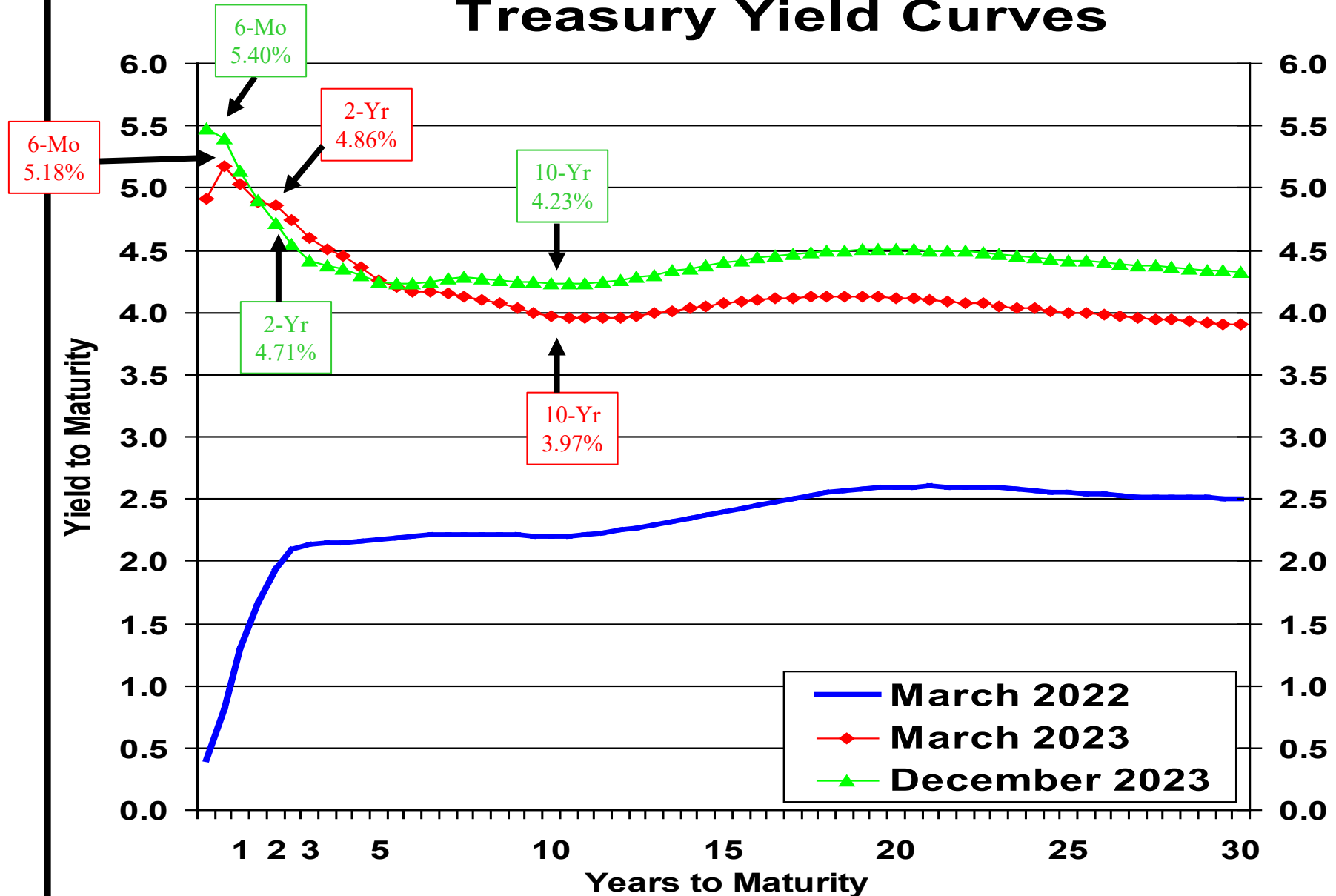
Treasury Yield Curves



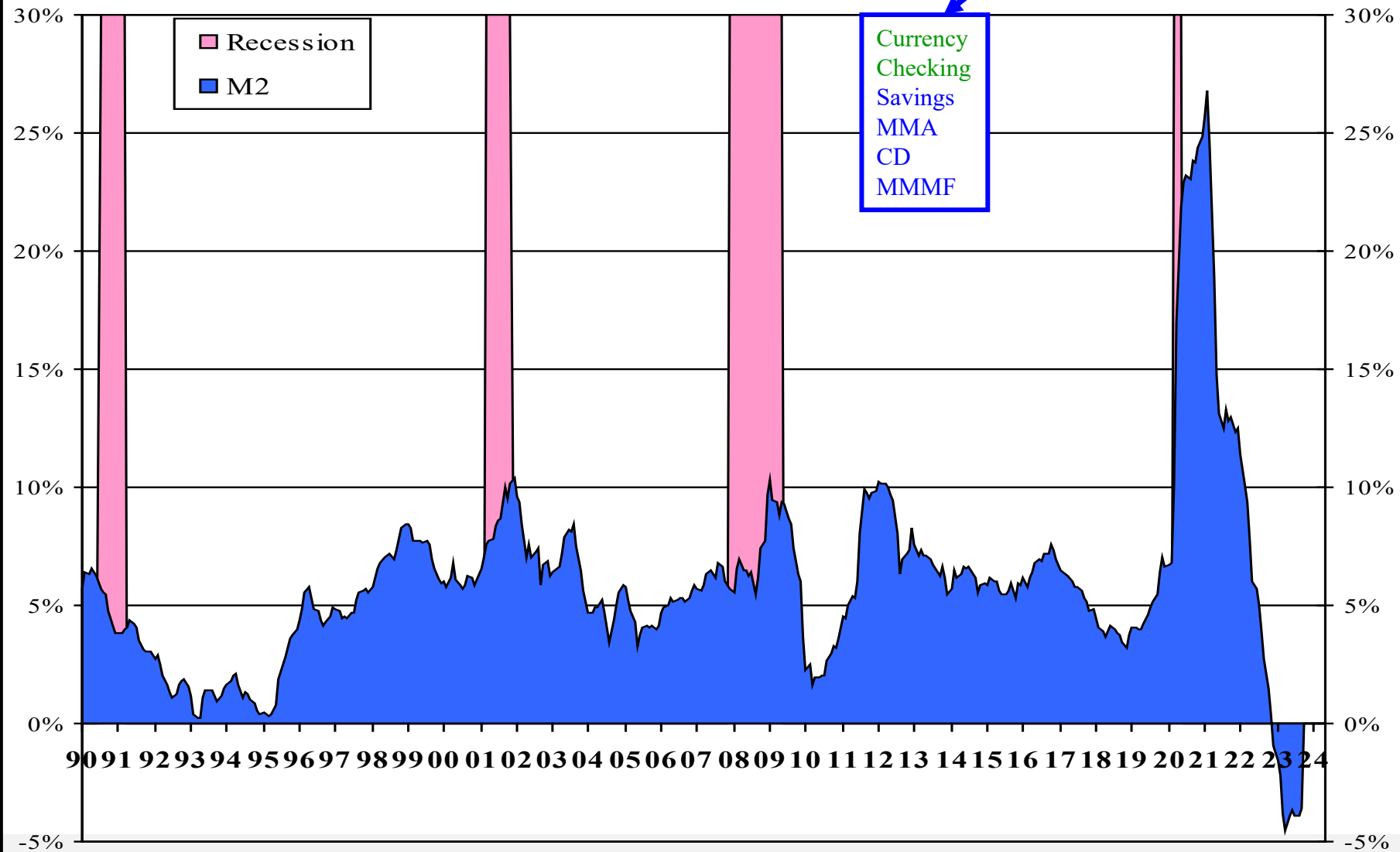
Treasury Yield Curves



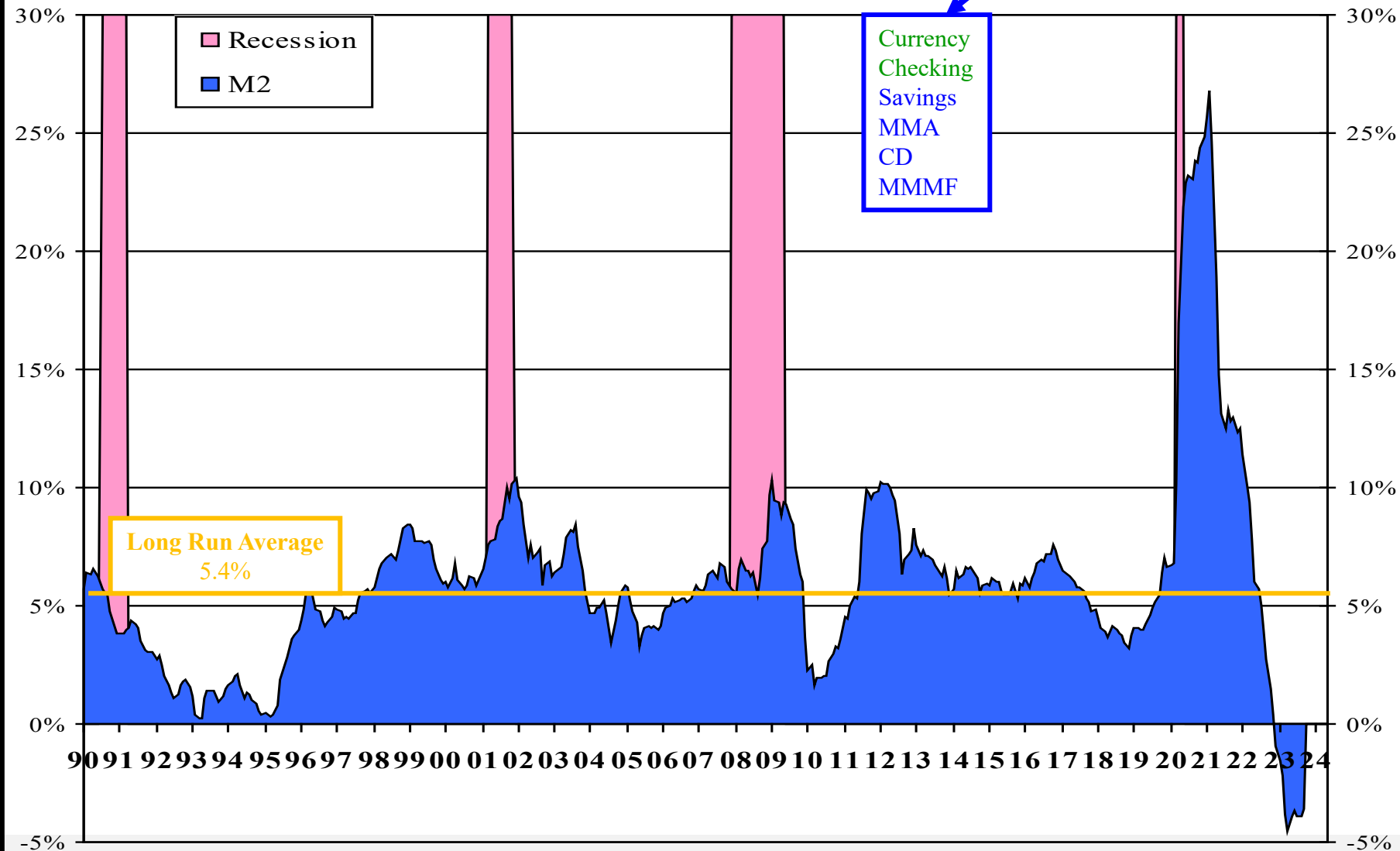
Treasury Yield Curves



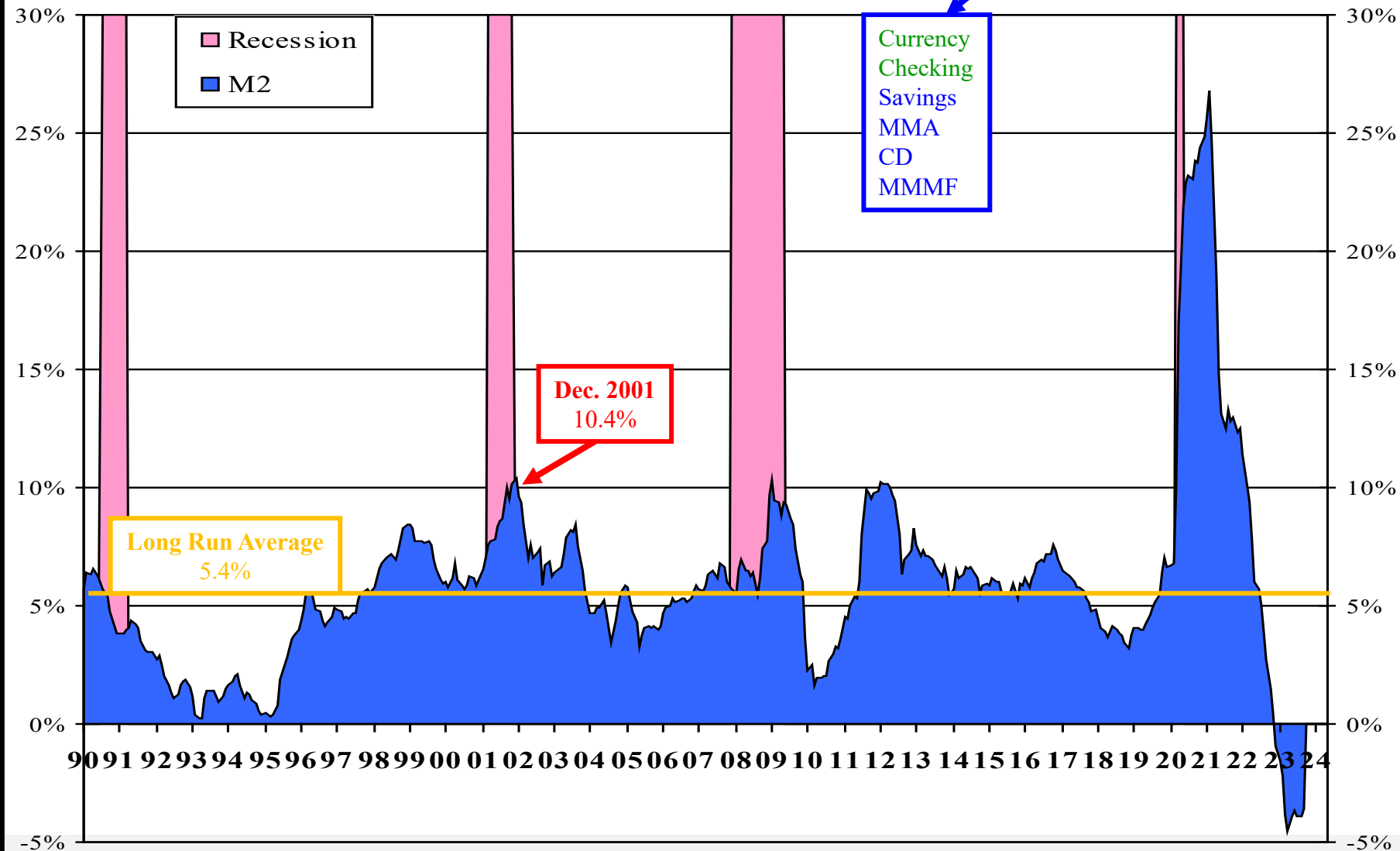
Money Supply Growth, M2



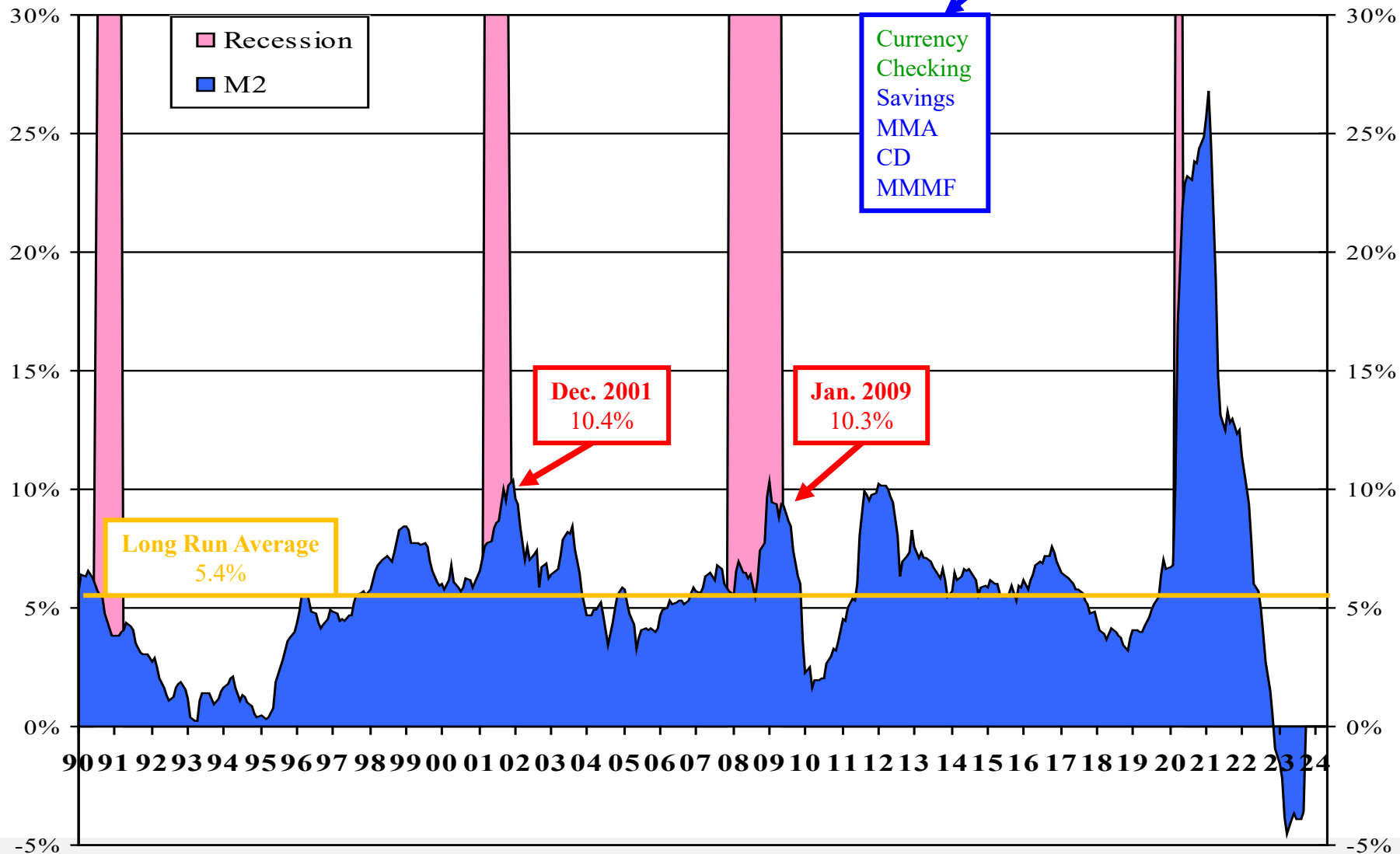
Money Supply Growth, M2



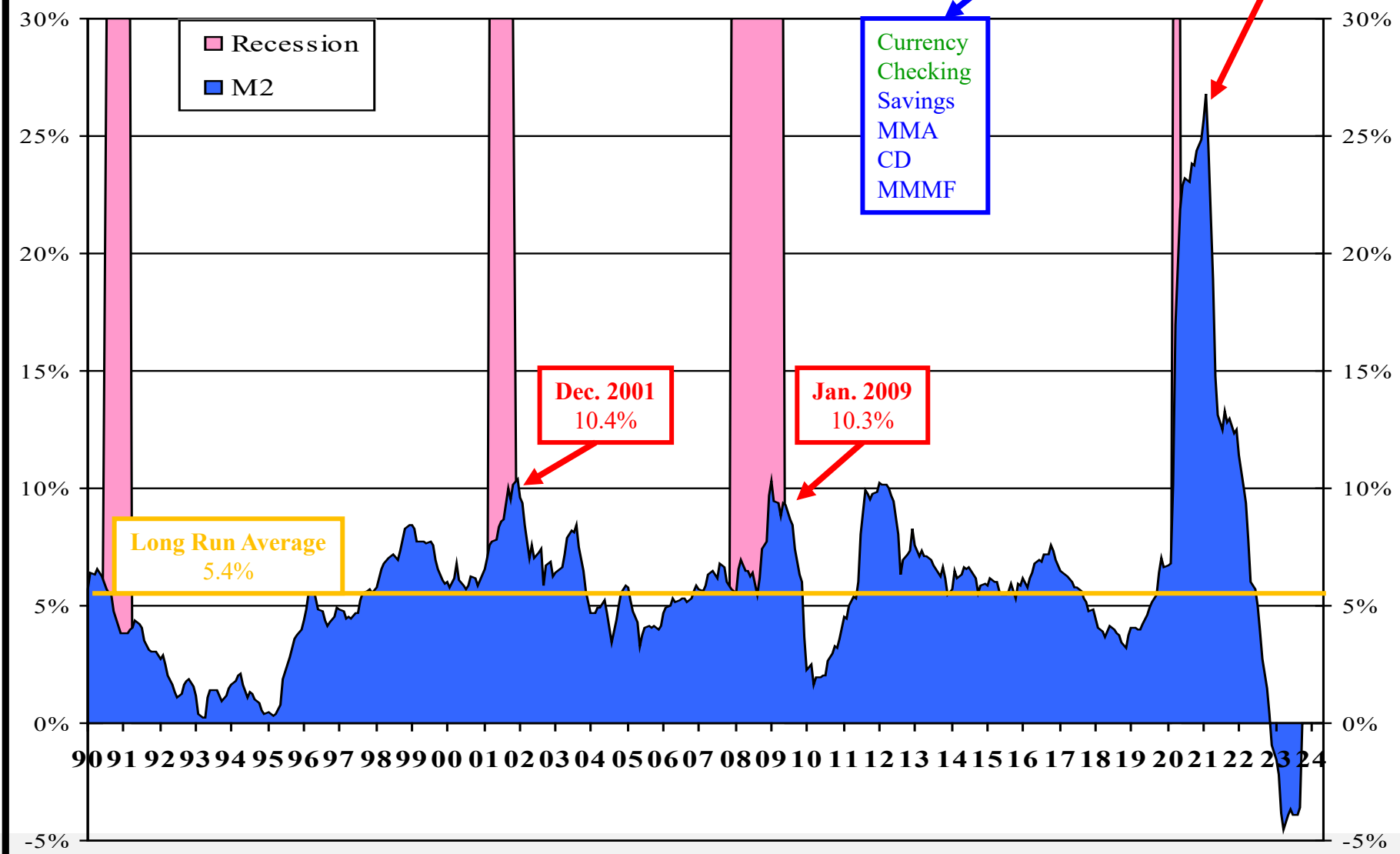
Money Supply Growth, M2



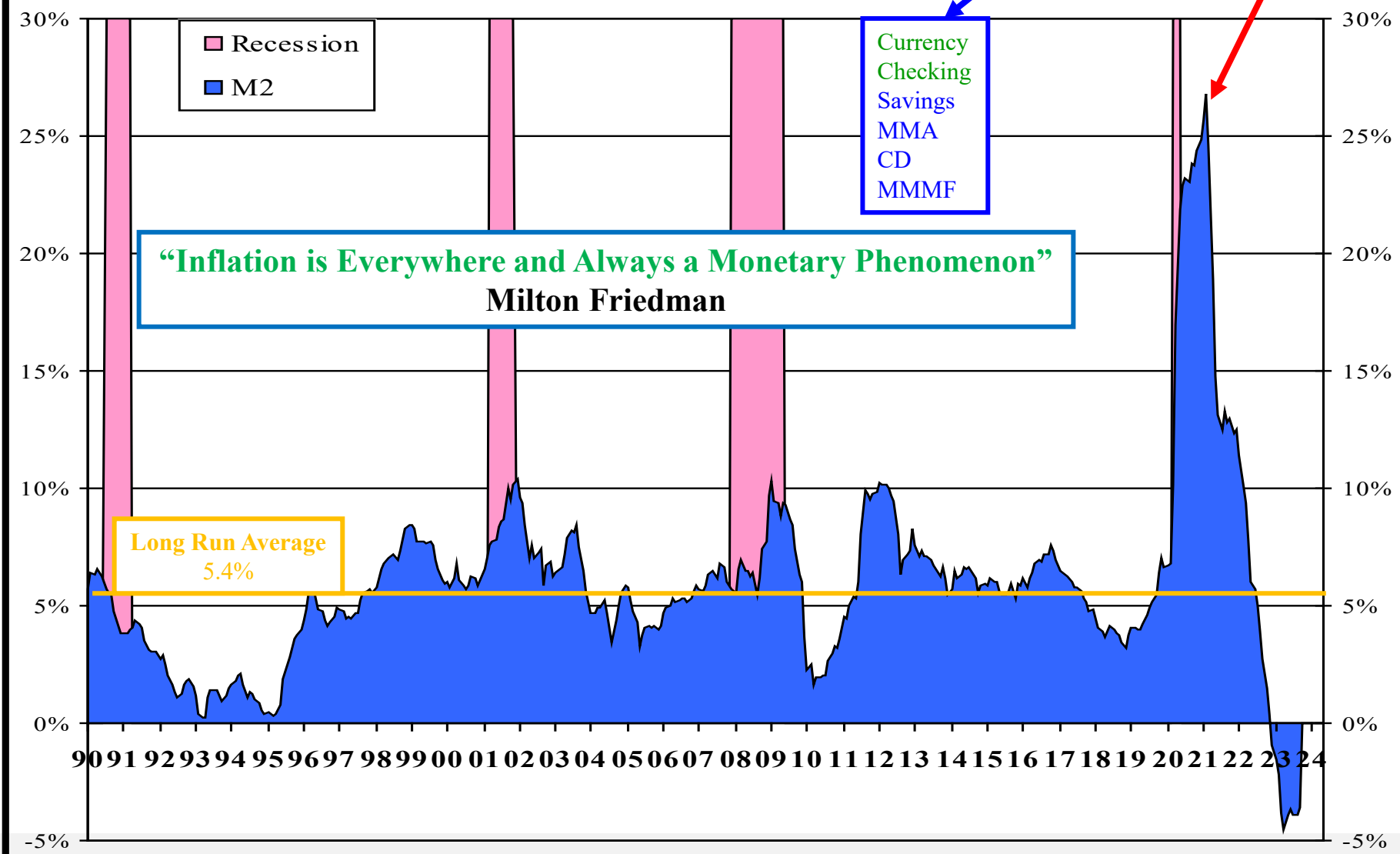
Money Supply Growth, M2



