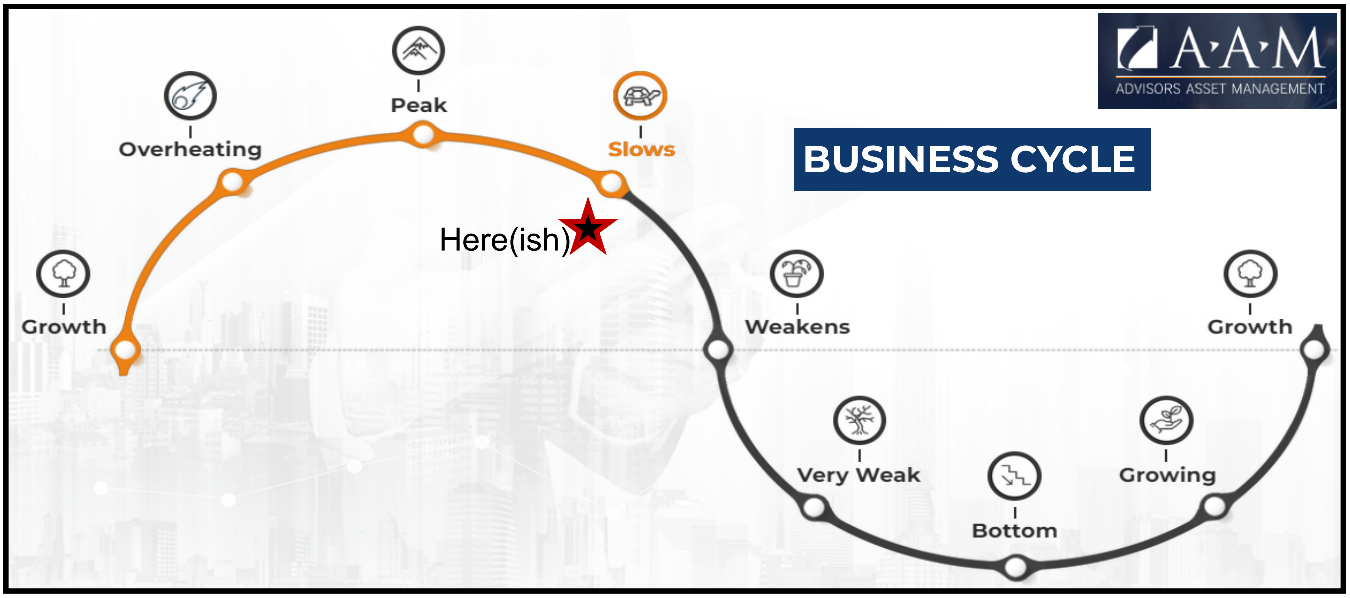
SO, WHERE IS THE U.S. ECONOMY?



Equity values typically follow a markedly different path, however. Because corporate earnings have tended to rise over time, equity values have tended to follow suit as they wiggle their way to ever higher values. But because investors are always trying to peek around the next economic corner, equity values have generally declined *prior* to business-cycle peaks and surged *prior* to business-cycle bottoms.

As a group, investors have an exceedingly poor track record of anticipating market turns, but because it's tempting to try and because trading is so accessible, the trying continues. It may be possible to occasionally capture gains while avoiding downdrafts, but over longer periods of time the strategy seems to be a loser.

During the first nine months of 2022, the S&P 500 has risen or fallen at least 1% on 89 different days. (The image to the right depicts some of the larger one-day moves of the S&P 500 so far this year.) By contrast, the S&P moved 1% or more on only eight days during all of 2017, a low-volatility year where the index offered a return of over 21%. On a given day, investors are apt to read these "signals" as market tops, or bottoms, or retrenchments, or breakouts, but I generally see such volatility as obfuscating noise.

Mostly, I am mindful of how hard it would be to avoid those red days without also missing many green ones.

