

2023 Economic and Investment Update

Are We Heading Toward a Recession?

Cleveland, OH

October 12, 2023





Agenda

welcome	Shawn Hufstedler – President, Ohio GFOA 9:00 am Tim McDonough – KeyBank 9:05 am			
economic and investment update				
questions	All 9:50 am			



Agenda

- I. Current State of the US Economy
- II. Federal Reserve Monetary Policy
- III. Recessions: What Should We Be Watching?
- IV. Municipal Bond Market Update

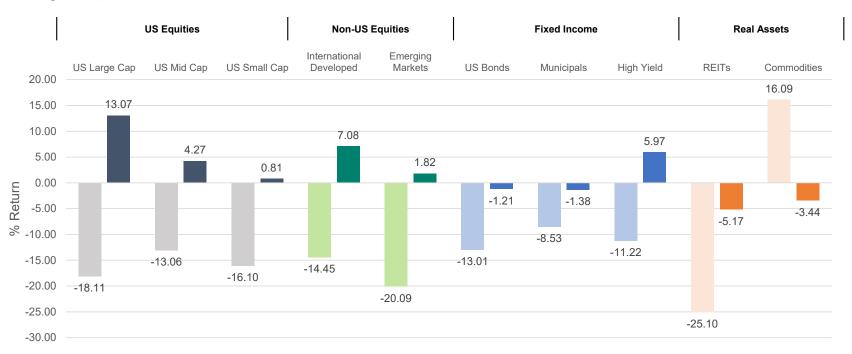


Current State of the US Economy How did we get here?



Financial markets are rebounding this year...

YTD through September 30, 2023



Light Color: 2022 Dark Color: YTD 2023

Indices used for:

Past performance is no guarantee for future results

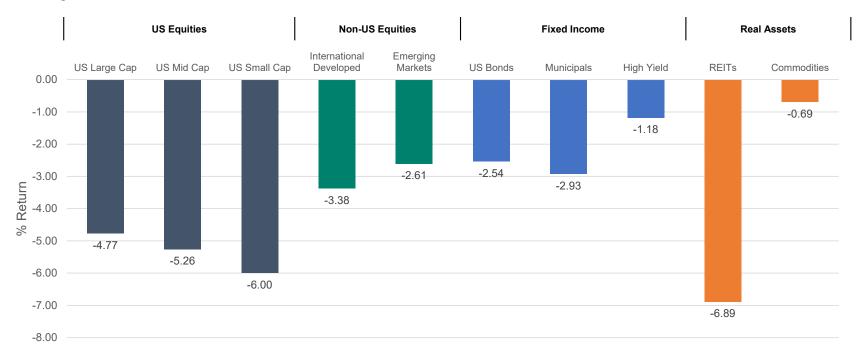
US Equities: US Large Cap - S&P 500 TR USD; US Mid Cap - S&P MidCap 400 TR USD; US Small Cap - S&P SmallCap 600 TR USD Non-US Equities: International Developed - MSCI EAFE NR USD; Emerging Markets - MSCI EM NR USD Fixed Income: US Bonds - Bloomberg US Agg Bond TR USD; Municipals - Bloomberg Municipal TR USD; High Yield - ICE BofA US High Yield TR USD

Real Assets: REITs - FTSE Nareit All REITs TR USD; Commodities - Bloomberg Commodity TR USD



...after a tough September

MTD through September 30, 2023



Dark Color: MTD 2023

Indices used for:

Past performance is no guarantee for future results

US Equities: US Large Cap - S&P 500 TR USD; US Mid Cap - S&P MidCap 400 TR USD; US Small Cap - S&P SmallCap 600 TR USD

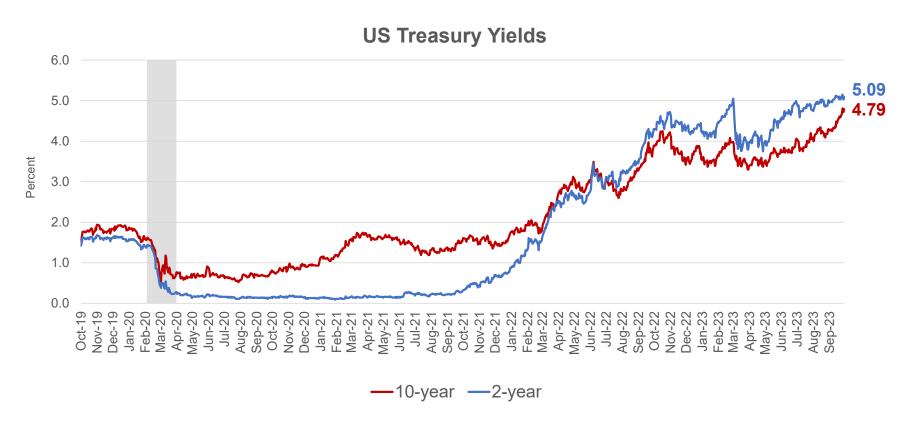
Non-US Equities: International Developed - MSCI EAFE NR USD; Emerging Markets - MSCI EM NR USD

Fixed Income: US Bonds - Bloomberg US Agg Bond TR USD; Municipals - Bloomberg Municipal TR USD; High Yield - ICE BofA US High Yield TR USD

Real Assets: REITs - FTSE Nareit All REITs TR USD; Commodities - Bloomberg Commodity TR USD



Interest rates have surged higher

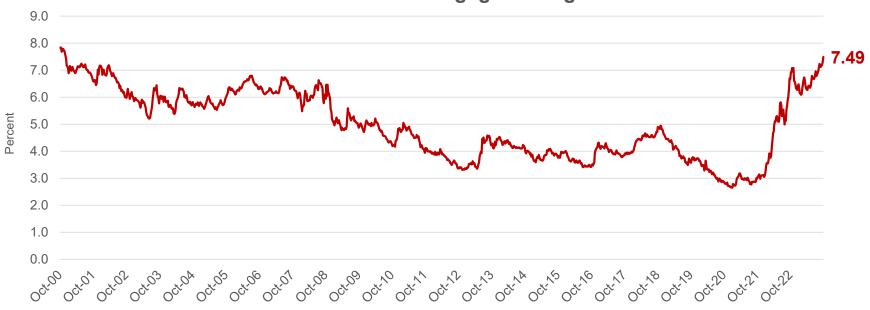


Market Yield on U.S. Treasury Securities at Constant Maturity, Quoted on an Investment Basis, Daily as of October 6, 2023. Shaded areas indicate U.S. recessions.



