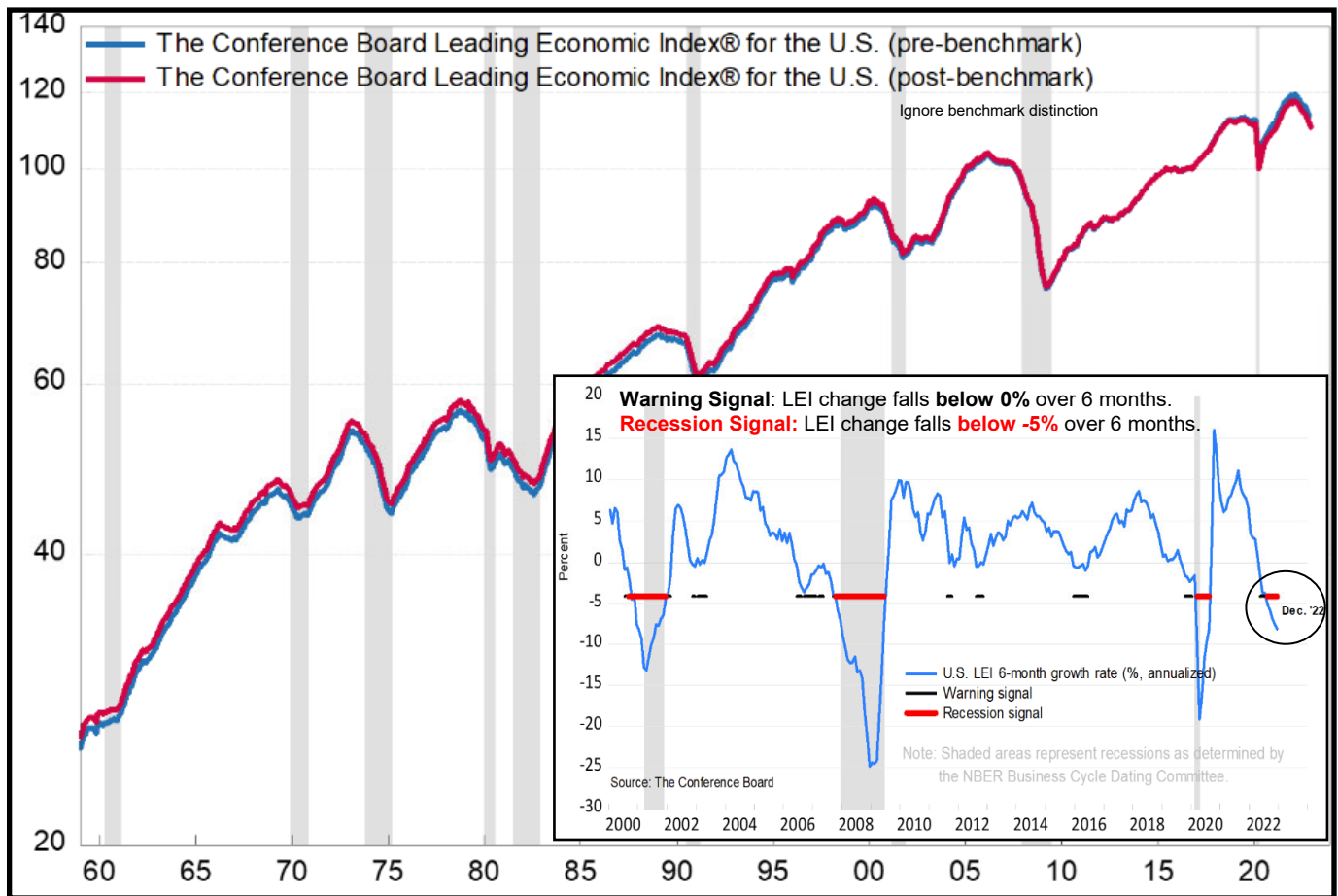


LEI® SUGGESTS RECESSION, BUT ...

The Conference Board's Leading Economic Index declined by another 1% during December to a reading of 110.5 (2016 = 100) which now suggests a recession will manifest within the U.S. in the near term.



Tucked into the corner of this LEI chart is an insert that warns when the onset of recession may be imminent (the black underscore) in addition to a signal that suggests the U.S. may *already* be in recession (the red underscore). Remember, recessions tend to be officially confirmed well *after* they have begun and, sometimes, even after they have ended. Based on Conference Board data, it looks as though the U.S. may already be experiencing recession.