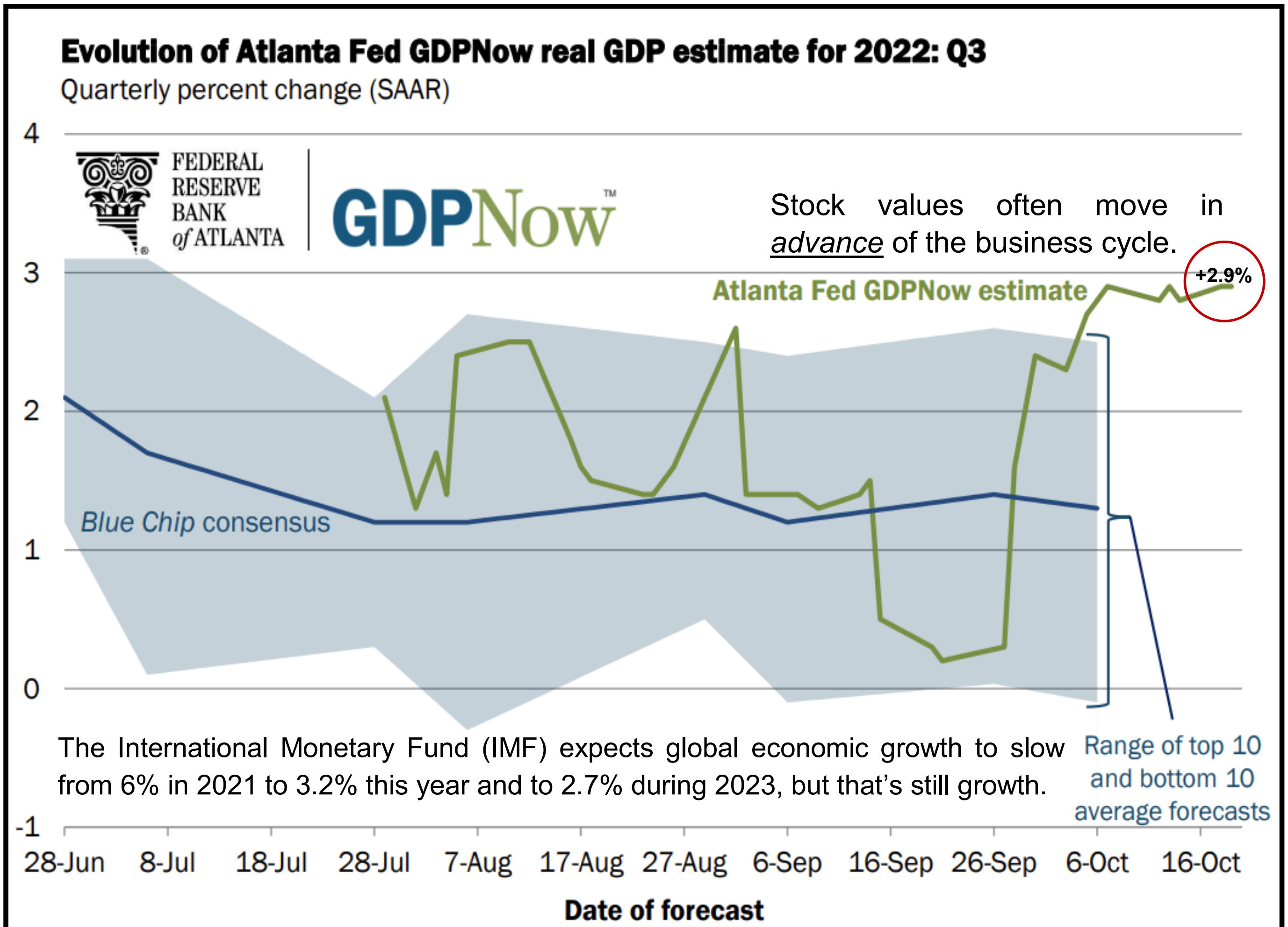
DATE	CLOSE	NET CHANGE	CHANGE %
1/28/2022	4,431.85	105.34	2.43
2/25/2022	4,384.65	95.95	2.24
3/7/2022	4,201.09	−127.78	−2.95
3/9/2022	4,277.88	107.18	2.57
3/16/2022	4,357.86	95.41	2.24
4/22/2022	4,271.78	−121.88	−2.77
4/26/2022	4,175.20	−120.92	−2.81
4/28/2022	4,287.50	103.54	2.47
4/29/2022	4,131.93	−155.57	−3.63
5/4/2022	4,300.16	124.69	2.99
5/5/2022	4,146.87	−153.30	−3.56
5/18/2022	3,923.68	−165.17	−4.04
5/27/2022	4,158.24	100.4	2.47
6/13/2022	3,749.63	−151.23	−3.88
6/16/2022	3,666.77	−123.22	−3.25
6/24/2022	3,911.74	116.01	3.06
7/19/2022	3,936.69	105.84	2.76
8/26/2022	4,057.66	−141.46	−3.38
9/13/2022	3,932.69	−177.72	−4.32

3Q GDP SET TO REBOUND AS PER FED'S "GDPNOW" TOOL

Although the National Bureau of Economic Research ultimately determines when the U.S. has experienced a recession, it typically recognizes a recession when economic output contracts during at least two consecutive quarters. That output is typically measured in terms of Gross Domestic Product (GDP).

In my last note, I discussed the fact that although the U.S. economy was exhibiting strength in a number of ways, I expected it to have experienced a technical recession. That happened, but again, the U.S. economy keeps adding jobs, the unemployment rate is historically low, and Gross Domestic Income, which is sort of the "flip side" of GDP, has actually increased.