Interest rates have surged higher





—30-Year Fixed Mortgage Rate

Freddie Mac, 30-Year Fixed Rate Mortgage Average in the United StatesWeekly, Ending Thursday as of October 5, 2023.



How did we get here? A post-pandemic demand boom



Advance Retail Sales (nominal) - Retail Trade and Food Services; seasonally-adjusted. As of August 2023. Shaded areas indicate U.S. recessions.



How did we get here? A robust labor market

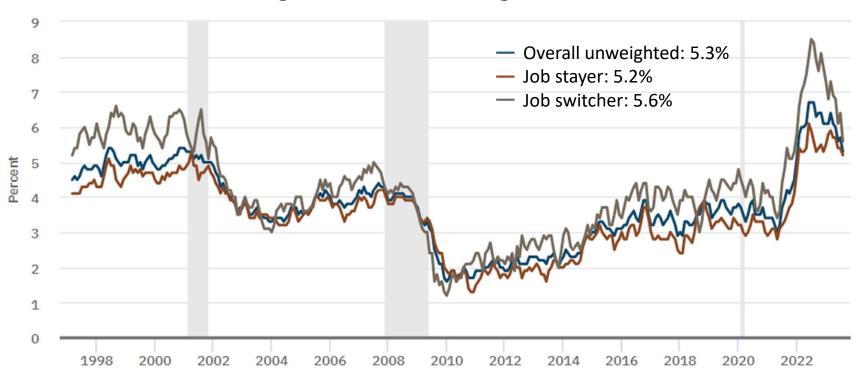


Job Openings: Total Nonfarm, Monthly, Seasonally Adjusted. As of August 2023. Shaded areas indicate U.S. recessions.



Wage growth – still high but decelerating

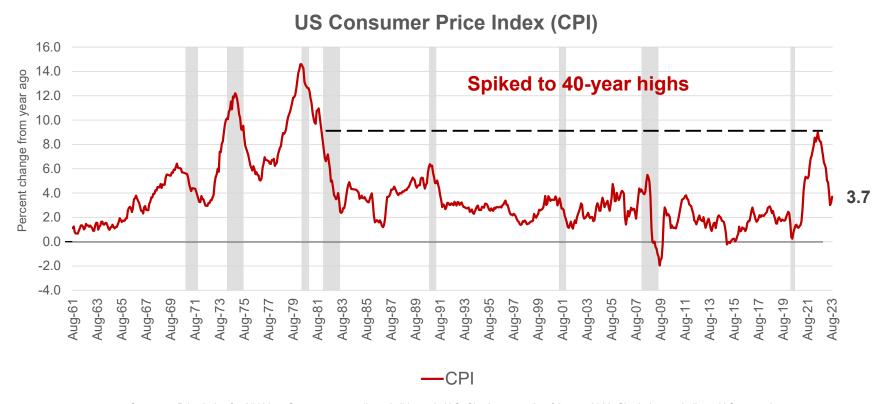
Wage Growth Tracker – August 2023





Three-month moving average of median wage growth, hourly data. As of August 2023. Shaded areas indicate U.S. recessions.

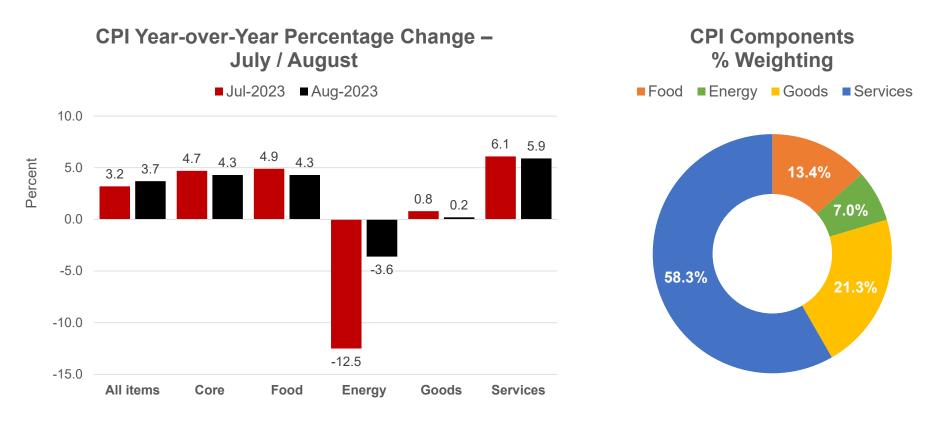
Put these together and what do you get? Inflation



Consumer Price Index for All Urban Consumers, unadjusted all items in U.S. City Average. As of August 2023. Shaded areas indicate U.S. recessions.



Inflation is moderating, but remains elevated





12-month percent change in Consumer Price Index (CPI) for All Urban Consumers (CPI-U), not seasonally adjusted.

Core, Goods and Services components exclude Food & Energy

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The Federal Reserve When will they finish raising interest rates?