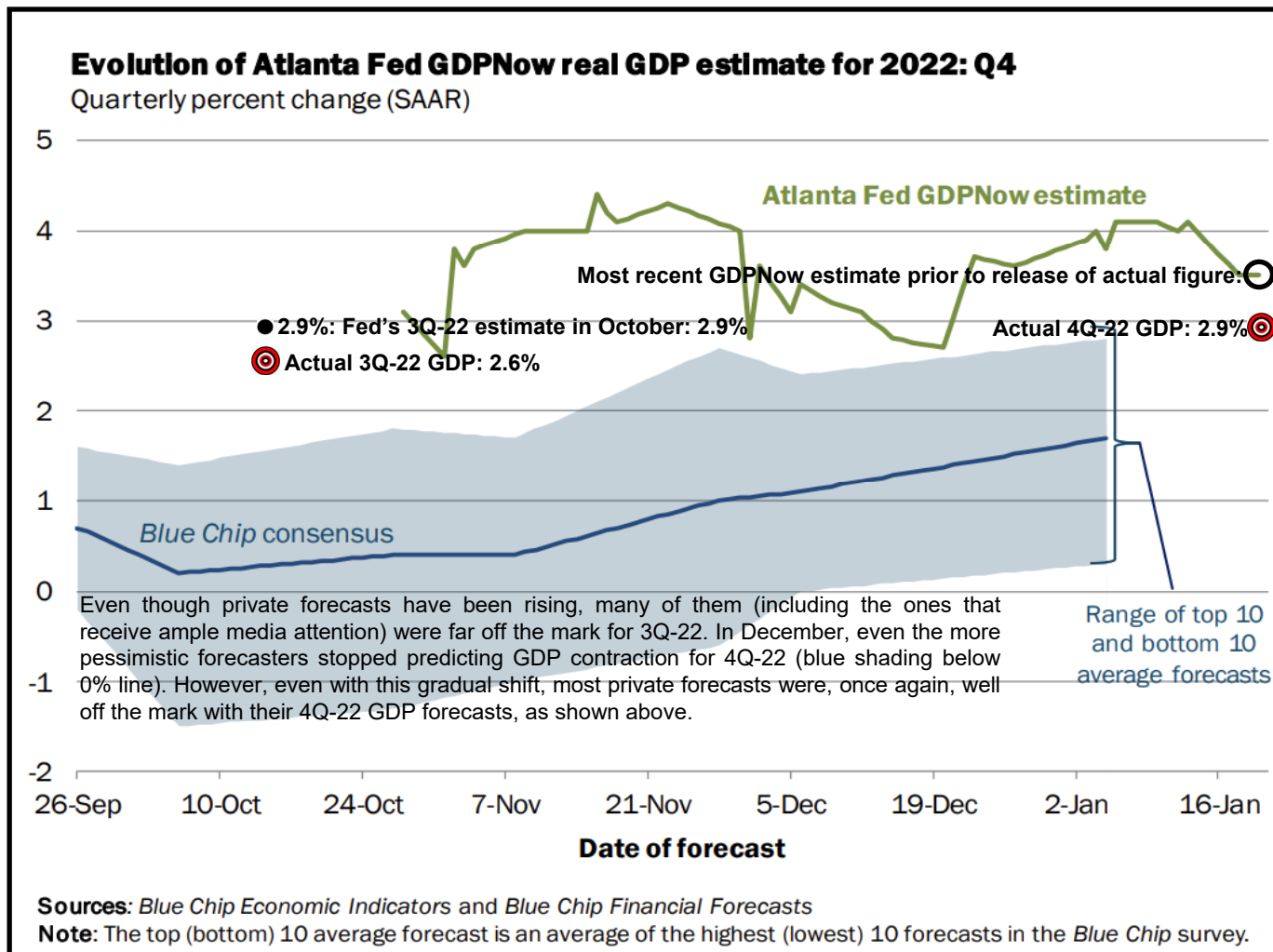
As per a January 23rd press release by the Conference Board:

“The US LEI fell sharply again in December—continuing to signal recession for the U.S. economy in the near term. There was widespread weakness among leading indicators in December, indicating deteriorating conditions for labor markets, manufacturing, housing construction, and financial markets in the months ahead.”