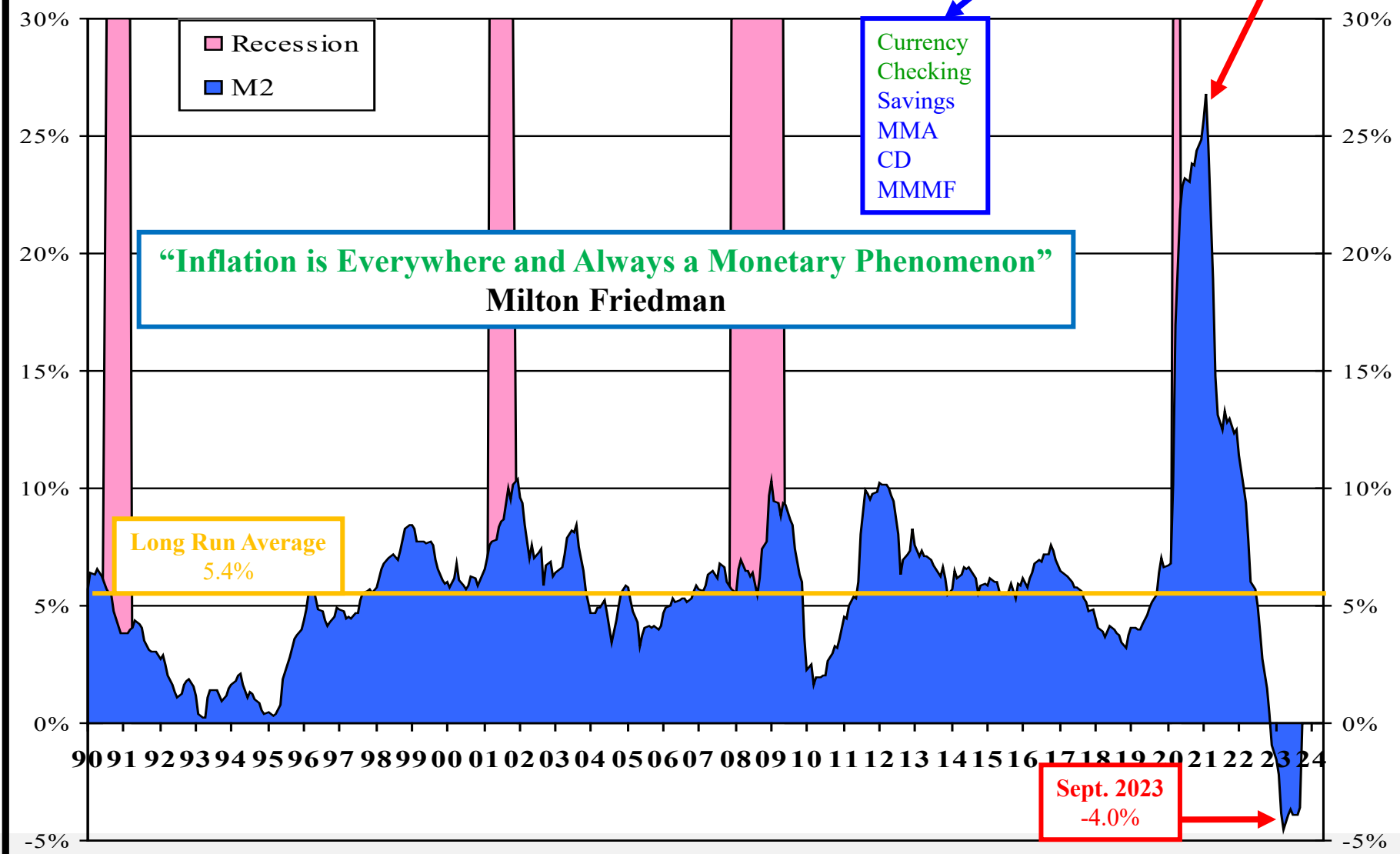
Money Supply Growth, M2



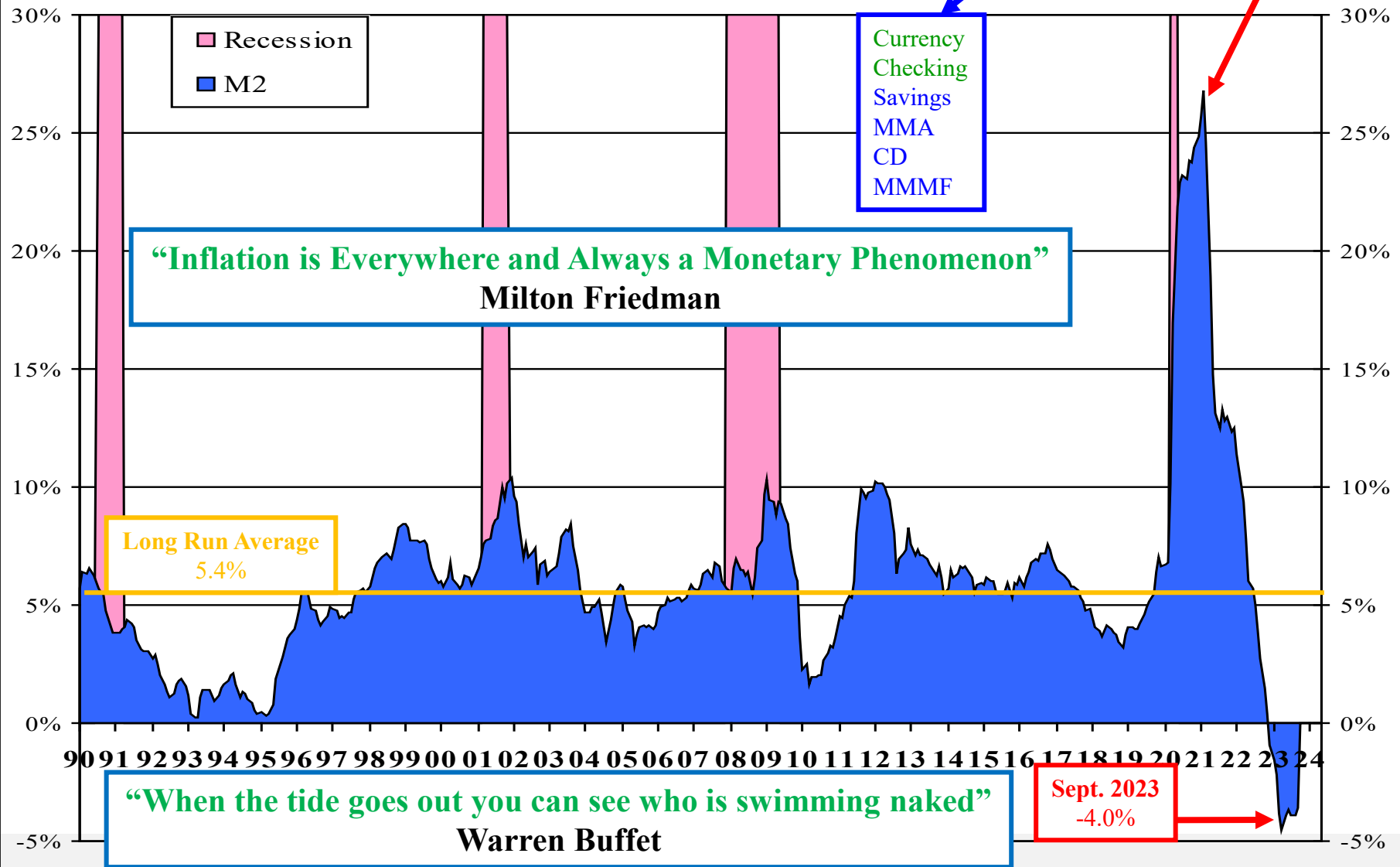
Money Supply Growth, M2



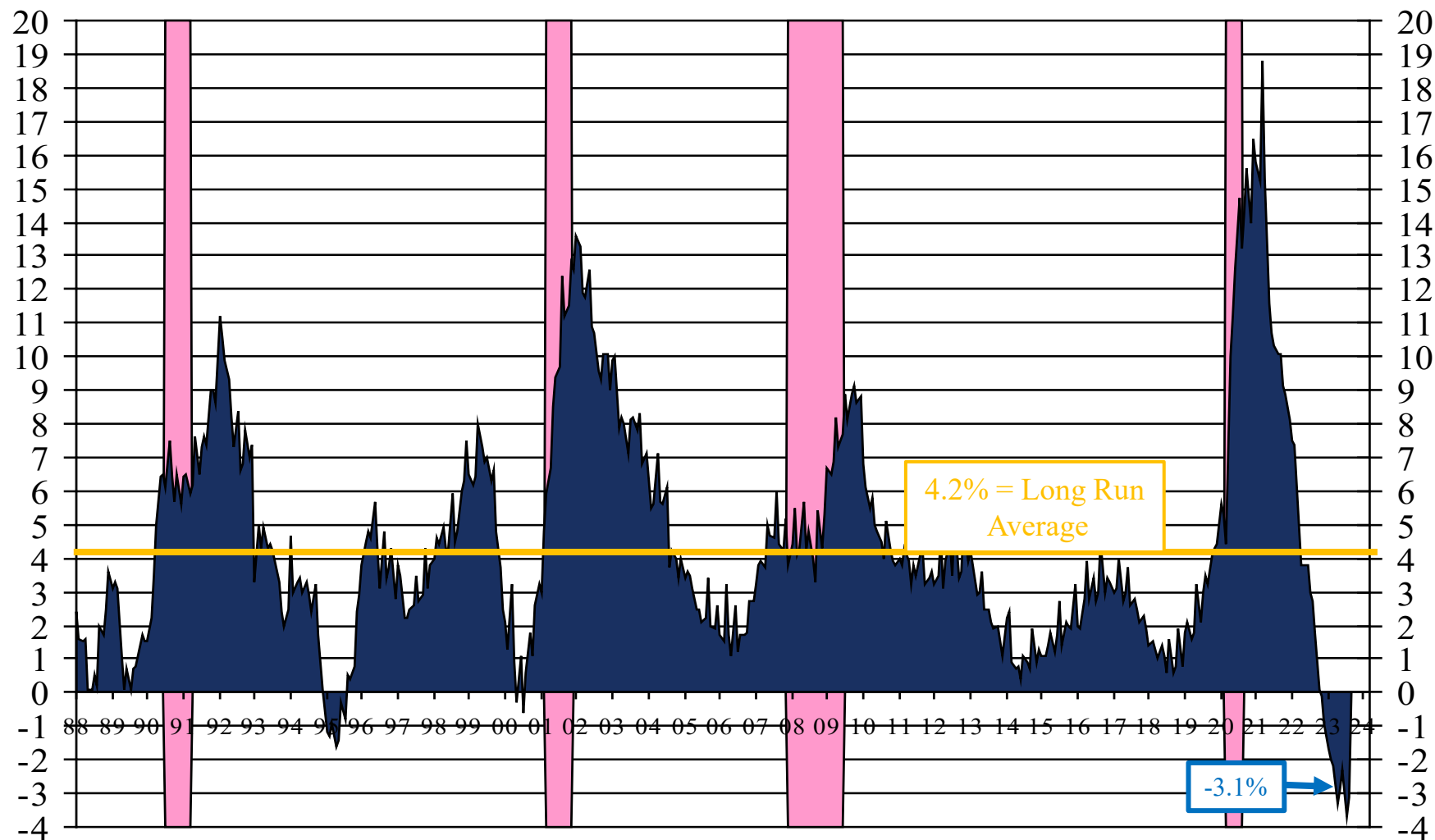
Money Supply Growth, M2



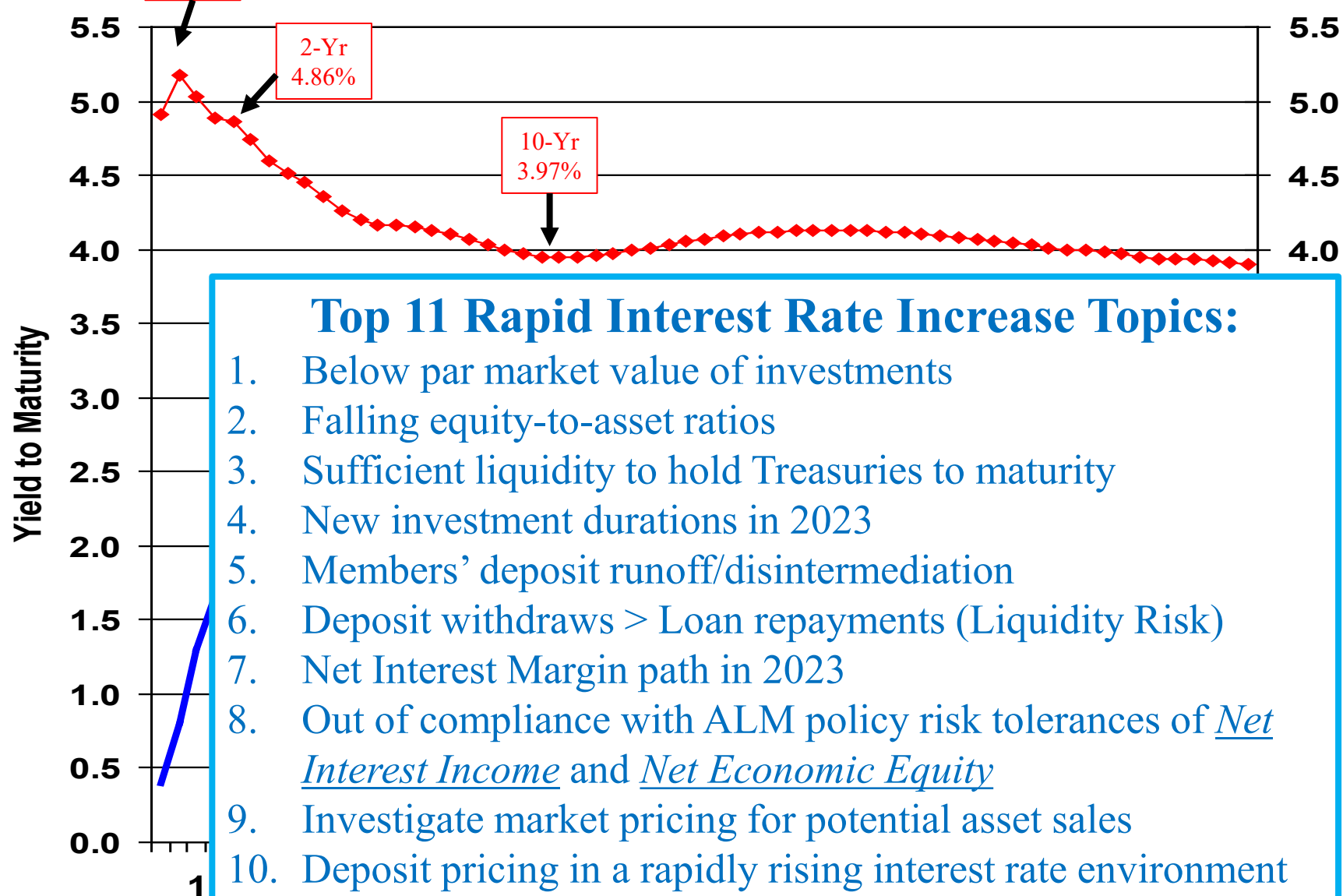
Money Supply Growth, M2



Savings per Member Growth Rate



Treasury Yield Curves



Top 11 Rapid Interest Rate Increase Topics:

1. Below par market value of investments
2. Falling equity-to-asset ratios