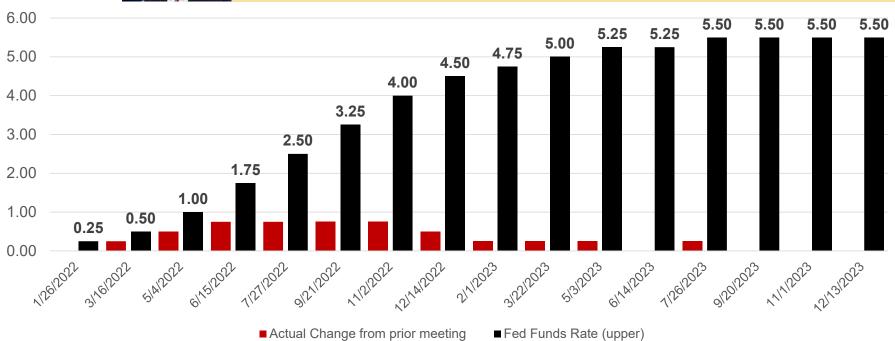


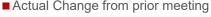
FOMC Rate Hikes: Pace and Magnitude

2022-2023: A total of 11 rate hikes (21 increments of 25 bps) in 17 months – an increase of 525 bps



"The Committee is strongly committed to returning inflation to its 2 percent objective. In assessing the appropriate stance of monetary policy, the Committee will continue to monitor the implications of incoming information for the economic outlook." - Jay Powell (September 20, 2023)



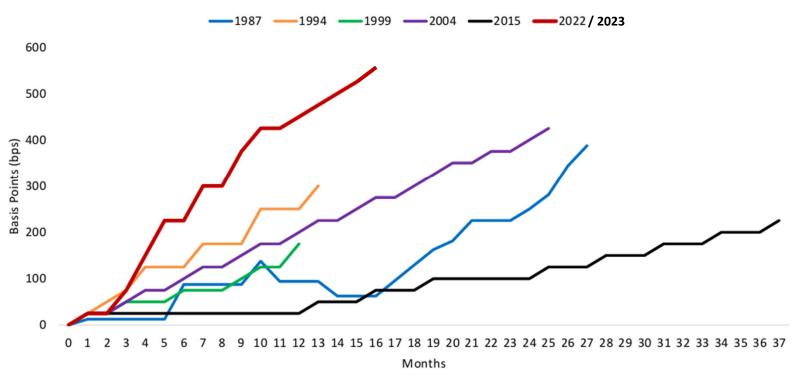






The Fed usually tightens until something breaks

Interest Rate Hikes Since Beginning of Tightening Cycle

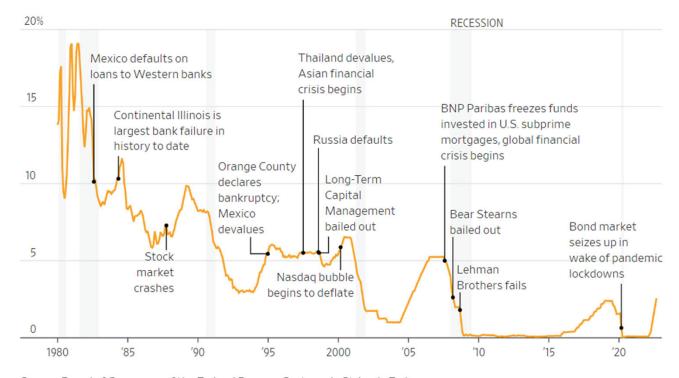


Through the September 20, 2023, FOMC Meeting.



The Fed usually tightens until something breaks

Federal-funds effective rate



Source: Board of Governors of the Federal Reserve System via St. Louis Fed



When will The Fed stop? History may be a guide...

The Fed has never stopped raising rates before the Federal Funds Rates was above the Consumer Price Index (CPI). Will this time be different?

Tightening Cycle	Fed Funds Peak	Date of Peak	CPI	Real Fed Funds
1973	11.00%	8/30/1973	7.40%	3.60%
1976-1980	20.00%	3/3/1980	14.80%	5.20%
1980	20.00%	12/5/1980	12.50%	7.50%
1983-1984	11.75%	8/24/1984	4.30%	7.45%
1986-1989	9.75%	2/24/1989	4.80%	4.95%
1994-1995	6.00%	2/1/1995	2.90%	3.10%
1999-2000	6.50%	5/16/2000	3.20%	3.30%
2004-2006	5.25%	6/29/2006	4.30%	0.95%
2015-2018	2.50%	12/19/2018	1.90%	0.60%
2022-2023	5.50%	???	3.70%	1.80%





Unemployment Rate Remains Iow, for now





—Unemployment Rate

Unemployment Rate: Monthly, Seasonally Adjusted. As of September 2023. Shaded areas indicate U.S. recessions.



Initial Claims remain steady for now

1/7/2023

2/4/2023

1/21/2023

3/4/2023

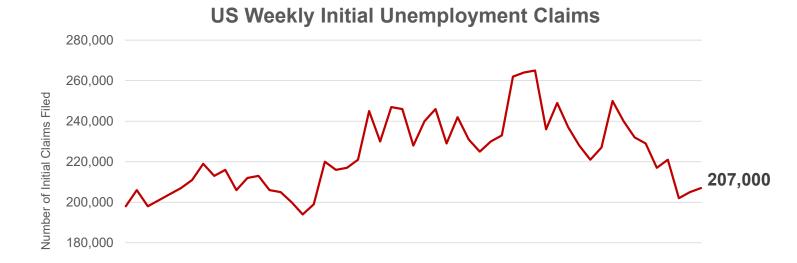
3/18/2023

2/18/2023

4/1/2023

-Initial Claims

4/15/2023 4/29/2023 5/13/2023 5/27/2023 6/10/2023



Recession Date	Peak in Claims
May 1970	343,750
Feb 1975	560,750
Jun 1980	629,000
Oct 1982	674,250
Mar 1991	501,250
Oct 2001	489,250
Mar 2009	659,250

Initial Claims, Weekly, Seasonally Adjusted. Week ending September 30, 2023.