“Overall economic activity is likely to turn negative in the coming quarters **before picking up again in the final quarter of 2023.**” [Emphasis added ... addressed later]

... GDP DATA IS NOT ONLY POSITIVE, IT'S IMPROVING

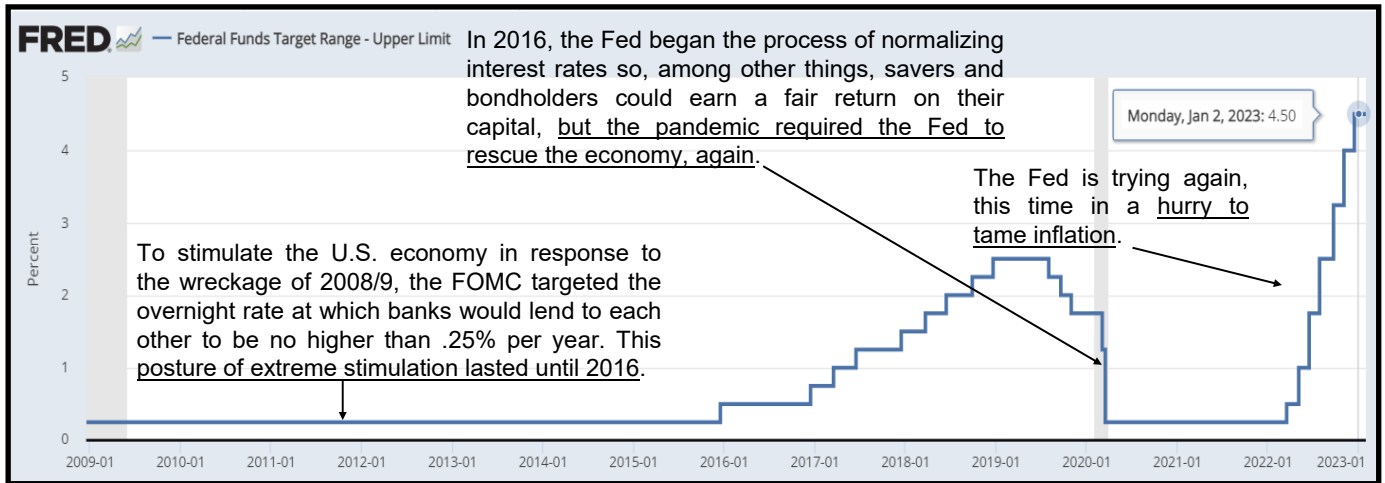
In my last note I showed that although the U.S. economy was slowing, the Atlanta Fed's GDP estimation tool (named "GDPNow") suggested that as of mid-October, third-quarter GDP within the U.S. might approximate 2.9% on an annualized basis, a figure that was well above even the upper boundary of consensus estimates. **Actual, third-quarter GDP growth came in at 2.6%.** While somewhat lower than the Fed's estimate, that 2.6% figure was still significantly higher than most forecasters expected and, more importantly, **nowhere near recession.**



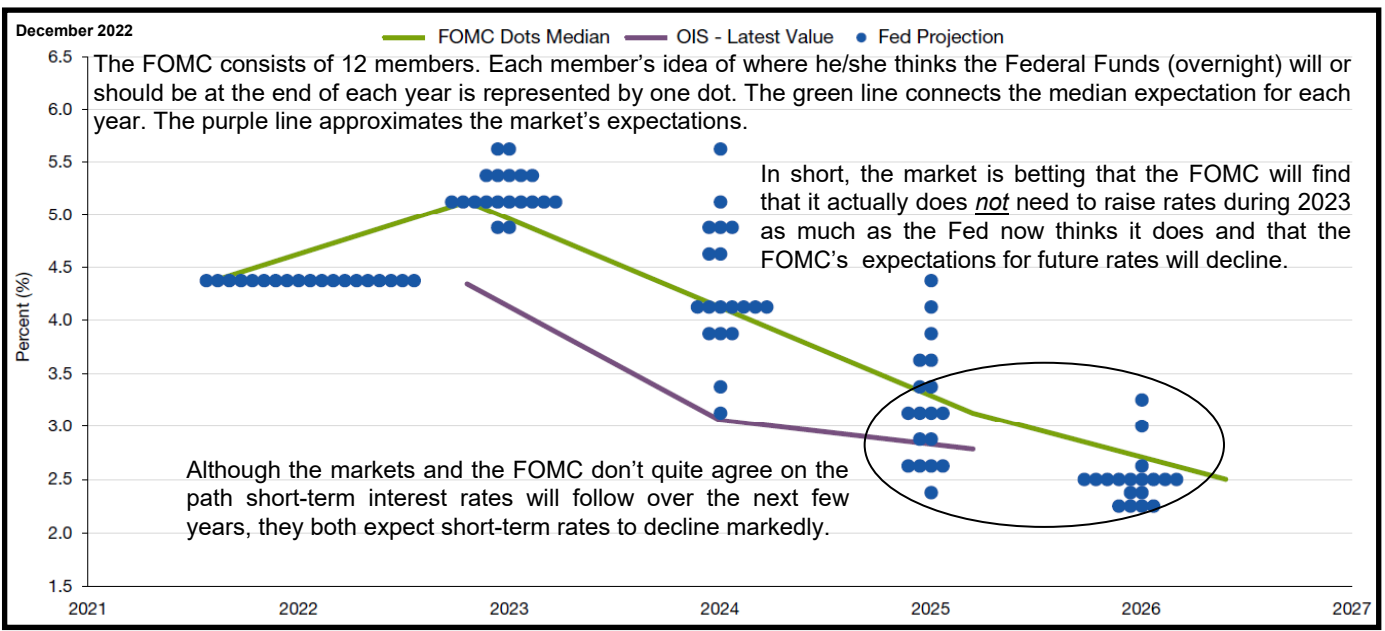
Since mid-October, consensus GDP estimates for the fourth quarter of 2022 have not only risen, the lowest boundary of those estimates no longer overlaps any negative GDP territory that would suggest recession. As of late January the Fed's annualized GDP estimate for the fourth quarter of 2022 has not only risen to 3.5% (circled), the actual figure for the fourth quarter of 2022 came in shortly thereafter at an annualized growth rate of 2.9%. **If the U.S. is, in fact, headed toward recession, it's not yet apparent in the GDP data** since that data is not only well above the 0% line, economic activity within the U.S. actually increased since the third quarter of 2022.