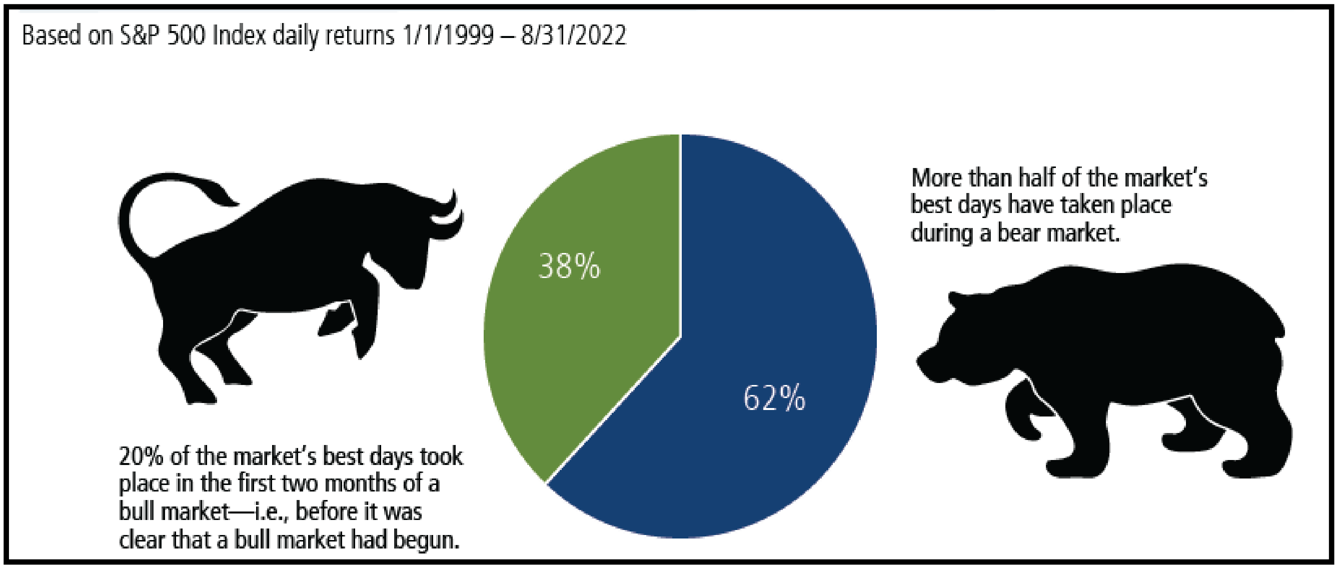
The Fed's "GDPNOW" tool is more of a flash indicator of the likely economic output for the next quarter than an official forecast, but it has been shown to have some predictive accuracy. As you can see below, this predictor is now flashing a pronounced improvement for third quarter GDP. If so, the technical recession within the U.S. will have ended.



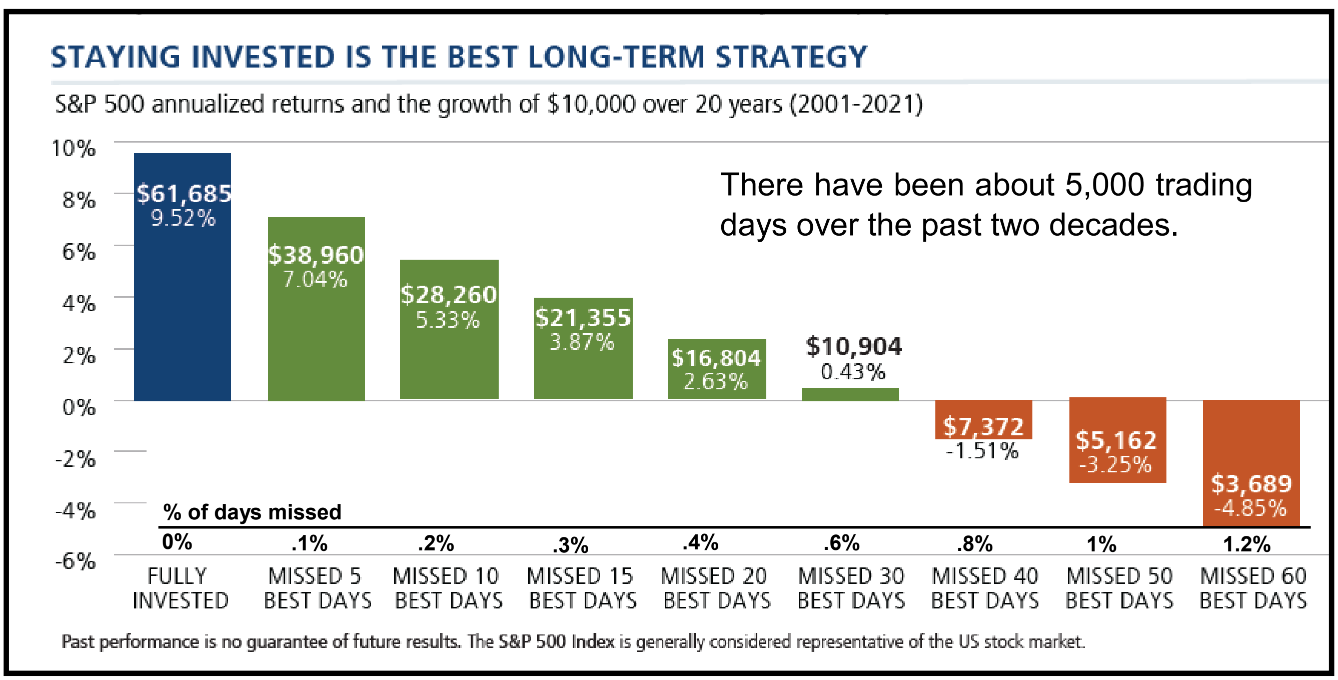
Sources: *Blue Chip Economic Indicators* and *Blue Chip Financial Forecasts*
Note: The top (bottom) 10 average forecast is an average of the highest (lowest) 10 forecasts in the *Blue Chip* survey.