160,000

10/1/2022

10/15/2022 10/29/2022 11/12/2022 11/26/2022 12/10/2022 7/8/2023

7/22/2023

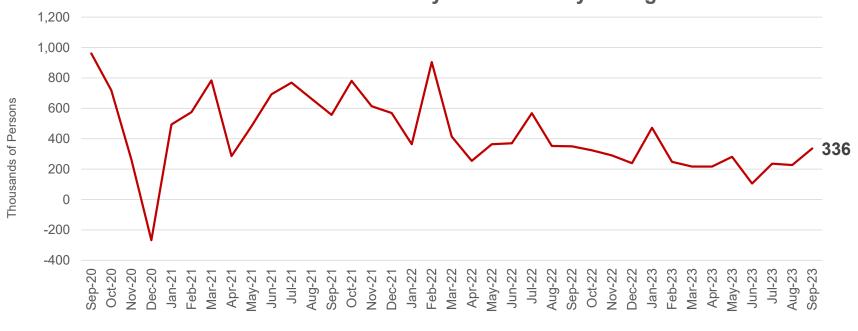
8/5/2023

8/19/2023 9/2/2023 9/16/2023

9/30/2023

New Non-farm payrolls surprised in September



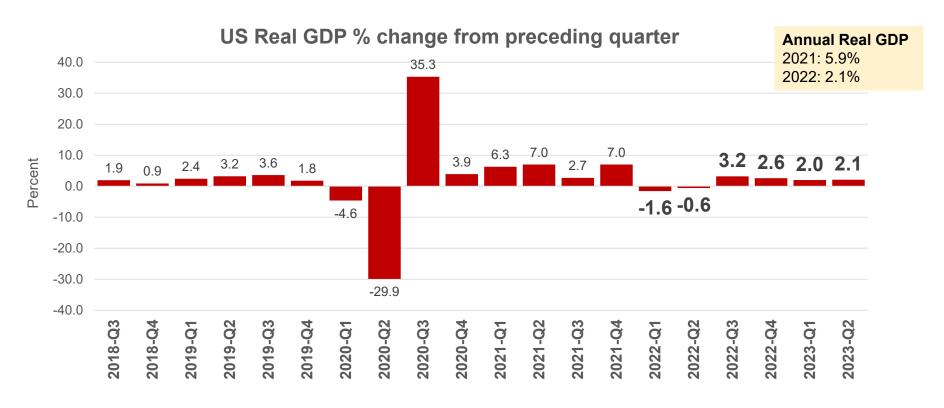


—Non-farm Payrolls

All Employees, Total Nonfarm, Monthly Change, Seasonally Adjusted. As of September 2023.



Economic Growth is Positive, but slowing

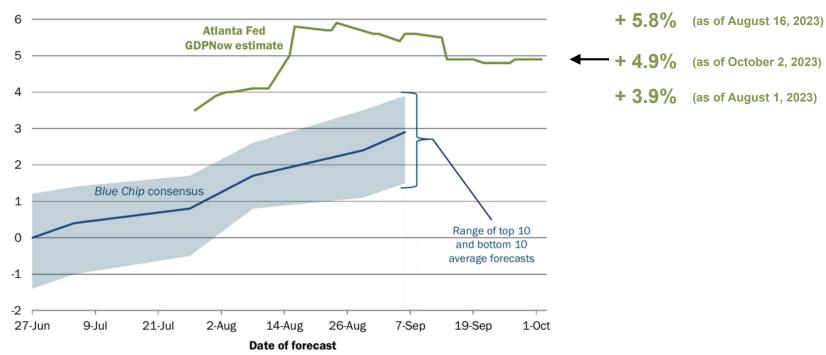


Real Gross Domestic Product (GDP), Compounded Annual Rate of Change, Quarterly, Seasonally Adjusted Annual Rate. Q2-2023 Final estimate.



Bigger questions for growth in Q3:2023 and FY:2023

Evolution of Atlanta Fed GDPNow real GDP Estimate for 2023:Q3



Quarterly percent change (SAAR)

Sources: BlueChip Economic Indicators and BlueChip Financial Forecasts

Note: the top (bottom) 10 average forecast is an average of the highest (lowest) 10 forecasts in the BlueChip survey.



Fed/FOMC Meeting (9/20/23)

"Good" News

- The Fed paused for the second time in 3 meetings
- Left Fed Funds rate at 5.50%
- Believes monetary policy is working, but with a lag
- Revised forecast for real GDP growth higher
- Revised forecast for unemployment rate lower

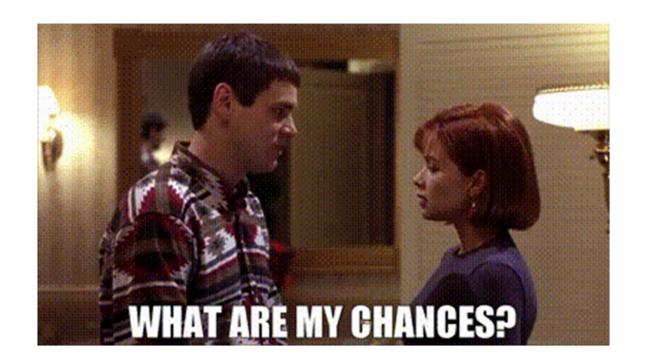
"Bad" News

- Left room for one more rate increase in 2023
- SEP forecasts raised Fed Funds rate in 2024 and 2025
- "Higher for longer"

Resilient economy + higher inflation = higher rates = "higher for longer"



Does the Fed have a chance of engineering a soft landing?





Does the Fed have a chance of engineering a soft landing?