INTEREST-RATE HIKES APPEAR TO BE ALMOST OVER

Last year, every major central bank, and most emerging market central banks, increased interest rates in response to surging inflation. While some central banks may continue to hike rates this year, others may hold steady, and some may even start reducing rates to ease economic conditions. In the U.S., the Fed’s Federal Open Market Committee (FOMC) consists of 12 members who vote eight times per year as to the manner and extent to which it will intervene in public markets to influence interest rates and, ultimately, economic activity and inflation. Historically, the Fed has opted to focus most of its influence on short-term rates.

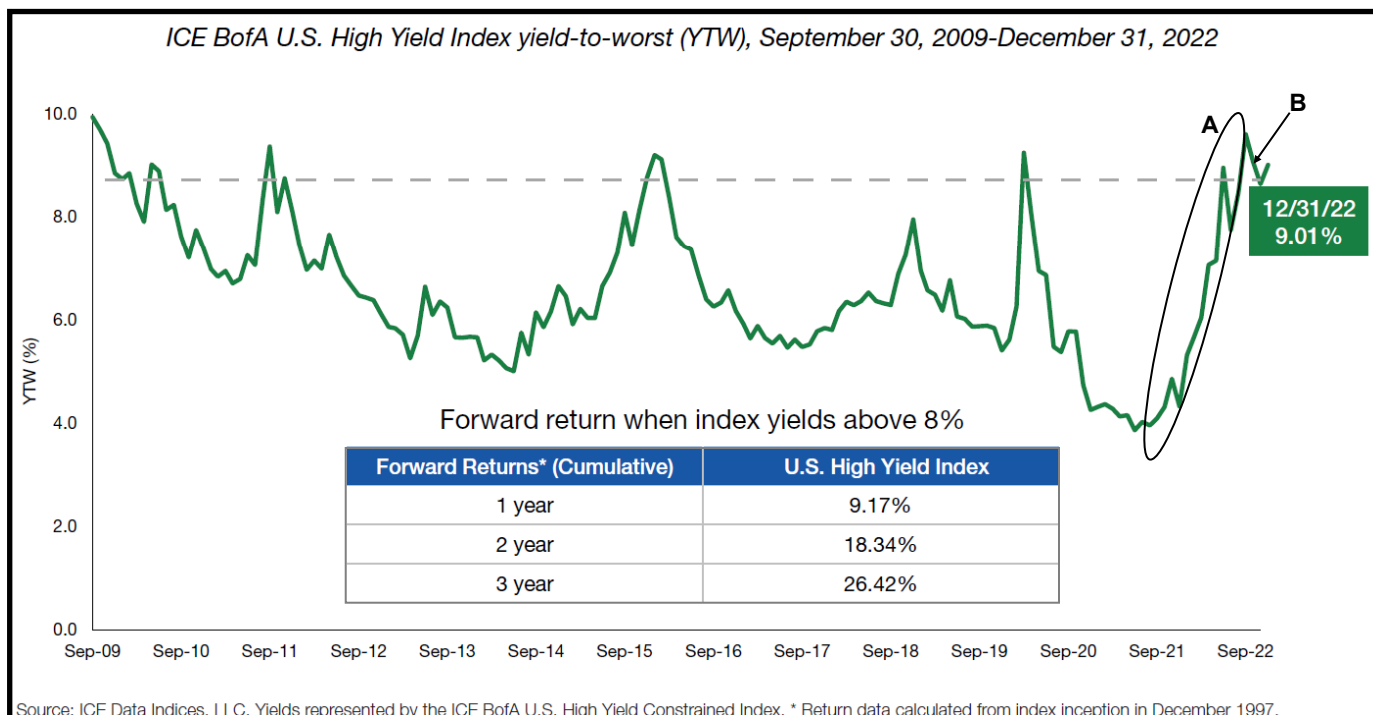


As short-term rates rise, the inflation premium that is embedded in longer-term rates will shrink (along with inflation, we hope), causing those rates to decline. **The questions that loom are how high the Fed will push short-term rates, how long those rates will remain elevated, and whether the Fed can remove some excess steam from the U.S. economy without causing a severe recession.** This next panel addresses those first two questions.



IMPLICATIONS OF THE RECENT SPIKE IN INTEREST RATES

As investors began to sense the Fed’s intention to raise rates in 2022, yields on bonds spiked. The image below illustrates how the yields on lower (credit) quality bonds have reacted to the renewed threat of inflation (A) and the Fed’s efforts to tame it (B). Higher quality (lower yielding) bonds have behaved similarly, albeit less dramatically. As shown in the image below, yields on the Bank of America High Yield Index rose by about 5% over the past year.



If history is a guide, this spike in interest rates could set the stage for generous returns from high-yield instruments over the next few years, possibly on the order of around 9% per year, as shown in the grid, above. To the extent the Fed/FOMC can successfully tame inflation while also avoiding a severe recession that could handicap the somewhat weaker companies that issue high-yield debt, I would expect high-yield bond issuers to generally pay as agreed. As per mutual fund sponsor, Lord Abbett:

