



A REVIEW OF RECENT MARKET MOVEMENTS AND WHAT TO DO ABOUT THEM

The financial markets have been volatile since the beginning of the year. After three great years, the stock market has been down significantly in 2022. Interest rates have risen causing bond prices to fall too.

So, the question is, what, if anything, should you do to adjust your long-term portfolio management strategy? Our recommendation is to stay the course and maintain your long-term strategy. Here’s why.

The Stock Market

There are always grim headlines about turmoil somewhere in the world, but, as you can see below, the stock market has historically risen over time despite the headlines. This provides value to investors who have patience and don’t overreact to the events of the day.



Source: Dimensional Fund Advisors. In US dollars. MSCI data © MSCI 201, all rights reserved. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results.

The stock market’s recent behavior is well within historic expectations. There is no reason to believe that it will not recover given time. When it does, investors will benefit again from the strong returns the stock markets have historically provided.

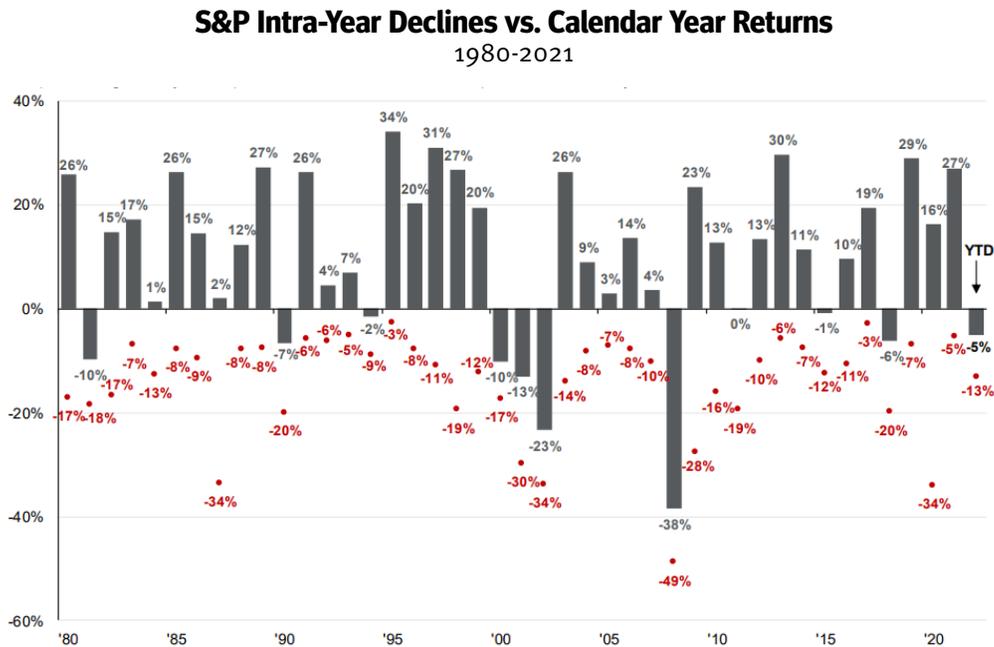
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The information contained herein does not constitute investment advice or a solicitation. Information obtained from 3rd parties is believed to be accurate, but has not been independently verified.

Unfortunately, the ride up is not a smooth one. As you can see here from the gray bars, since 1980 the S&P 500 index has had positive returns in 32 of the past 42 years.