Does the Fed have a chance of engineering a soft landing?



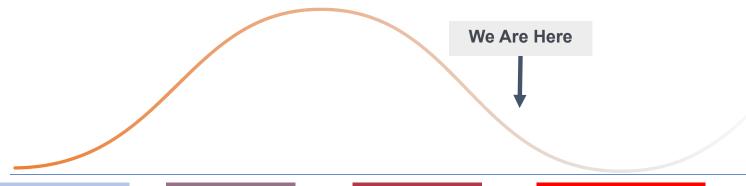


Recession Indicators

Are we headed for one and if so, what do we do about it?



What is a recession? Normal business cycle.



EARLY

- Economic activity accelerates
- Housing activity increases
- Easier central bank policies

MID

- Full employment
- · Wages accelerate
- Profits expand
- Inflation rises

LATE

- Profits peak
- Credit moderates
- Inflation above target
- Tighter central bank policy

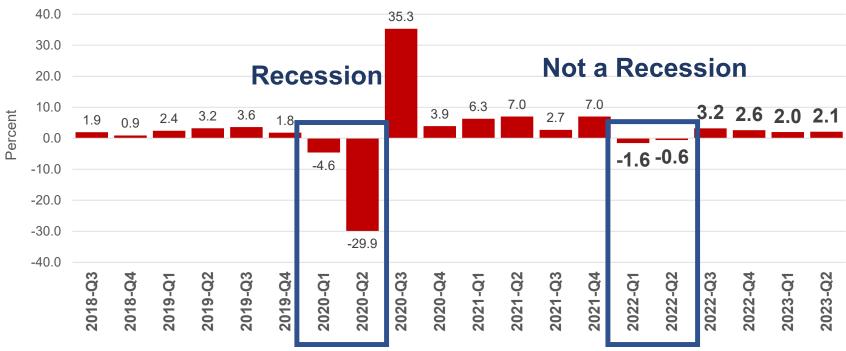
RECESSION

- Rising unemployment
- Declining activity
- Contracting profits
- Easing central bank policy



What is a recession?





Real Gross Domestic Product (GDP), Compounded Annual Rate of Change, Quarterly, Seasonally Adjusted Annual Rate. Q2-2023 Final estimate.



What is a recession? Who determines we are in one?



The NBER's traditional definition of a recession is that it is "a significant decline in economic activity that is spread across the economy and that lasts more than a few months." The determination is based on a range of monthly measures of aggregate real economic activity published by the federal statistical agencies:

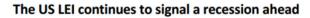
Actual or close proxy *	Change from prior month					
NBER Economic Activity (measure)	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Real personal income (disposable) *	0.3%	0.2%	0.4%	0.0%	-0.2%	-0.2%
Nonfarm payroll employment (000s)	217	217	281	105	236	227
Real personal consumption expenditures	0.0%	0.1%	0.1%	0.3%	0.6%	0.1%
Nominal Retail Sales *	-0.7%	0.4%	0.5%	0.3%	0.5%	0.6%
[Un] Employment (household survey)	3.5%	3.4%	3.7%	3.6%	3.5%	3.8%
Industrial production	0.1%	0.5%	-0.3%	-0.4%	0.7%	0.4%

Note: data is from original sources and not official NBER calculations/measures



What is a recession? What else do we watch?

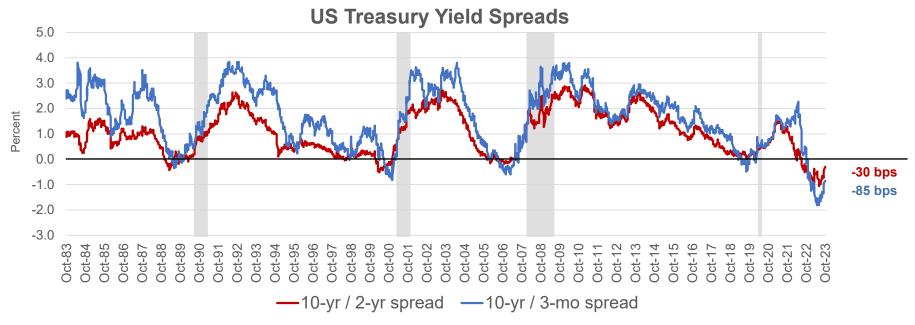
US LEI continued to decline, signaling a contraction in economic activity may be imminent







Inverted yield curve suggests risk of a recession



Market Yield Spread on U.S. Treasury Securities at Constant Maturity; weekly ending Fridays end of period; as of October 6, 2023. Shaded areas indicate U.S. recessions.

The 10-yr/2yr yield curve has been inverted, suggesting a recession may be looming ~12-18 months from now.

The 10-yr/3month yield curve is also deeply inverted, suggesting a recession may be more imminent.



Recession- Not If, But When?

How Long Until the Recession?

When the 3-month to 10-year yield curve inverts for 10 consecutive trading days

Date of	Consecutive Trading	Date of	Calendar Days to
Inversion	Days Inverted	Next Recession	Next Recession
1/10/1969	24	Dec-69	325
6/14/1973	177	Nov-73	140
12/8/1978	91	Jan-80	389
11/7/1980	102	Jul-81	236
6/6/1989	30	Jul-90	390
7/31/2000	135	Mar-01	213
8/1/2006	217	Dec-07	487
6/6/2019	41	Feb-20	268
11/22/2022	299	????	????
Average	111		311