U.S. EQUITIES HAVE REBOUNDED OVER 6% SINCE MID-OCTOBER

In no way am I predicting that this rebound marks a reversal of the stock market tide, but since capital market returns tend to lead the business cycle and because investors often prefer to recommit to capital market instruments *after they've risen*, it may be worth knowing that a fifth of the returns on offer from equities have occurred *before* it was clear a "bear" market (where equity values had been down at least 20%) had ended.

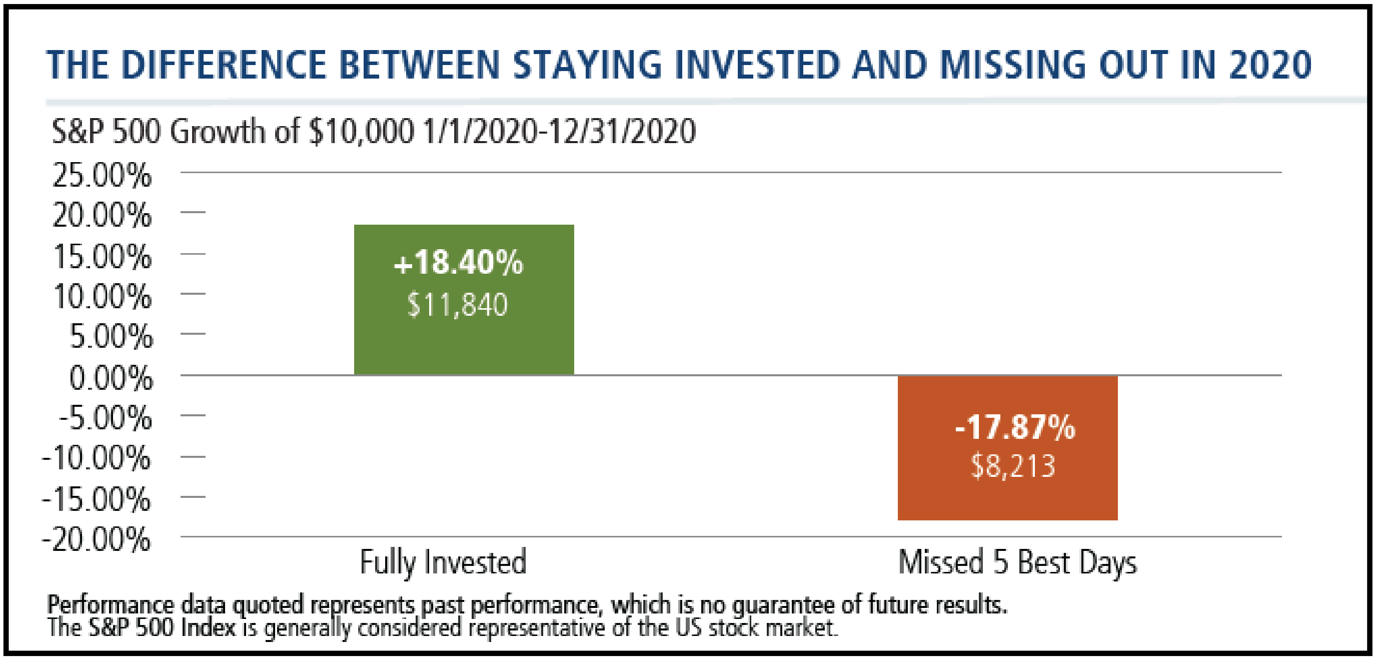


I've mentioned this before, but I think it's worth remembering that the returns that have been generated by equities have tended to occur in concentrated lumps. While it's exceedingly unlikely for an investor to have missed only the very best investment days during a given span of time, the following image illustrates that returns have tended to be highly concentrated in a relatively small number of days.