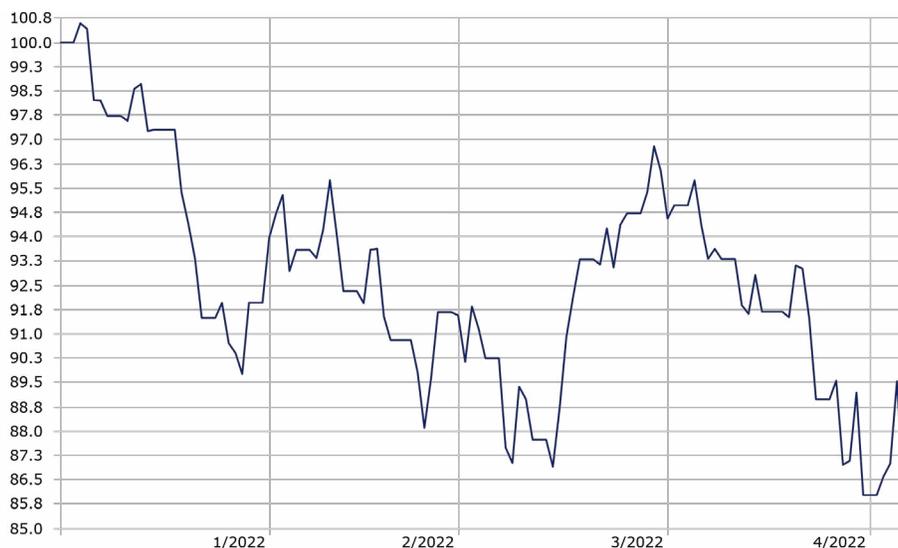
But the red dots show the intra-year declines in each year. In most years, even the positive ones, there has been a significant decline at some point in the year. The average decline is about 14%, which is not too far off the decline we have seen so far in 2022.



Source: J.P. Morgan Asset Management. Data Source: FactSet, Standard and Poor's, J.P. Morgan Asset Management. Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980-2021, over which time period the average annual return was 9.4%.

Let's put this year's stock market decline in perspective. As you can see below, the market was down for the year almost 15% as of May 6, 2022. That doesn't feel good to anybody.

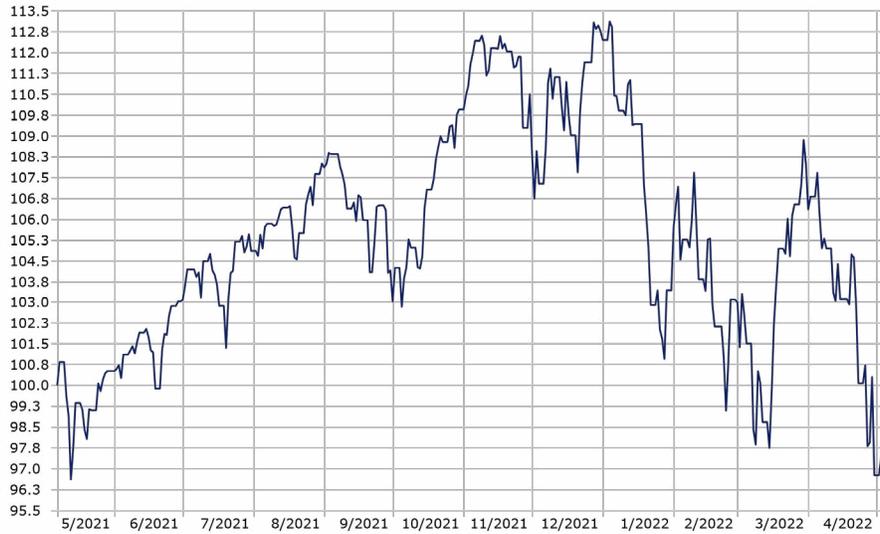
Investment Growth - CRSP US Total Market TR USD Jan. 1, 2022 - May 6, 2022



Source: Morningstar Direct

But, as you can see below, looking back over the past 12 months, we are pretty close to where we were a year ago. Not great, but not terrible.

Investment Growth - CRSP US Total Market TR USD May. 7, 2021 - May 6, 2022



Source: Morningstar Direct

Now let's look back over the last 5 years. You can see that even with the recent declines and the Bear market we had in 2020, we are still far ahead of where we were 5 years ago.