3. Sufficient liquidity to hold Treasuries to maturity
4. New investment durations in 2023
5. Members' deposit runoff/disintermediation
6. Deposit withdraws > Loan repayments (Liquidity Risk)
7. Net Interest Margin path in 2023
8. Out of compliance with ALM policy risk tolerances of Net Interest Income and Net Economic Equity
9. Investigate market pricing for potential asset sales
10. Deposit pricing in a rapidly rising interest rate environment
11. Rely on wholesale borrowings to maintain sufficient liquidity

Credit Union Balance Sheet

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Credit Union Balance Sheet

Assets

Assets	Credit Union Balance Sheet	Liabilities + Capital

Credit Union Balance Sheet

Assets

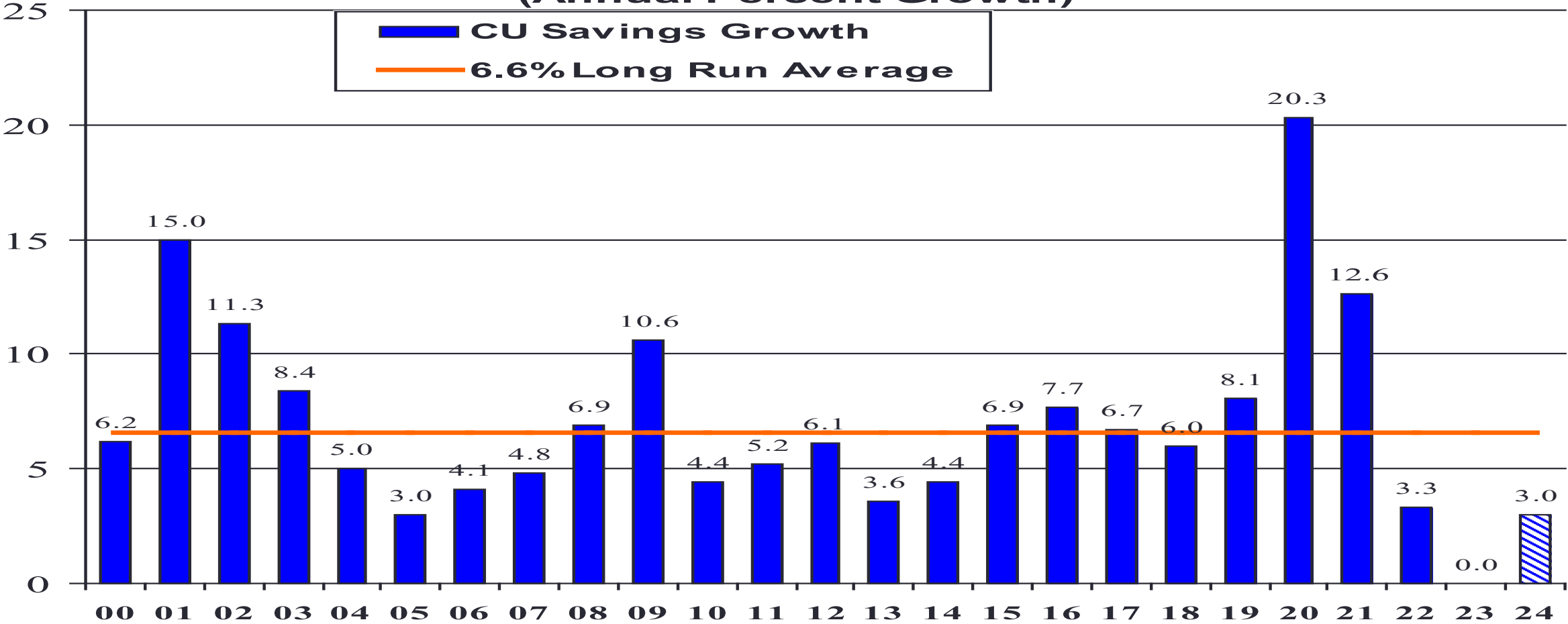
Liabilities + Capital

Deposits

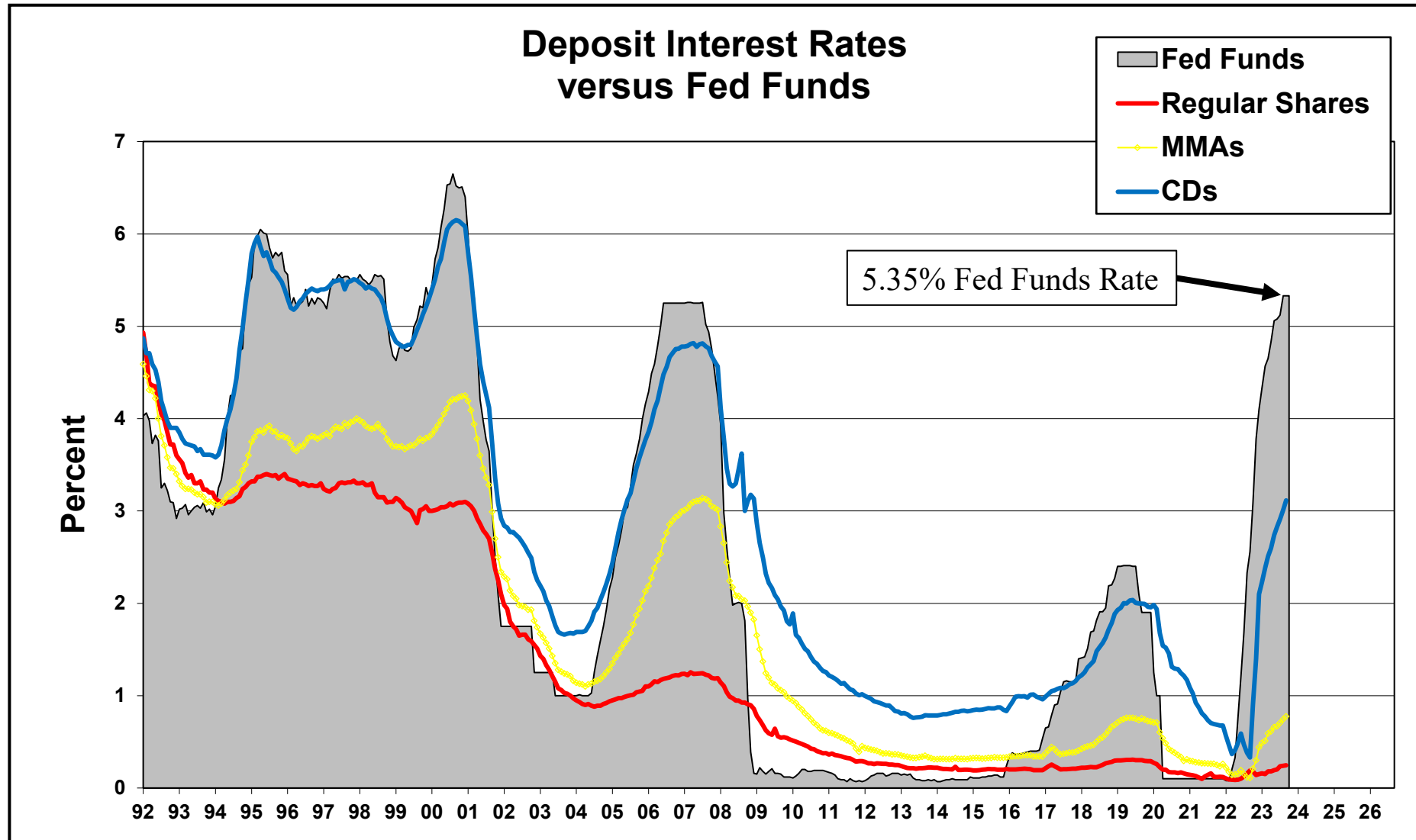
- Checking Accounts
- Savings
- Money Market Deposits
- Certificates of Deposits