REMAINING PLANTED … EVEN DURING A PANDEMIC YEAR

Once it became apparent the world was facing a pandemic in January of 2020, the S&P 500 shed about 20% of its value by the end of February. Despite that downdraft, the S&P finished over 18% higher for the year. For any investor unlucky enough to have been on the sidelines for just the five best market days of that year, that 18% return would have morphed into an approximately equal-sized loss.



SIDESTEPPING RECESSIONS IS NOT A RATIONAL GOAL, EITHER

Investment-wise, the typical presumption is that recessions are to be sidestepped, especially with respect to owning equities. Accordingly, I'm often asked about the likelihood and/or severity of the next recession. Of course, I can look at data and make some guesses, but there's a more important issue at play that rarely receives attention.

Unlike being in love (or hate), it's exceedingly difficult to know in real time whether an economy has entered or exited a recession. Only *after the onset* of a recession and only *well after the end of one* does the data become available to perform the ex-post analysis that allows the National Bureau of Economic Research (NBER) to define the official beginning and end points of the event. By the time the NBER has made its formal recession declarations, the world has moved on.

Couple this with the fact that the prices of capital market instruments have long tended to move in anticipation of the business cycle and the result is a major disconnect between the returns generated by capital market instruments and the real-time occurrence of recessions. Exacerbating this asynchronous mess is the fact that many (most?) of the of the market signals that drive investors to upset their portfolios in the first place turn out, in retrospect, to be false.

MAJOR RETURNS MISSED BEFORE RECESSIONS' END DECLARED

To further make the point that recession avoidance is an unworthy goal, consider the fact that during the previous six recessions the National Bureau of Economic Research required an average of fifteen months after the actual end of a recession to declare it to the public. As the NBER was gathering data and making its calculations with respect to the past six recessions outlined below, equities generated post-recession returns that, on average, amounted to 61% per "all-clear" signal. Foregone returns is the predictable, recurring cost of feeling safe.

	RECESSION STARTS		THE NBER DECLARES THE RECESSION OVER	# OF MONTHS AFTER THE END	S&P 500 TOTAL RETURN: LOW TO NBER ANNOUNCEMENT DATE
	START	END			
2020	March 2020	April 2020	7/19/2021	15	94%
2008-2009	January 2008	June 2009	9/20/2010	15	74%
2001	April 2001	November 2001	7/17/2003	20	28%
1990-1991	August 1990	March 1991	12/22/1992	21	60%
1981-1982	August 1981	November 1982	7/8/1983	8	71%
1980	February 1980	July 1980	7/8/1981	12	39%
			Average	**15**	**61%**

Past performance is no guarantee of future results.
S&P 500 Index is generally considered representative of the US stock market.
Source: Charlie Bilello, Compound Advisors

Note that the recession that occurred near the onset of the Covid pandemic in 2020 lasted, in retrospect, only about a month. Nonetheless, the NBER still required 15 months to perform its accounting and to officially demarcate the beginning and end of that recession. It's understandable why investors might be inclined to disinvest during fraught times, but the data argues convincingly to remain planted.

FED HIKES RATES TO TAME INFLATION BY DESTROYING DEMAND

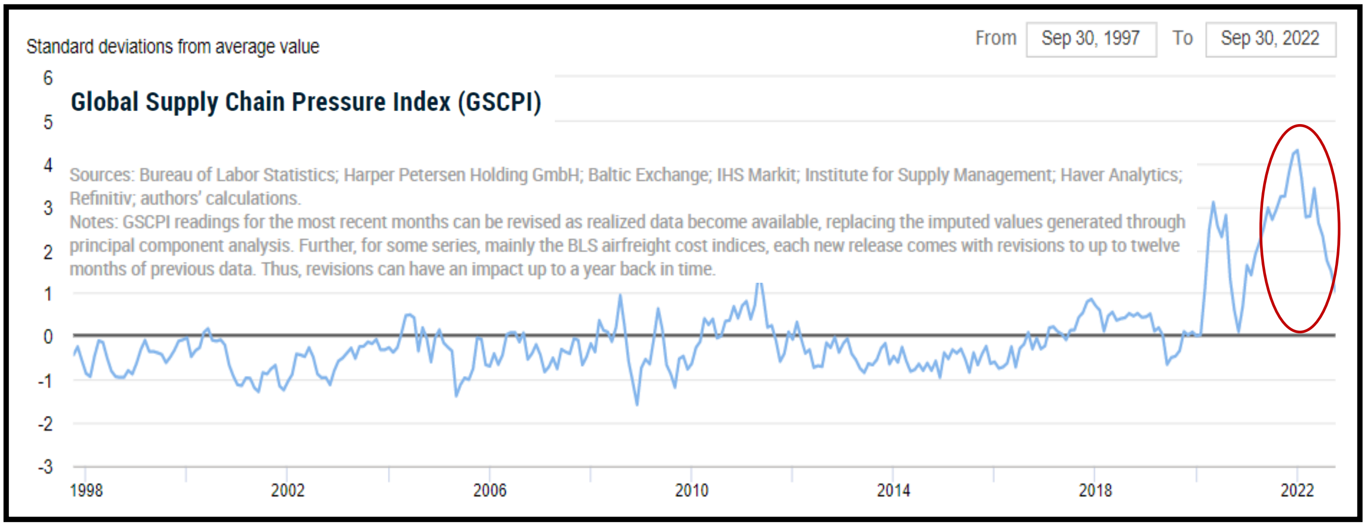
A byproduct of the pandemic was prolific spending by Congress and the Federal Reserve to stimulate the U.S. economy enough to offset at least some of the demand that had been destroyed as a result of the pandemic. The excess liquidity that had been pumped into the U.S. economy is now being expressed as excess demand as total demand now exceeds pre-pandemic levels. That this excess demand has occurred in an environment where the supply chain is still not functioning normally creates a perfect recipe for inflation.