“High-yield issuers, overall, face the economic slowdown to come with balance sheets that have fully retraced the impact of the pandemic. Impressively, leverage is sitting near its lowest level in the post-financial crisis period, while interest coverage is at its best levels, nearly 25% higher than on the eve of the 2008-09 global financial crisis. Finally, while every cycle is different, forward returns when the yield-to-worst exceeds 8% (ending 2022 at 9.01%) historically have been quite favorable for investors. In the history of the ICE BofA High Yield Index since 1996, there have never been two-consecutive years of negative returns.”

If the Fed is able to tame inflation, long-term yields are apt to decline and bond valuations are apt to rise leading to capital gains for investors who locked in recent yields.

HOW TO KNOW IF YOU HAVE HIGH-YIELD EXPOSURE

You probably do, but you won't own any individual, high-yield bonds. Instead, I much prefer to obtain exposure to high-yield (lower credit quality) bonds through a unique series of exchange-traded funds (ETFs) that combine the diversification benefits offered by traditional mutual funds with the relative certitude associated with the ability to hold bonds until they mature or are otherwise redeemed by the issuer. (Mutual funds do not offer this certitude.)

Therefore, if a bond held in a given ETF were to default, the offending bond is likely to represent a far smaller percentage of that ETF than if we were to try to own that individual bond directly in a given portfolio. And since each ETF holds bonds that mature during a given year, holding a series of ETFs that mature and liquidate at the end of each year over a span of years makes it possible to spread the credit risk inherent in high-yield ("junk") bonds over hundreds of individual bonds in even relatively small portfolios.

For example, **if we were to have established positions in the following ticker symbols in your portfolio in late January, the gross, average annual total return (interest received plus changes in value) from those funds might approximate the yield-to-worst figures depicted below.**

However, if we were to have purchased these funds in 2022, when yields were higher (before investors started to become more convinced that the Fed will be able to successfully tame inflation), **the yields you would experience would then tend to be higher than the yields shown to the right.** That is, using this type of fund to hold bonds allows the investor to get much closer to actually "locking in" yields as can be accomplished by holding individual bonds.