Slowing Credit Union Savings Growth

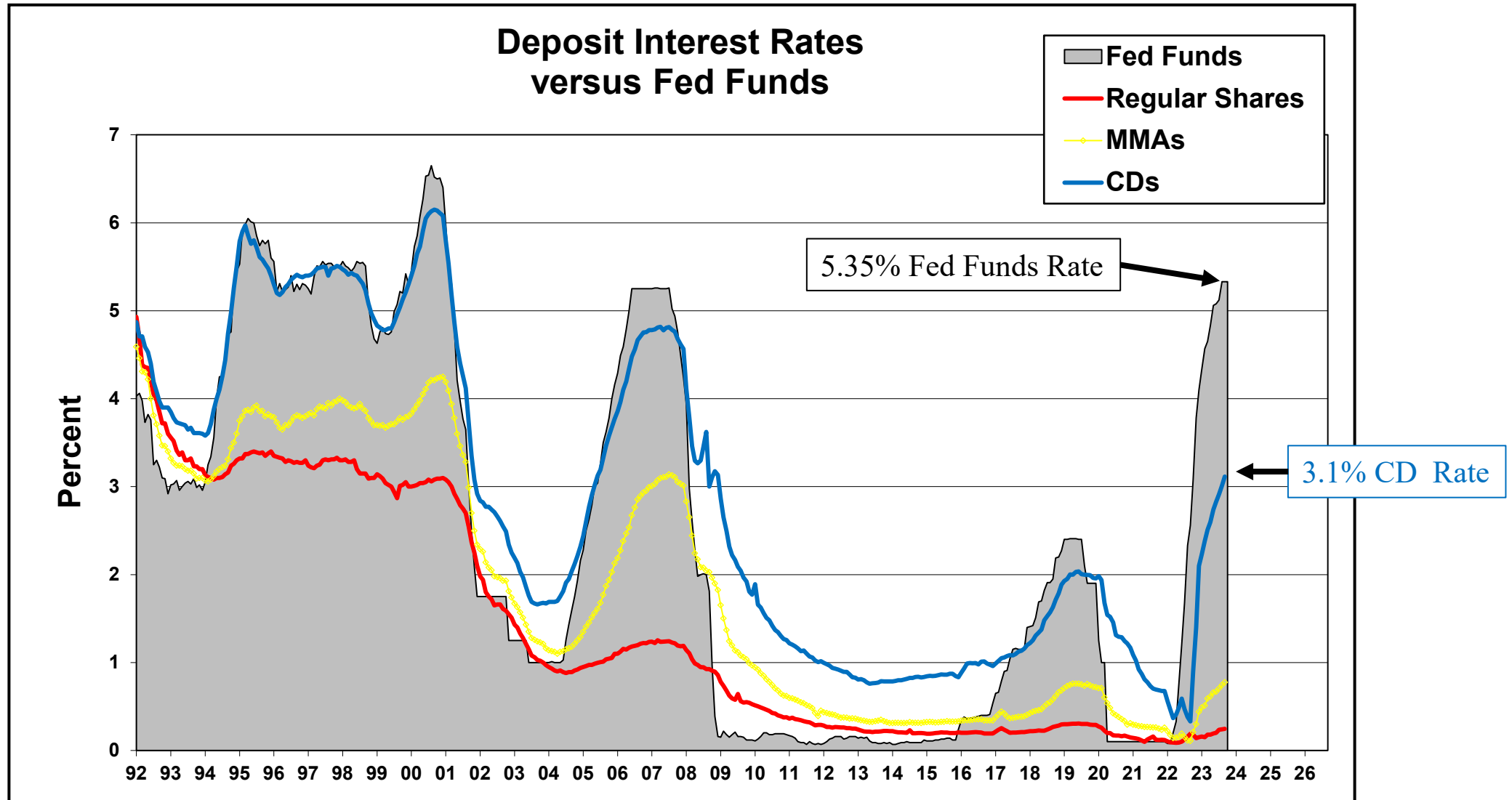
Credit Union Savings Growth (Annual Percent Growth)



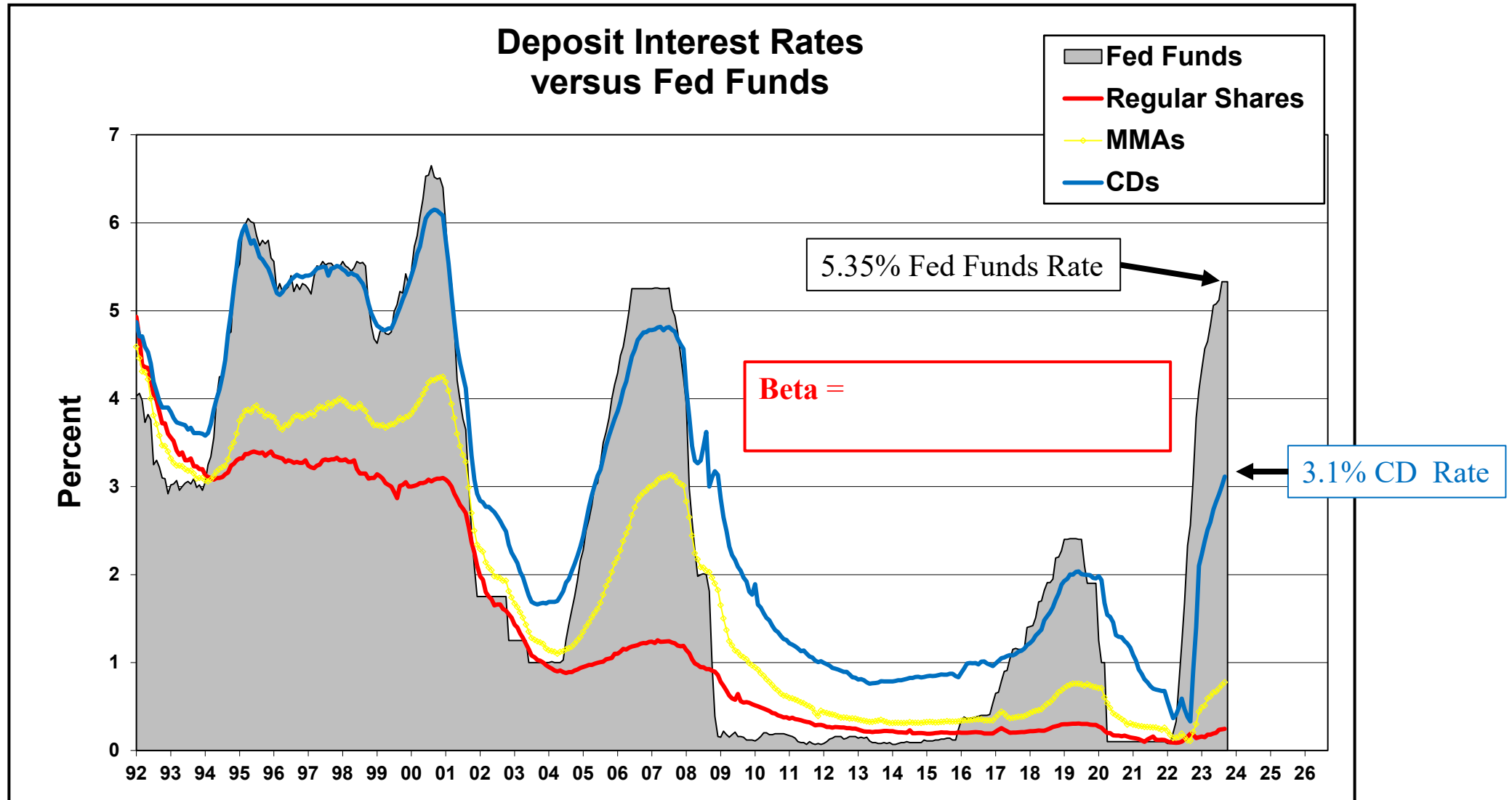
Rising Fed Funds Interest Rate and Deposit Pricing



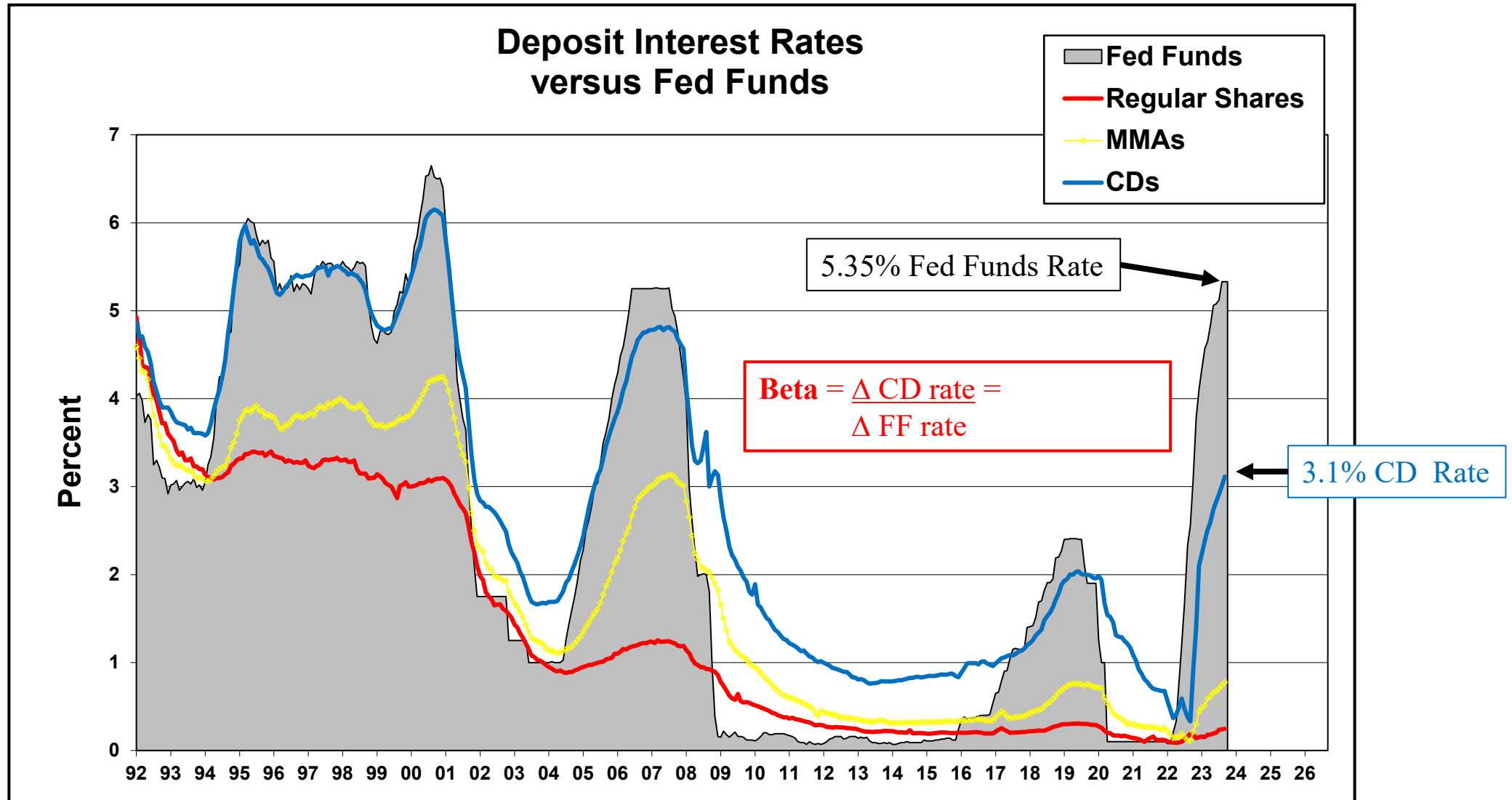
Rising Fed Funds Interest Rate and Deposit Pricing