Recognizing this, the Fed has been and will likely continue to raise interest rates in an effort to destroy, at least temporarily, some of this excess demand.

IMPROVING SUPPLY CHAIN MAY OFFER FED BREATHING ROOM

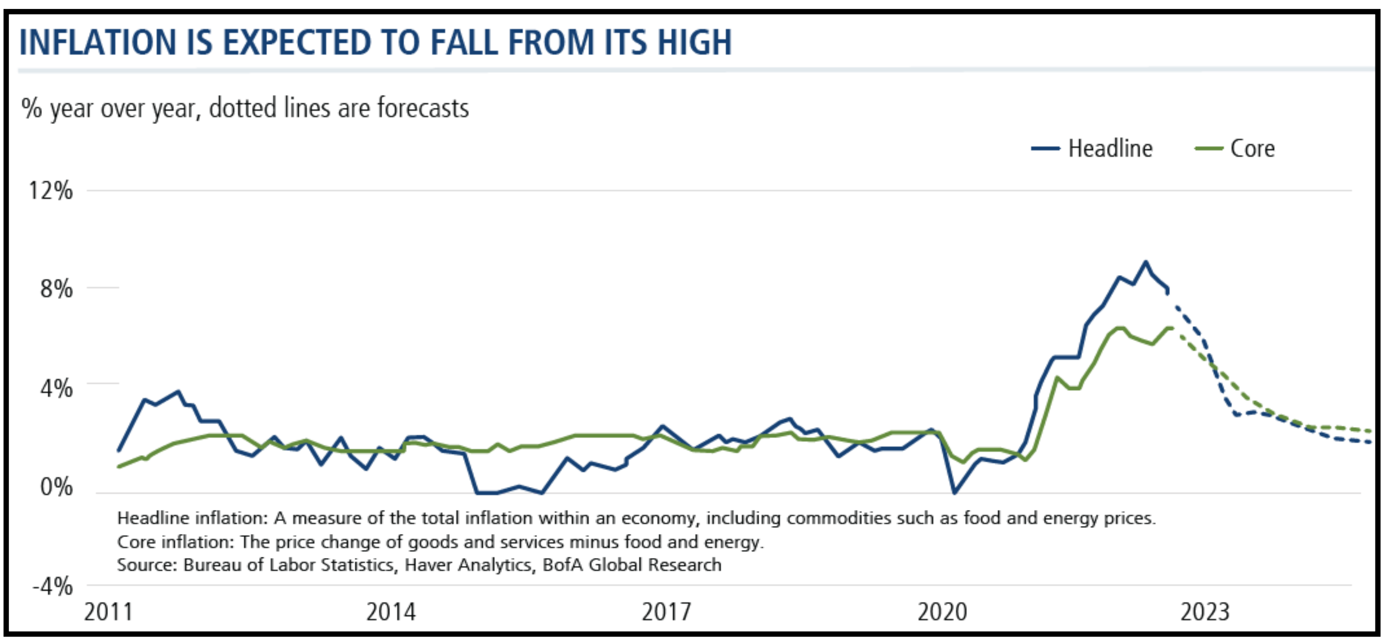
The Fed needs to destroy demand only to the extent demand exceeds available supply. The primary method the Fed uses to destroy demand is via interest rate hikes. Supply chain disruptions peaked in November of last year, but have improved markedly since then. As per the image below, supply chain pressures are close to being back in line with historical norms.

As more demand is sated with additional supply, excess demand will decline which may allow the Fed greater latitude to end its interest-rate-hike program earlier. Investors of all stripes would cheer this result, … well in _advance_ of it becoming obvious.



INFLATION FORECAST

The inflation forecast that appears below is recent and it suggests the Fed will prevail in its quest to control inflation over the next couple of years.