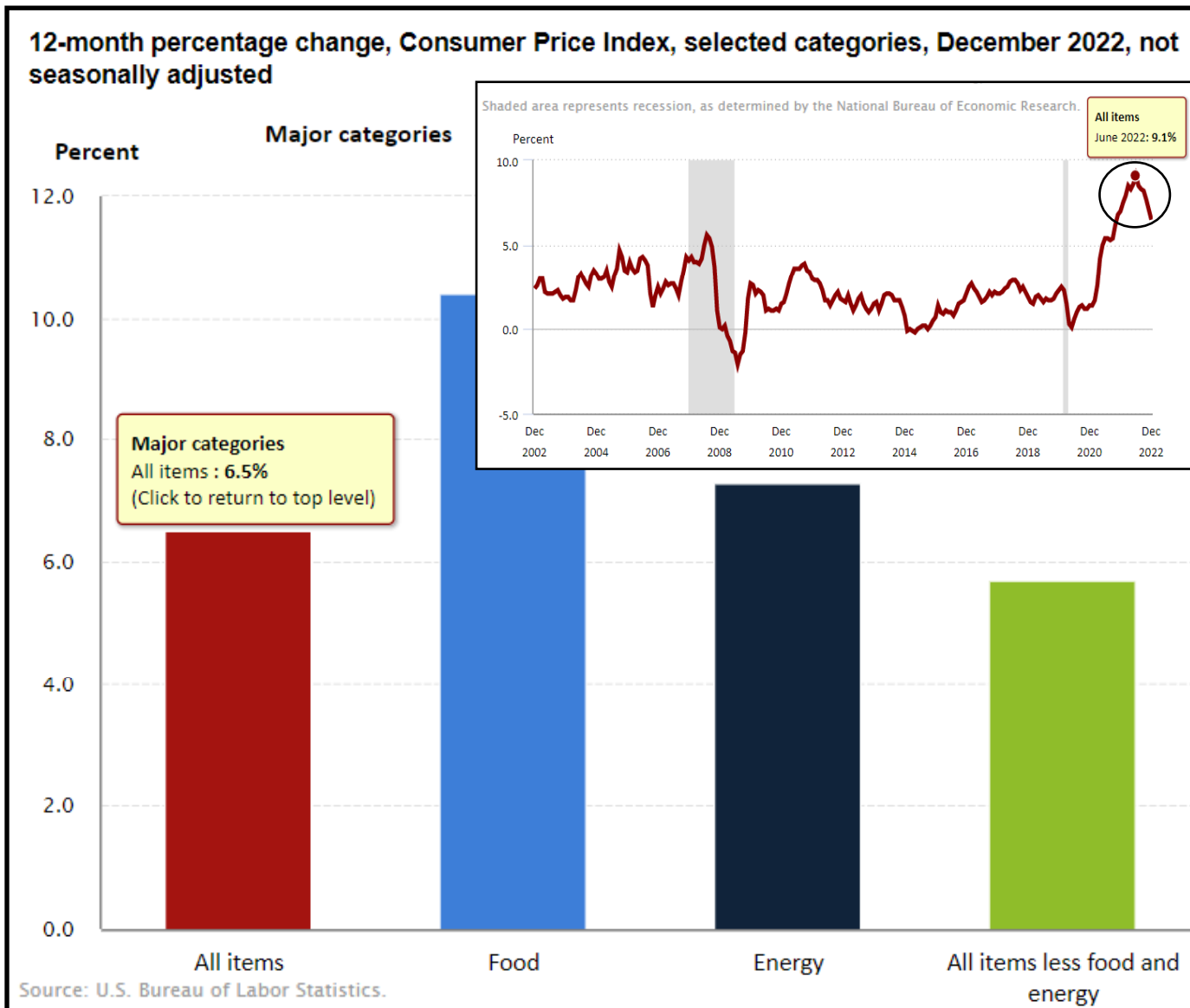
Again, to the extent the Fed has some success taming inflation, the inflation premium that is embedded in the yields shown to the right (and most other interest rates) would likely shrink. Since bond values tend to vary inversely with changes in interest rates, bond valuations may drift higher, further augmenting returns.

Fund Liquidates	at the End of	Ticker	Yield to Worst*	# Bonds Held
	2023	BSJN	6.14%	79
	2024	BSJO	7.07%	70
	2025	BSJP	8.08%	156
	2026	BSJQ	7.91%	170
	2027	BSJR	7.78%	174
	2028	BSJS	8.11%	229
	2029	BSJT	7.88%	289
	2030	BSJU	7.43%	99
				1,266

*Approximates the average expected total average annual return of the bonds held in each fund as of 1/27/23.

HOW IS THE FED DOING IN ITS BATTLE TO TAME INFLATION?

Fairly well. In the insert below, you can see that year-over-year inflation for “All Items” peaked at 9.1% last June (circled). As of December, that figure had declined to 6.5% (red bar).



Here’s a look at the inflation components of the “All Items” category. Continued success in this battle is likely to take pressure off the Fed to raise rates. Investor sentiment may also improve.