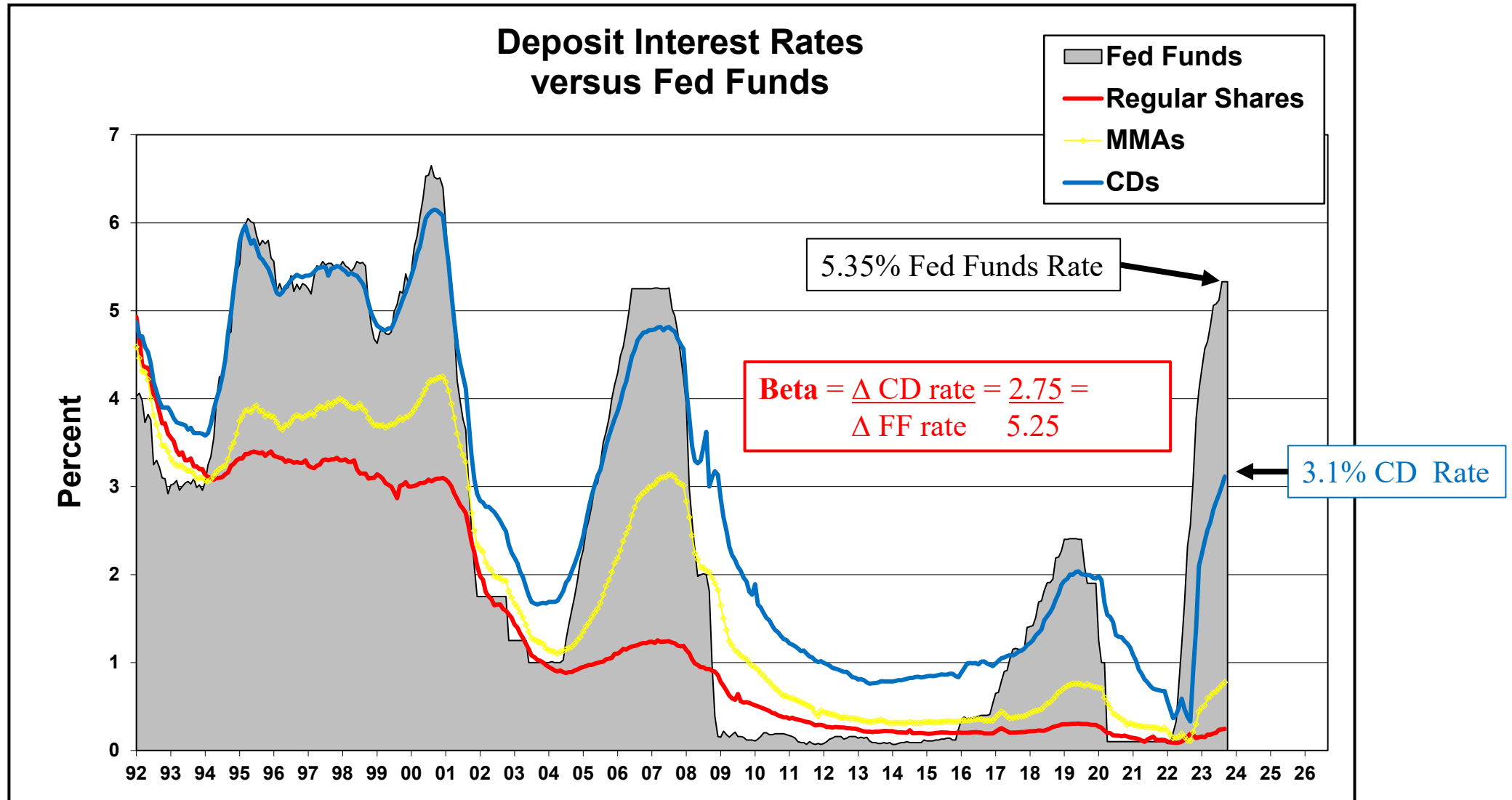
Rising Fed Funds Interest Rate and Deposit Pricing



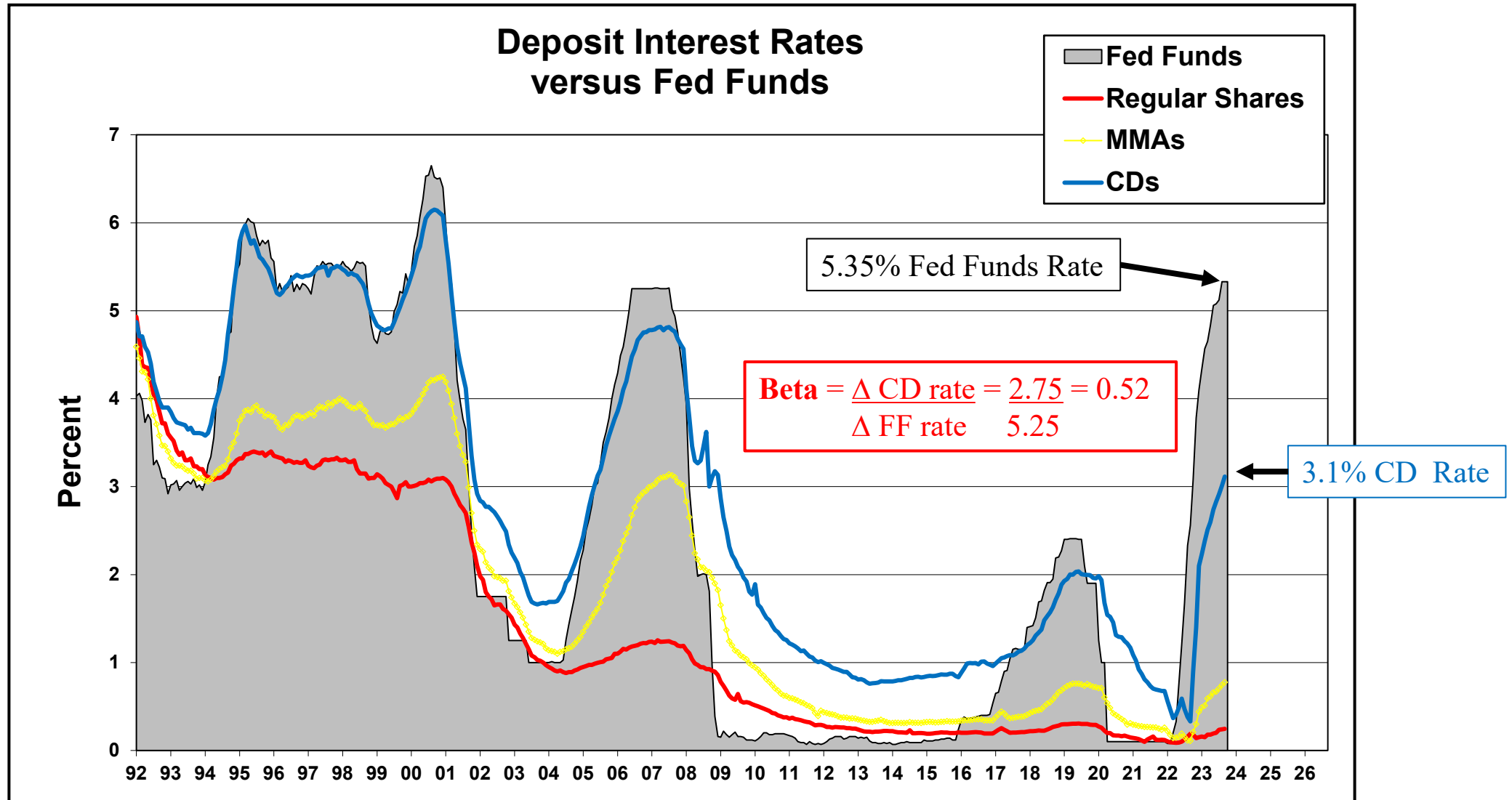
Rising Fed Funds Interest Rate and Deposit Pricing



Rising Fed Funds Interest Rate and Deposit Pricing



Rising Fed Funds Interest Rate and Deposit Pricing



Credit Union Balance Sheet

Assets

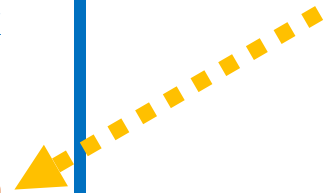
Liabilities + Capital

Deposits

- Checking Accounts
- Savings
- Money Market Deposits
- Certificates of Deposits

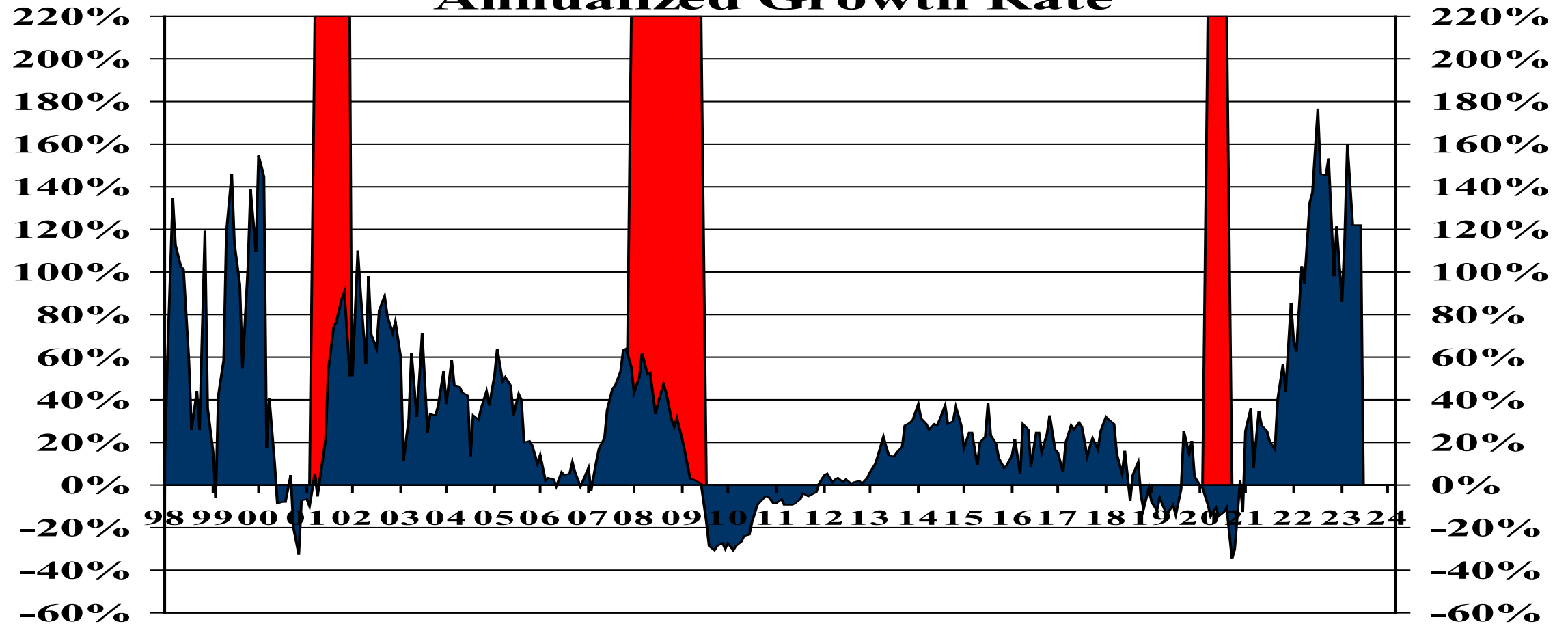
Borrowings

- Federal Home Loan Bank
- Corporate Line of Credit
- Fed Funds Purchased
- Bank Term Funding Program



Resurgent Borrowings

CU Borrowings Growth Seasonally Adjusted Annualized Growth Rate



Credit Union Balance Sheet

Assets

Liabilities + Capital

Deposits

- Checking Accounts
- Savings
- Money Market Deposits
- Certificates of Deposits

Borrowings

- Federal Home Loan Bank
- Corporate Line of Credit
- Fed Funds Purchased
- Bank Term Funding Program

Equity (Net Capital)

1. Undivided Earnings
2. Regular Reserves
3. Gains (losses) on Available For Sale (AFS) Securities

Credit Union Balance Sheet

Assets

Liabilities + Capital

Cash (Reserves)

Deposits

- Checking Accounts
- Savings
- Money Market Deposits
- Certificates of Deposits

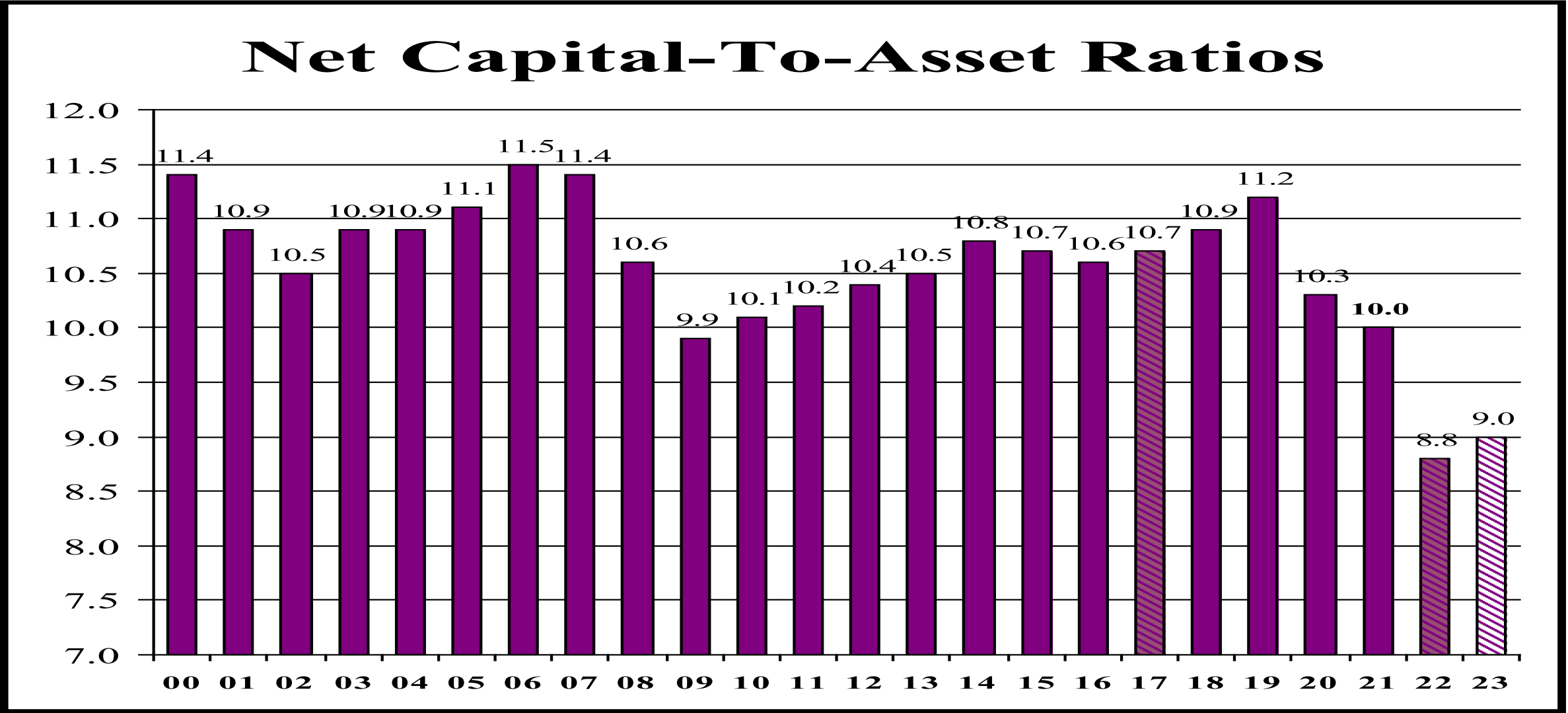
Borrowings

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Equity (Net Capital)