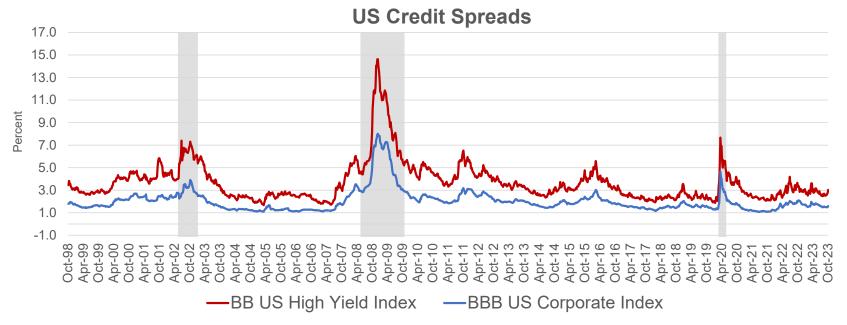
1/10/1969 = Inverted for 24 calendar days, went positive for 33 days, then inverted again for 53 days

6/6/1989 = Inverted for 30 calendar days, went postive for 9 days, inverted again for 26 days

6/6/2019 = Inverted 41 consecutive trading days, went positive for 1 day, then inverted again for 67 days (through October 10)



Credit markets are concerned, but not panicked



Option-Adjusted Spread, percent, weekly ending Friday, not seasonally-adjusted; as of October 6, 2023. Shaded areas indicate U.S. recessions.

Rising credit spreads (the difference in yield between corporate debt and government debt) usually signals signs of distress. While spreads have approached 2018 levels and thus deserve attention, spreads are below recessionary levels and reflect a "growth scare" vs. an economic contraction.



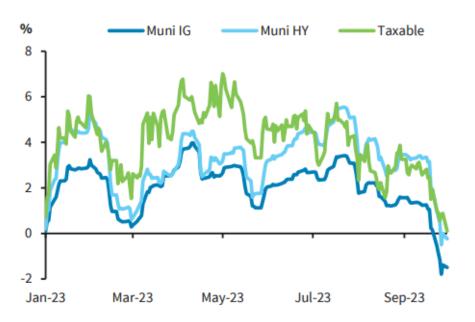
Municipal Bond Market Update

Staying the Course



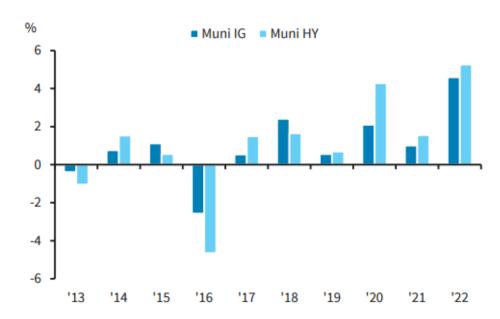
Municipal Bond Market Performance

FIGURE 1. Giving Back All YTD Gains



Source: Bloomberg Fixed Income Indices

FIGURE 2. Muni Performance in November-December



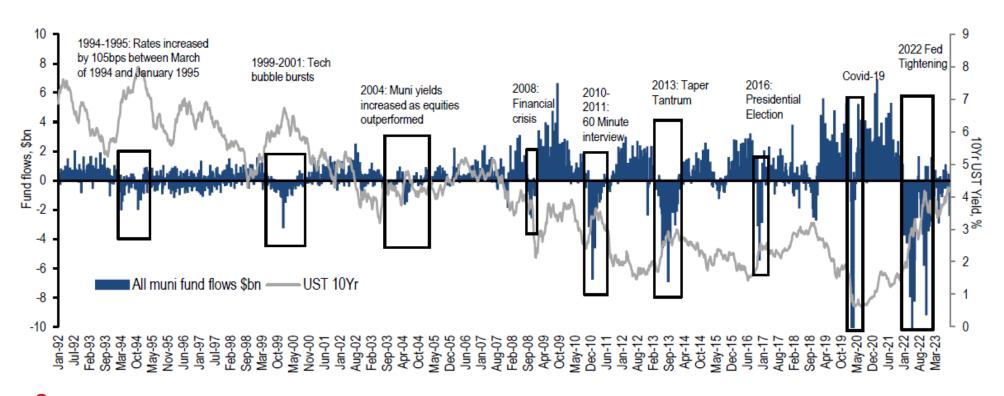
Source: Bloomberg Fixed Income Indices



Source(s): Barclays Research 37

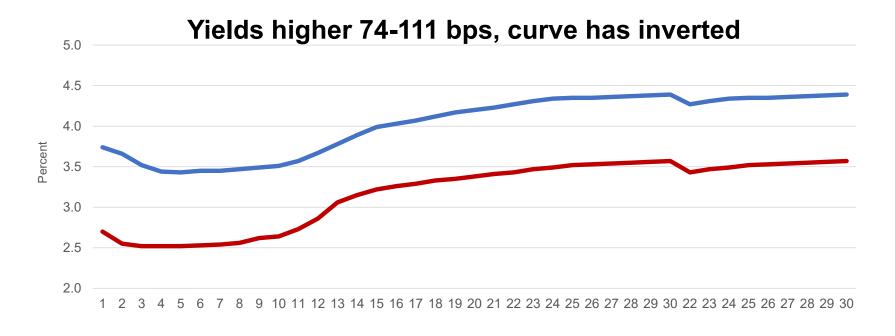
Municipal Bond Fund Flows

-13 billion YTD, volatile around UST rallies and sell-offs





Municipal AAA Yield Curve



—January 1, 2023 —October 6, 2023

Market Yield on AAA Municipal Bonds



Municipal / Treasury Ratios

Munis cheapening but not cheap

	January 1, 2	023		Oc	tober 6, 20)23
Years	AAA US		Historical	AAA	US	
i Gai S	Muni Treasury	Ratio	Average	Muni	Treasury	Ratio
1	2.70 4.65	58%	78%	3.74	5.42	69%
2	2.55 4.35	59%	82%	3.66	5.08	72%
3	2.52 4.10	61%	82%	3.52	4.89	72%
5	2.52 3.84	66%	84%	3.43	4.76	72%
7	2.54 3.77	67%	90%	3.45	4.81	72%
10	2.64 3.68	72%	88%	3.51	4.80	73%
20	3.38 3.96	85%	92%	4.20	5.17	81%
30	3.57 3.80	94%	96%	4.39	4.97	88%