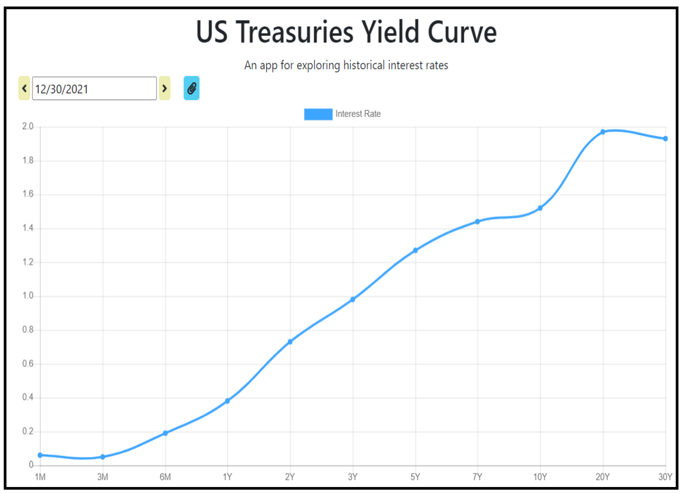


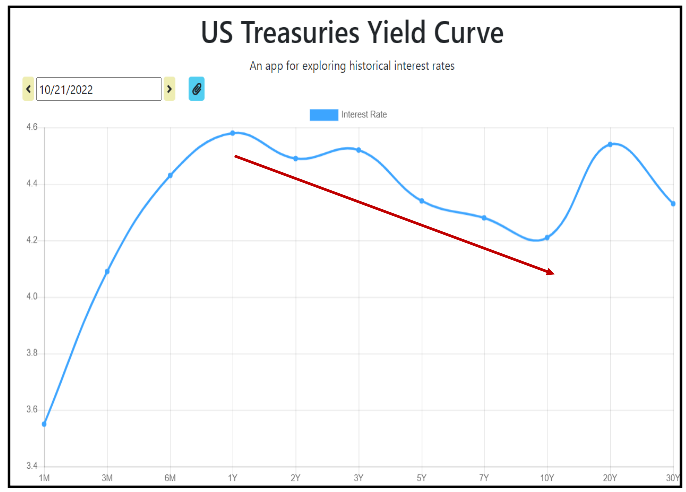
THE BOND MARKET AGREES THAT INFLATION WILL SUBSIDE

The yield curve on the left (below) depicts the yields on government guaranteed bonds as of the end of 2021 whereas the yield curve on the right depicts those same yields as of late October. Aside from the more recent yield curve reflecting higher yields to compensate for the erosive effects of inflation, the 1 — 10 year portion of the recent curve is also downwardly sloping (inverted).

Note how yields have risen significantly more on the short end of the curve (depicted in grid to right) than they have on the long end. This is the result of investors having used billions of dollars to essentially vote that they believe inflation will subside after a year, or so.

Maturing in:	12/30/2021	10/21/2022	Change
1 Month	0.06%	3.55%	3.49%
3 Months	0.05%	4.09%	4.04%
6 Months	0.19%	4.43%	4.24%
1 Year	0.38%	4.58%	4.20%
2 Years	0.73%	4.49%	3.76%
3 Years	0.98%	4.52%	3.54%
5 Years	1.27%	4.34%	3.07%
7 Years	1.44%	4.28%	2.84%
10 Years	1.52%	4.21%	2.69%
20 Years	1.97%	4.54%	2.57%
30 Years	1.93%	4.33%	2.40%





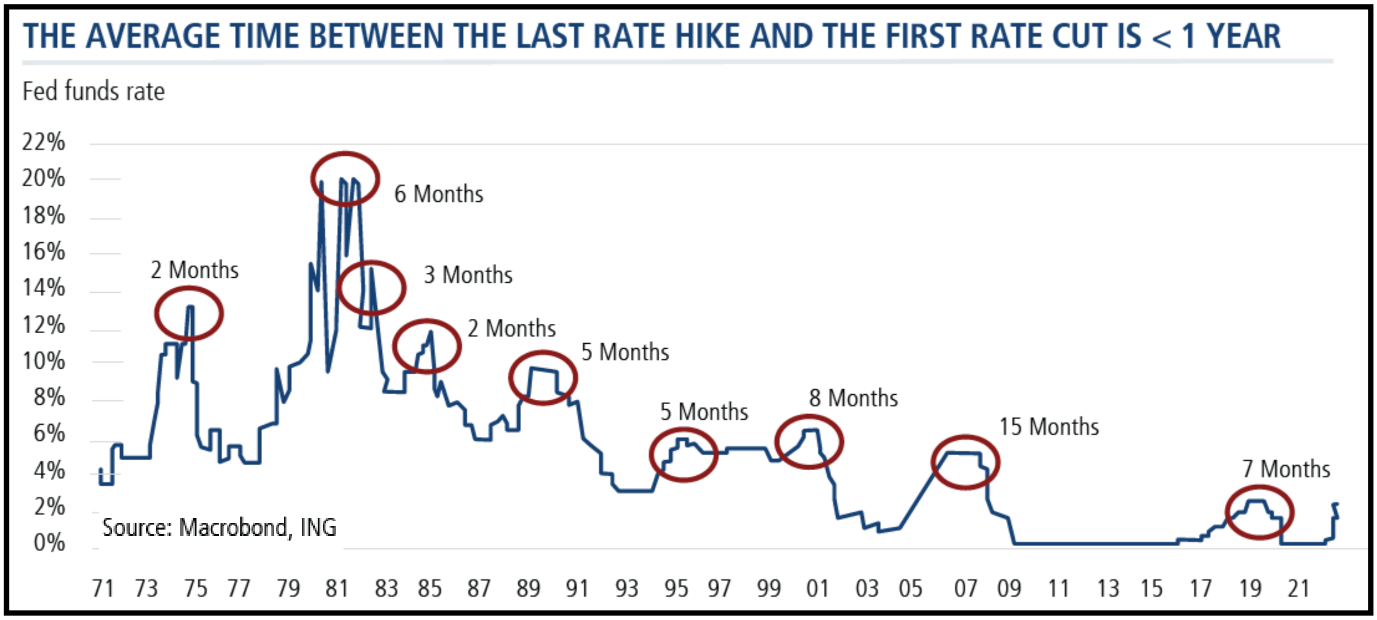
INFLATION SET TO DECLINE MARKEDLY BY NEXT SUMMER