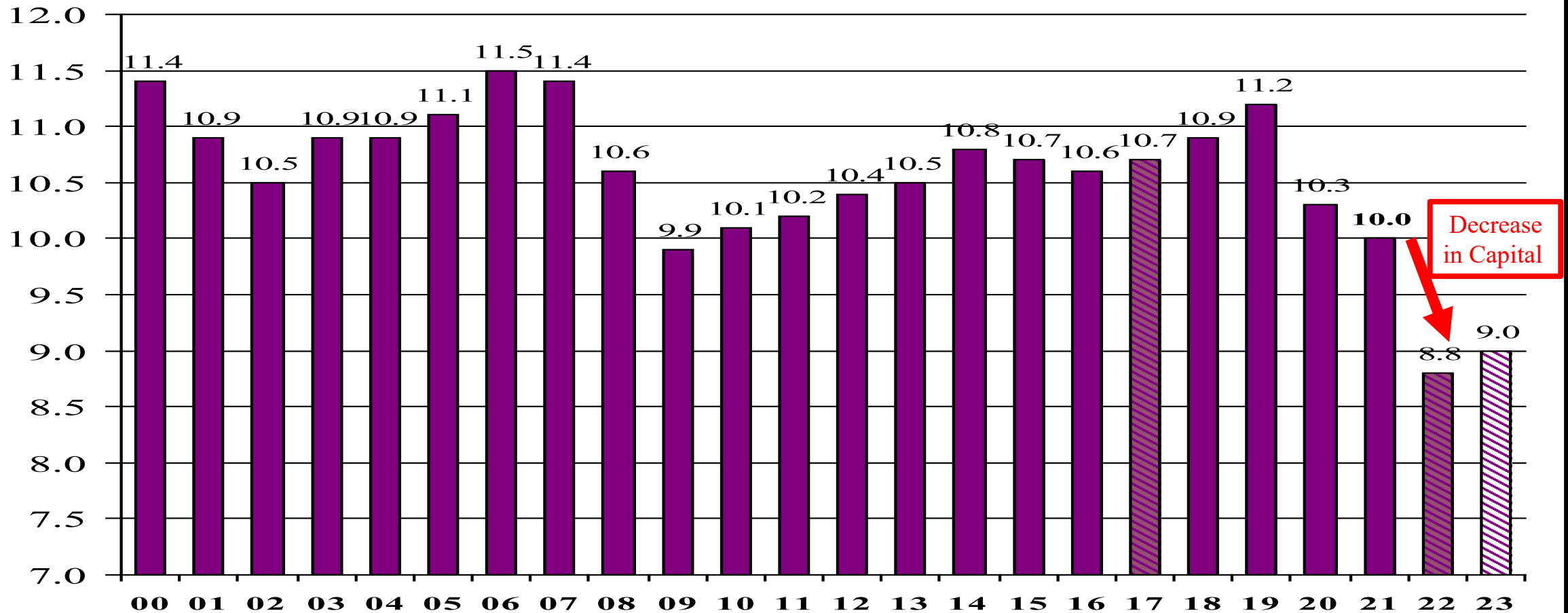
1. Undivided Earnings
2. Regular Reserves
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Falling Net Capital Ratios

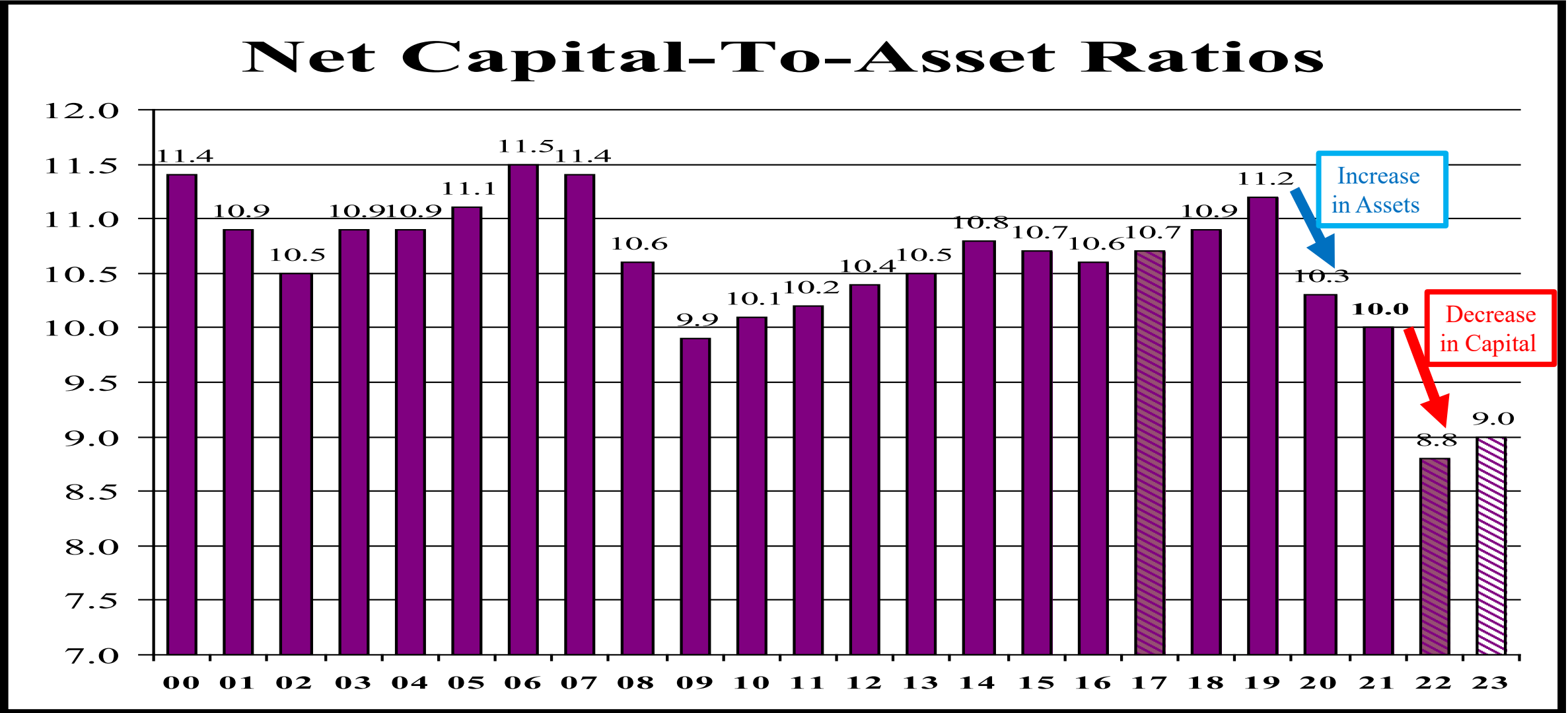


Falling Net Capital Ratios

Net Capital-To-Asset Ratios



Falling Net Capital Ratios



Credit Union Balance Sheet

Assets

Liabilities + Capital

Cash (Reserves)

Fixed Assets

- Land
- Building
- Equipment

Deposits

- Checking Accounts
- Savings
- Money Market Deposits
- Certificates of Deposits

Borrowings

- Federal Home Loan Bank
- Corporate Line of Credit
- Fed Funds Purchased
- Bank Term Funding Program

Equity (Net Capital)

1. Undivided Earnings
2. Regular Reserves
3. Gains (losses) on Available For Sale (AFS) Securities

Credit Union Balance Sheet

Assets

Liabilities + Capital

Cash (Reserves)

Fixed Assets

- Land
- Building
- Equipment

Investments

- < 1 year maturity
- 1–3-year maturity
- > 3-year maturity

Deposits

- Checking Accounts
- Savings
- Money Market Deposits
- Certificates of Deposits

Borrowings

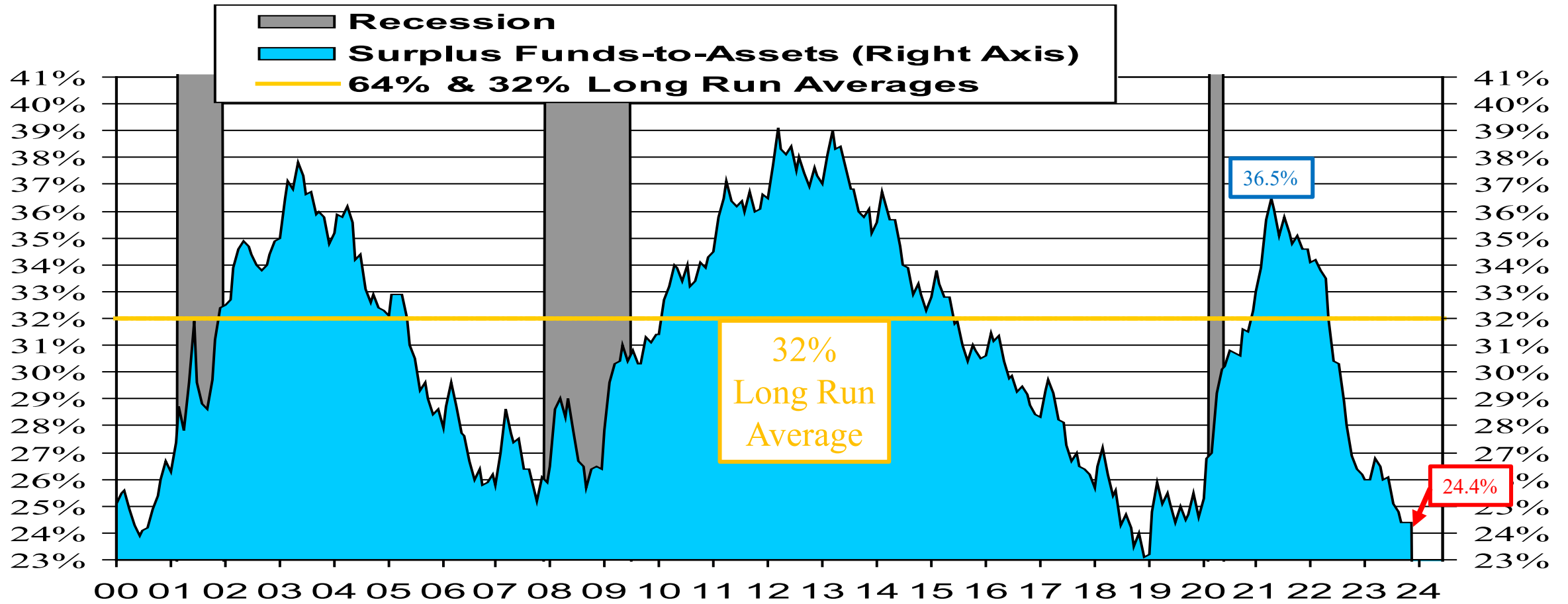
- Federal Home Loan Bank
- Corporate Line of Credit
- Fed Funds Purchased
- Bank Term Funding Program

Equity (Net Capital)