December 2022: 12-Month Percentage Change, Consumer Price Index, not seasonally adjusted

All Items	6.5%	Electricity	14.3%	Medical Care Commodities	3.2%
Food	10.4%	Natural Gas (piped)	19.3%	Services less Energy Services	7.0%
Food at Home	11.8%	All Items less Food & Energy	5.7%	Shelter	7.5%
Food away from Home	8.3%	Commodities less Food & Energy Commodities	2.1%	Medical Care Services	4.1%
Energy	7.3%	Apparel	2.9%	Education & Communication	0.7%
Gasoline (all types)	-1.5%	New Vehicles	5.9%		

STOCKS DON'T NECESSARILY SAG WHEN GDP DOES

If the Conference Board is correct that economic (GDP) growth is likely to turn negative in the coming quarters before “picking up again in the final quarter of 2023,” history suggests that this scenario is not necessarily a death knell for equities, especially more growth-oriented issues.

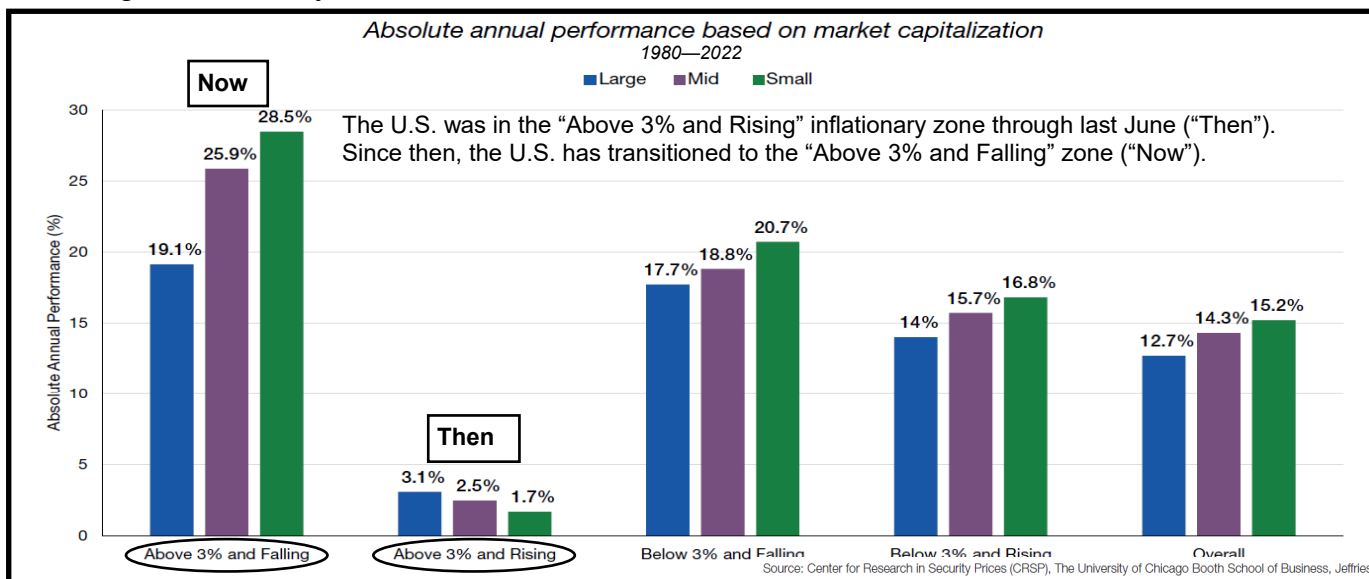
Economic Environment (1980-Present)	Russell 1000 Growth	Russell 1000 Value	Avg. Excess Return (Growth-Value)	Freq. of Growth Outperforming
GDP Growth <2.0%	9.5%	4.8%	4.7%	9 out of 14
GDP Growth <1.5%	12.2%	4.4%	7.8%	6 out of 10
GDP Growth <0.5%	26.6%	15.8%	10.8%	6 out of 6

Source: Lord Abbett and Bloomberg.

Since markets are forward looking, the downdraft in equities we’ve already experienced may actually have been in anticipation of the slowdown the Conference Board expects.

HISTORY FAVORS THE CURRENT INFLATIONARY ENVIRONMENT

It is also interesting, if not surprising, to know that equities have performed particularly well in environments where inflation was declining from an already elevated level. Unless the decline in inflation we’re currently seeing suddenly reverses itself, which I think would be unlikely since the Fed continues to be laser focused on reigning it in before it becomes entrenched in our collective psyche, it seems safe to conclude we’ll remain in an environment where inflation is elevated, but declining for the next year or so.



The counterintuitive nature of the equity market’s response to the GDP and inflationary data presented on this page coupled with the forward-looking nature of the capital markets surely contribute to the market-timing errors that conspire to whipsaw investors.