The following image comes from Zacks Research. It's admittedly obtuse, but Zacks estimated a variety of month-over-month inflation rates as far out as June of 2023. In a case where month-over-month inflation continued to surprise to the upside by 10 basis points (.1%) each month (as it recently did), 12-month trailing CPI would decline to 5.87% by February of 2023 and to 2.24% by June of 2023. Even with regular upside inflation surprises of 40 basis points (.4%) per month, CPI would *still* fall to 5.03% by June. This meshes with the yield curve's implications.

	Sep 22	Oct 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23
-10 bps	7.86	6.87	6.24	5.81	4.82	3.77	2.3	1.63	0.42
Zero	7.97	7.08	6.56	6.23	5.34	4.39	3.01	2.44	1.33
+10 bps	8.08	7.29	6.88	6.66	5.87	5.02	3.74	3.27	2.24
+20 bps	8.19	7.51	7.2	7.08	6.4	5.65	4.47	4.09	3.16
+30 bps	8.29	7.72	7.52	7.51	6.93	6.28	5.2	4.93	4.09
+40 bps	8.4	7.94	7.84	7.94	7.47	6.92	5.93	5.77	5.03

MOST ECONOMISTS EXPECT THE FED TO FINISH IN EARLY 2023

Of course, investors (and consumers) prefer interest rates to be low and/or falling because that environment provides a tailwind to economic activity as well as to asset valuations. So if supply conditions continue to improve and the Fed were to finish raising rates in early 2023, what then? Would 30-year, fixed-rate mortgages remain stuck at their current level of 8%? Possibly, but the Fed has a history of reducing rates fairly quickly after having raised them. Here's some data:



THE 10TH MONTH OF A CYCLICAL BEAR MARKET?

Structural bear markets, like the one that occurred in 2008/9, are typically the most severe and enduring with equity declines averaging 50% and recoveries averaging a couple years. In contrast, cyclical bear markets, which are driven by changes in the business cycle, have tended to result in equity values declining by an average of about 30% with the ensuing recovery requiring a bit over a year. Zacks Research believes we're in month 10 of a cyclical bear market. Either way, here's some data for the S&P 500 at various points in time after experiencing a 25% decline which is near the 21% decline we've already seen. The rebound odds look good.

- Glenn Wessel

			SUBSEQUENT RETURNS			
HIGH DATE	LOW DATE	DECLINE	1 YEAR LATER	2 YEARS LATER	5 YEAR LATER	10 YEARS LATER
12/12/1961	6/26/1962	-28.0%	31.2%	69.2%	94.8%	171.1%
11/29/1968	5/26/1970	-36.1%	32.2%	44.3%	27.9%	97.5%
1/11/1973	10/3/1974	-48.2%	1.4%	23.8%	42.0%	188.4%
11/28/1980	8/12/1982	-27.1%	43.9%	81.2%	238.6%	403.9%
8/25/1987	12/4/1987	-33.5%	14.7%	34.1%	96.8%	387.1%
3/24/2000	10/9/2002	-49.1%	0.2%	1.9%	21.5%	38.3%
10/9/2007	3/9/2009	-56.8%	-6.9%	3.7%	61.2%	209.6%
2/19/2020	3/23/2020	-33.9%	56.4%			
1/3/2022	9/30/2022	-25.2%	Source: TheIrrelevantInvestor.com using Ycharts data			
	Average	**-37.6%**	**21.6%**	**36.9%**	**83.3%**	**213.7%**