Sector and Credit Quality Performance

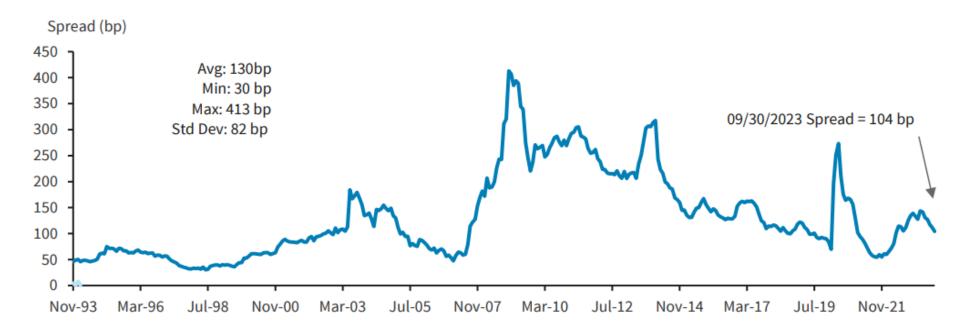
High yield outperforming investment grade

				ANNUALIZED (%)		
	MTD	Last 3M	YTD	1 Year	3 Years	5 Years
GO	-3.01	-4.10	-2.01	-3.54	0.54	1.37
Revenue	-3.00	-4.04	-1.16	-3.61	0.64	1.52
AAA	-3.19	-4.34	-2.35	-3.86	0.20	0.99
AA	-2.83	-3.89	-1.58	-3.47	0.49	1.27
Α	-2.86	-3.69	-0.58	-3.22	0.93	1.77
Baa	-3.57	-4.49	-0.24	-3.55	1.14	2.38
High Yield	-3.40	-4.24	0.00	-3.19	1.66	3.18



Municipal Investment Grade Spreads

FIGURE 8. BAA Municipal Index Yields Minus AAA Municipal Index Yields

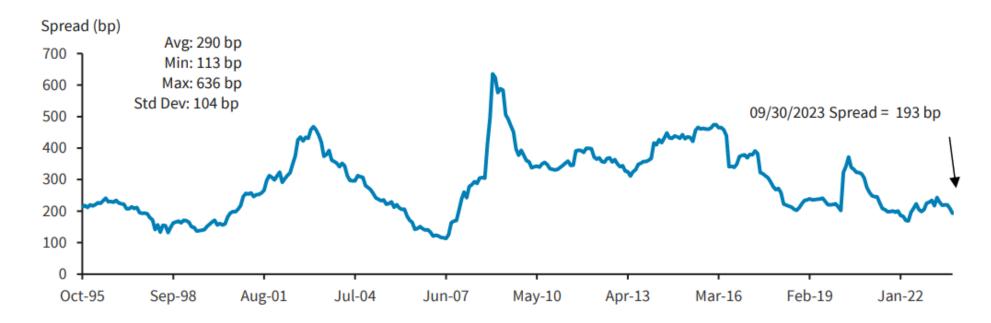


Source: Bloomberg Fixed Income Indices



Municipal High Yield Spreads

FIGURE 9. High Yield Municipal Index Yields Minus Investment Grade Municipal Index Yields



Source: Bloomberg Fixed Income Indices



Municipal Bond Rating Trends

FIGURE 9. Tax-Backed Issuers' Ratings Trend

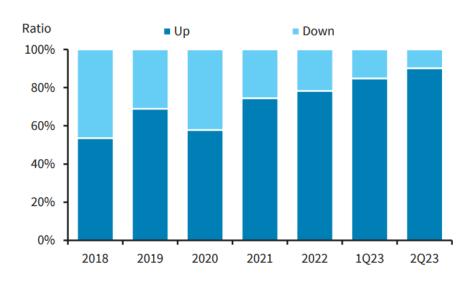
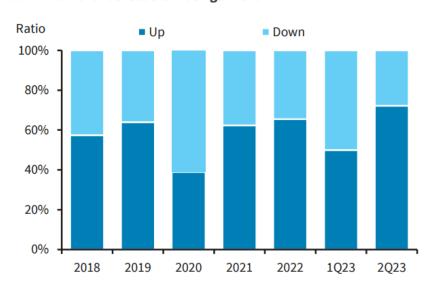