ANNUALIZED CAPITAL MARKET EXPECTATIONS (NEXT DECADE)

According to a recent study by Schwab, economists expect global GDP growth to approximate 1.8% per year over the next decade versus the 2.6% that was achieved since 1970. Less robust growth suggests lower average annual equity returns. However, return expectations for many types of interest-bearing securities have improved markedly, as shown in a similar study by Franklin Templeton Investment Solutions, below.

Equity Expectations				
Versus past 20-year return: ● Better ● Worse				
As of September 30, 2022				
Asset Class Name	Expected Return (Geometric)	Expected Risk (Std. Dev)	Sharpe Ratio	Past 20-Yr Annualized Return
GLOBAL EQUITY	8.3%	16.3%	0.31	8.5%
Developed-Market Equity	8.2%	16.3%	0.30	8.6%
US	● 7.9%	16.0%	0.29	9.9%
Canada	● 8.4%	19.4%	0.26	9.3%
EAFE	● 8.9%	16.5%	0.34	6.3%
EMU	● 8.9%	20.6%	0.27	6.4%
UK	● 8.4%	17.1%	0.30	5.1%
Japan	● 9.8%	16.0%	0.41	4.5%
Pacific Ex-Japan	● 8.7%	19.4%	0.28	9.0%
Australia	● 8.4%	21.7%	0.24	9.5%
Emerging Market Equity	● 9.3%	19.8%	0.31	9.0%
China	● 9.8%	23.5%	0.28	10.0%
Specialty Equity				
Global Listed Infrastructure*	● 7.2%	16.2%	0.24	8.2%
US Listed Infrastructure	● 6.1%	13.0%	0.22	7.6%
Global REITS	● 8.0%	19.2%	0.25	6.4%
US REITS	● 8.0%	21.2%	0.23	7.7%

*Denotes where shorter average is used (20-yr unavailable), periods range from 92 to 237 months.
Source: Franklin Templeton Investment Solutions.

Equity return expectations remain muted versus recent historical averages, but for those who maintain exposure to fixed income securities in the quest of regular income or for those who simply wish to maintain a more conservative investment posture, the recent interest-rate reset finally allows for that portion of a portfolio to generate returns that more fairly compensate them for having accumulated that capital in the first place. **So while equities may offer less generous returns, fixed income securities might pick up some of the slack resulting in the continued appeal of a balanced portfolio posture.** — Glenn Wessel

Fixed Income Expectations				
As of September 30, 2022				
Asset Class Name	Expected Return (Geometric)	Expected Risk (Std. Dev)	Sharpe Ratio	Past 20-Yr Annualized Return
GLOBAL GOVERNMENTS				
Global Governments	● 4.3%	6.6%	0.16	2.4%
US Government	● 3.9%	4.6%	0.14	2.6%
Canadian Government*	● 4.0%	8.6%	0.09	4.0%
Euro Government	● 4.9%	10.0%	0.16	2.9%
UK Government	● 5.8%	10.8%	0.24	1.3%
Japanese Government	● 4.2%	9.3%	0.11	0.4%
Australian Government*	● 4.9%	10.6%	0.16	-0.3%
China Government*	● 3.6%	4.5%	0.08	4.8%
Inflation Linked				
Global Inflation Linked	● 4.5%	8.4%	0.14	3.5%
GLOBAL CREDIT				
Global Investment Grade Credit	● 5.9%	7.1%	0.37	3.5%
US Investment Grade	● 5.6%	6.4%	0.37	4.1%
EU Investment Grade	● 6.1%	10.5%	0.28	2.9%
UK Investment Grade	● 8.0%	12.7%	0.38	1.9%
Global High Yield	● 6.9%	9.8%	0.37	7.2%
US High Yield	● 6.6%	9.1%	0.37	7.4%
Euro High Yield	● 7.9%	14.9%	0.31	7.5%
UK High Yield	● 9.3%	14.6%	0.42	10.0%
US High Yield Loans	● 6.2%	8.8%	0.34	4.6%
US Securitized				
US MBS	● 4.5%	3.5%	0.34	2.8%
Municipal Bonds				
US Munis	● 4.5%	4.6%	0.24	3.4%
Emerging Markets Governments				
Emerging Market Debt-Corp (Hard)*	● 5.9%	9.8%	0.27	4.5%
Emerging Market Debt-Gov (Hard)*	● 6.4%	9.4%	0.33	5.8%
Emerging Market Debt-Gov (Local Fx)*	● 5.4%	11.6%	0.19	4.4%

Source: Franklin Templeton Investment Solutions.