1. Undivided Earnings
2. Regular Reserves
3. Gains (losses) on Available For Sale (AFS) Securities

Investments Are Falling and Yields Are Rising

CU Surplus Funds (Cash + Investments)



Credit Union Balance Sheet

Assets

Liabilities + Capital

Cash (Reserves)

Fixed Assets

- Land
- Building
- Equipment

Investments

- < 1 year maturity
- 1–3-year maturity
- > 3-year maturity

Loans

- Commercial
- Auto
- Home
- Credit Card

Deposits

- Checking Accounts
- Savings
- Money Market Deposits
- Certificates of Deposits

Borrowings

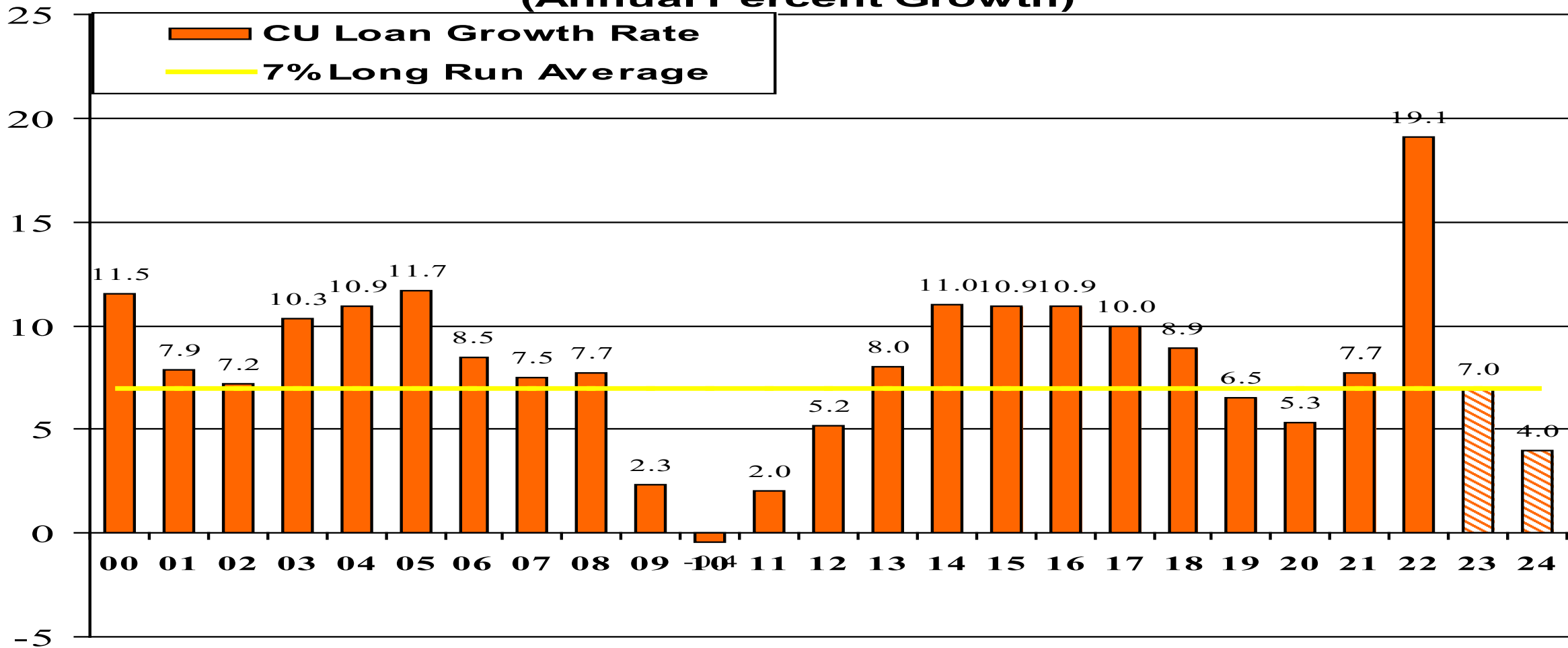
- Federal Home Loan Bank
- Corporate Line of Credit
- Fed Funds Purchased
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Equity (Net Capital)

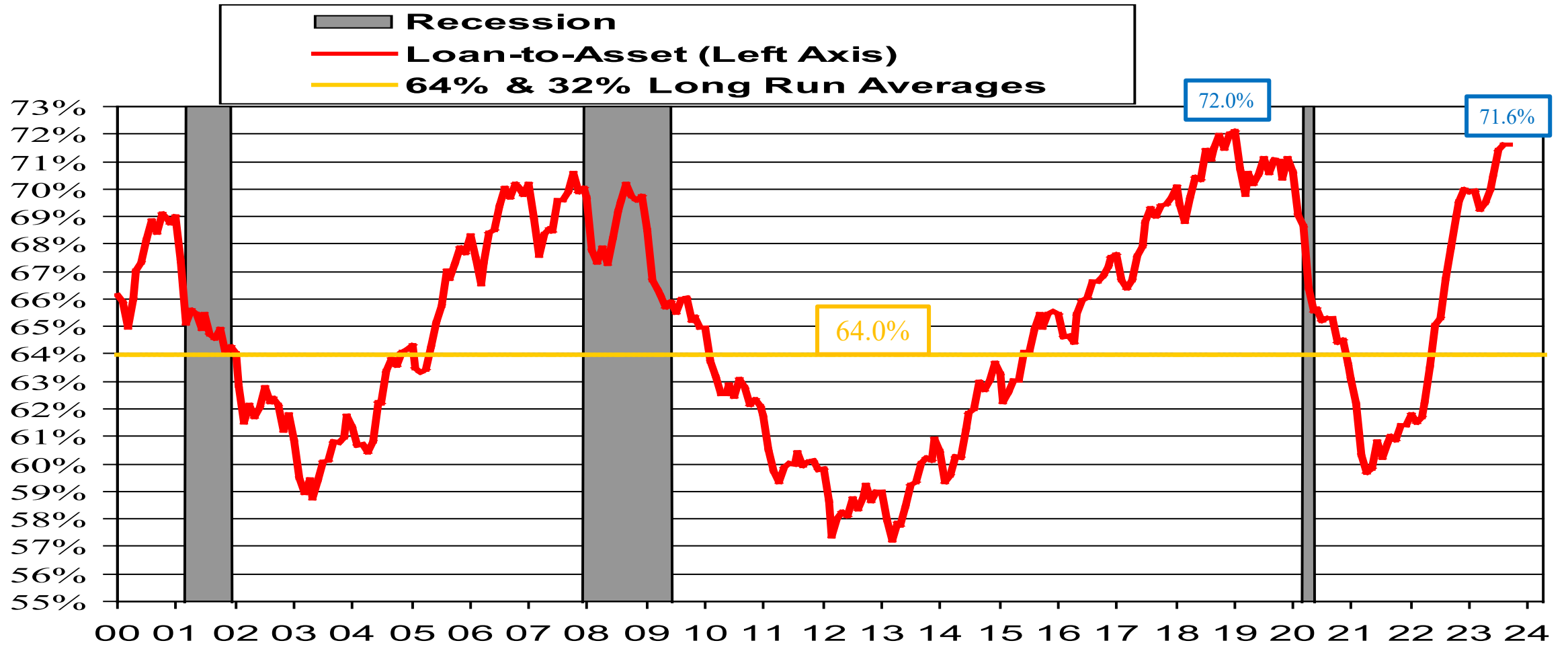
1. Undivided Earnings
2. Regular Reserves
3. Gains (losses) on Available For Sale (AFS) Securities

Slowing Credit Union Loan Growth

Credit Union Loan Growth (Annual Percent Growth)



CU Loan to Asset Ratio



Credit Union Balance Sheet

Assets

Liabilities + Capital

Cash (Reserves)

Fixed Assets

- Land
- Building
- Equipment

Investments

- < 1 year maturity
- 1–3-year maturity
- > 3-year maturity

Loans

- Commercial
- Auto
- Home
- Credit Card

Deposits

- Checking Accounts
- Savings
- Money Market Deposits
- Certificates of Deposits

Borrowings

- Federal Home Loan Bank
- Corporate Line of Credit
- Fed Funds Purchased
- Bank Term Funding Program

Equity (Net Capital)

1. Undivided Earnings
2. Regular Reserves
3. Gains (losses) on Available For Sale (AFS) Securities

Credit Union Balance Sheet

Assets

Liabilities + Capital

Cash (Reserves)

Fixed Assets

- Land
- Building
- Equipment

Investments

- < 1 year maturity
- 1–3-year maturity
- > 3-year maturity

Loans

- Commercial
- Auto
- Home
- Credit Card

Allowance for Loan Loss

Deposits

- Checking Accounts
- Savings
- Money Market Deposits
- Certificates of Deposits

Borrowings

- Federal Home Loan Bank
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Equity (Net Capital)

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Limerick of the Day

There once was a credit union that had quite a scare

Limerick of the Day

There once was a credit union that had quite a scare
For their liquidity seemed quite rare

Limerick of the Day

There once was a credit union that had quite a scare
For their liquidity seemed quite rare
But with some quick loans

Limerick of the Day

There once was a credit union that had quite a scare
For their liquidity seemed quite rare
But with some quick loans
And more cash in their bones

Limerick of the Day

There once was a credit union that had quite a scare
For their liquidity seemed quite rare
But with some quick loans
And more cash in their bones
They managed to keep their head above the despair.

Economic Update Summary For 2023

1. Slow economic growth for the next year

Economic Update Summary For 2023

1. Slow economic growth for the next year
2. Falling inflation rate during the next 2 years

Economic Update Summary For 2023

1. Slow economic growth for the next year
2. Falling inflation rate during the next 2 years
3. Unemployment rate rising to natural rate in 2024

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4. Short-term interest rates above long-term interest rates into 2024

Economic Update Summary For 2023

1. Slow economic growth for the next year
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3. Unemployment rate rising to natural rate in 2024
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5. Credit union loan growth slowing in 2024

Economic Update Summary For 2023

1. Slow economic growth for the next year
2. Falling inflation rate during the next 2 years
3. Unemployment rate rising to natural rate in 2024
4. Short-term interest rates above long-term interest rates into 2024
5. Credit union loan growth slowing in 2024
6. Falling net interest margins in 2024

Economic forecast

November 2023

	Past results		Forecasts					
	Previous 10 Yr. Avg	2022	2023 Q1	2023 Q2	2023 Q3	2023Q4	2023	2024
Growth rates:								
Economic Growth (% chg GDP)*	2.1%	2.1%	2.0%	2.4%	4.9%	2.0%	2.5%	1.5%
Inflation (CPI, 12 mth % chg)	2.2%	6.5%	5.0%	3.1%	3.7%	3.7%	3.7%	3.0%
Unemployment Rate (BLS)	6.0%	3.5%	3.5%	3.6%	3.8%	3.9%	3.9%	4.3%
Federal Funds Rate (effective)	0.58%	4.33%	4.83%	5.08%	5.33%	5.33%	5.33%	5.10%
10-Year Treasury Rate	2.11%	3.88%	3.48%	3.81%	4.59%	4.80%	4.80%	4.80%
10-Year-Fed Funds Spread	1.53%	-0.45%	-1.35%	-1.27%	-0.77%	-0.53%	-0.53%	-0.3%

*Percent change, annual rate. All other numbers are end-of-period values.

Credit union forecast

November 2023

	Past Results		Quarterly results/ forecasts				Annual forecasts	
	10 Yr Average	2022	2023 Q1	2023 Q2	2023 Q4	2023 Q4	2023	2024
Growth rates:								
Savings growth	7.7%	3.3%	2.3%	-0.5%	-1.0%	-0.8%	0.0%	3.0%
Loan growth	9.20%	19.10%	1.7%	2.2%	2.3%	1.8%	8.0%	4.0%
Asset growth	7.70%	5.10%	2.0%	0.3%	1.0%	0.7%	4.0%	4.0%
Membership growth	3.55%	4.30%	1.2%	1.0%	0.4%	0.4%	3.0%	2.5%
Liquidity:								
Loan-to-share ratio**	79.5%	81.5%	80.9%	83.1%	86.0%	88.3%	88.3%	88.1%
Asset quality:								
Delinquency rate**	0.66%	0.61%	0.52%	0.63%	0.70%	0.75%	0.75%	0.90%
Net charge-off rate*	0.48%	0.34%	0.52%	0.54%	0.55%	0.55%	0.55%	0.65%
Earnings:								
Return on average assets (ROA)*	0.88%	0.88%	0.81%	0.77%	0.70%	0.65%	0.70%	0.50%
Capital adequacy:								
Net worth ratio**	10.9%	10.7%	11.1%	11.2%	11.0%	11.1%	11.1%	11.3%

*Quarterly data, annualized. **End of period ratio.

Questions?