FIGURE 10. Revenue Issuers' Ratings Trend

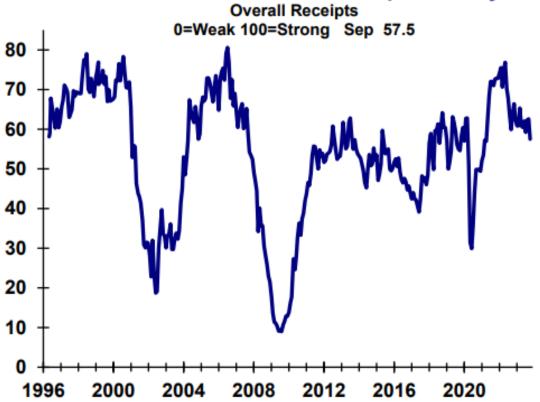


Source: Moody's Source: Moody's



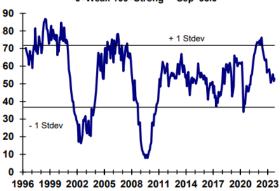
State Tax Receipts Stabilizing

Evercore ISI State Tax Receipts Survey



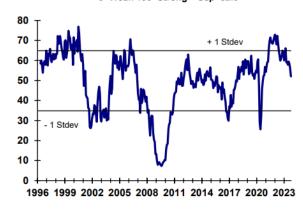
Evercore ISI State Tax Receipts Survey

Personal Income Receipts 0=Weak 100=Strong Sep 53.0



Evercore ISI State Tax Receipt Survey

Sales Receipts 0=Weak 100=Strong Sep 52.0



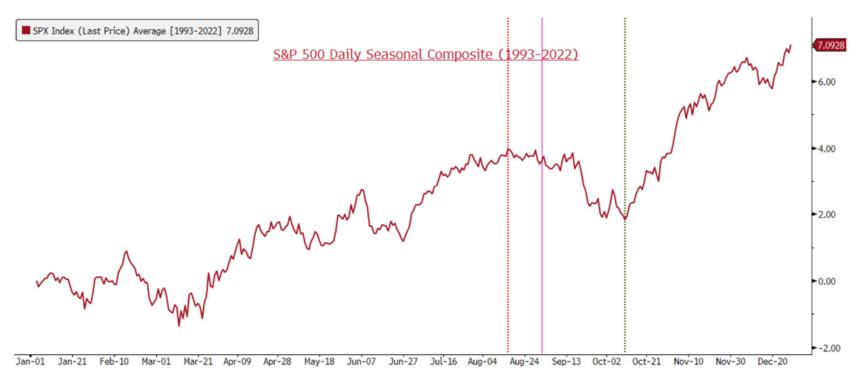


Final Thoughts What should we consider?



Seasonality: Navigating the weakest part of the year

S&P 500: Seasonals are not the most important factor, but they often provide a headwind or a tailwind for prevailing market conditions. Will the traditional seasonal headwind from mid-August to mid-October matter this year?





Seasonality: A September to remember? Maybe. Maybe not.

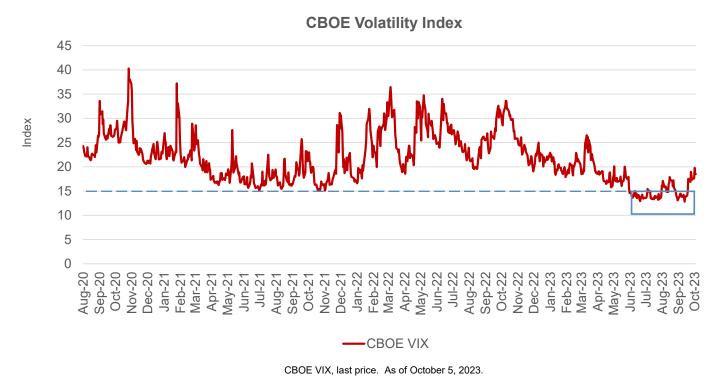
S&P 500 returns in years with positive year-to-date returns and negative August returns

	VED notarine				
Year	YTD returns through August	August return	September return	Sept – Dec return	
1954	20.2%	-3.4%	8.3%	20.6%	
1955	20.0%	1.1%	7.2%	5.4%	
1967	16.6%	-1.2%	3.3%	3.0%	
1975	26.7%	-2.1%	-3.5%	3.8%	
1976	14.1%	-0.5%	2.3%	4.4%	
1985	12.8%	-1.2%	-3.5%	12.0%	
1995	22.3%	0.0%	4.0%	9.6%	
1997	21.4%	-5.7%	5.3%	7.9%	
2013	14.5%	-3.1%	3.0%	13.2%	
2019	16.7%	-1.8%	1.7%	10.4%	
2023	17.4%	-1.8%	-4.8%	???	
Average			2.1%	9.0%	
% of time positive			72%	100%	



Volatility: Complacency creeping in...and then not

With volatility collapsing toward multi-year lows (blue dotted line) on the recent market rebound, and with the weakest seasonal period somewhat behind us, the market's complacency (blue box) might be over due to recent events.



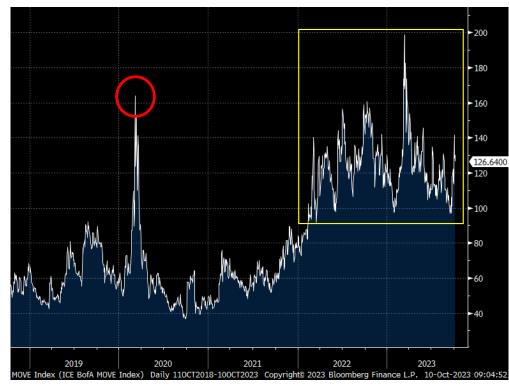


Bond Market Volatility Persists in 2023

VIX Index (S&P 500)







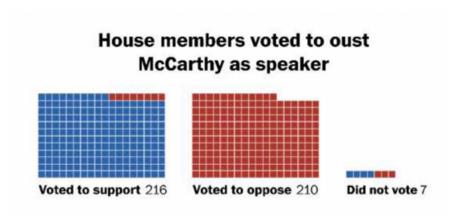


50 Source(s): Bloomberg

Political disorder: likely to remain the order of the day

Enjoy the theatre! Don't alter your investment plans.







Three Big Questions for 2023 (and our answers)

Question	Our Thoughts
1. Will inflation persist?	 Inflation will slow but remain above the Fed's target rate
2. How will the Fed respond and how will the economy perform?	 The Fed will keep interest rates higher for longer and the economy will slow
3. Will we have a recession?	 Most likely, but we don't expect it will be a historic one





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Key Questions: Will Actions by Global Central Banks Lead to a Recession?



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Central banks face a dilemma: Allow inflation to remain persistent or raise interest rates to combat it at the potential cost of a serious global economic slowdown.



Key Questions: Persistent Inflation Provokes a Bear Market. What's Next?

George Mateyo, Chief Investment Officer, KeyBank Investment Cente



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investors may be facing a "financial hurricane" but the best strategy may be to remain call as the storm comes to shore.



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