Investment Growth - CRSP US Total Market TR USD May. 7, 2017 - May 6, 2022

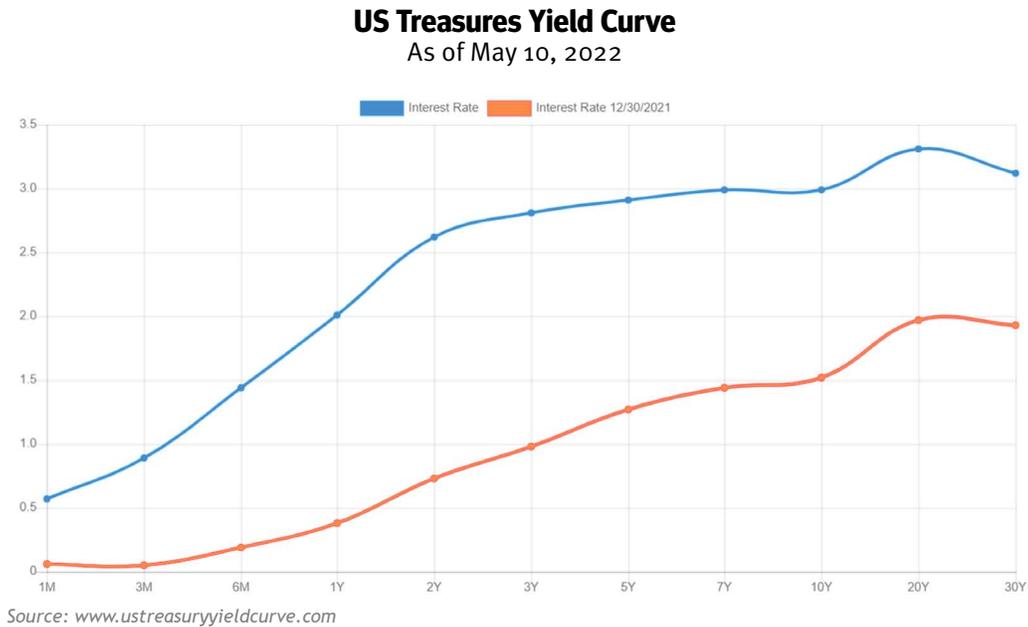


Source: Morningstar Direct

This shows the value of patience in the market. There is no reason to expect these general historical patterns to be any different going forward. There will be ups and downs as we move forward, but the market should be expected to rise over the long-term.

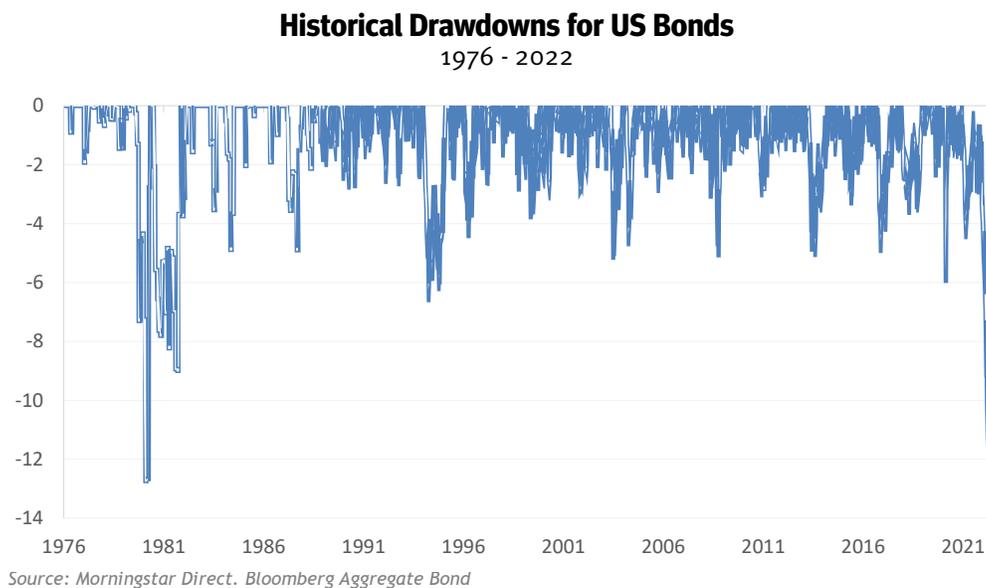
The Bond Market

As you can see below, interest rates have been rising. The orange line is where interest rates were at the end of last year and the blue line shows where they were as of May 10th.



There are a number of logical reasons for this rise in rates. They include inflation, COVID-related supply chain issues, the war in Ukraine, and the Fed's efforts to tame inflation.

When interest rates rise, bond prices fall. Below you can see the recent decline in bond prices and compare it to other periods when bond prices have declined since 1976.



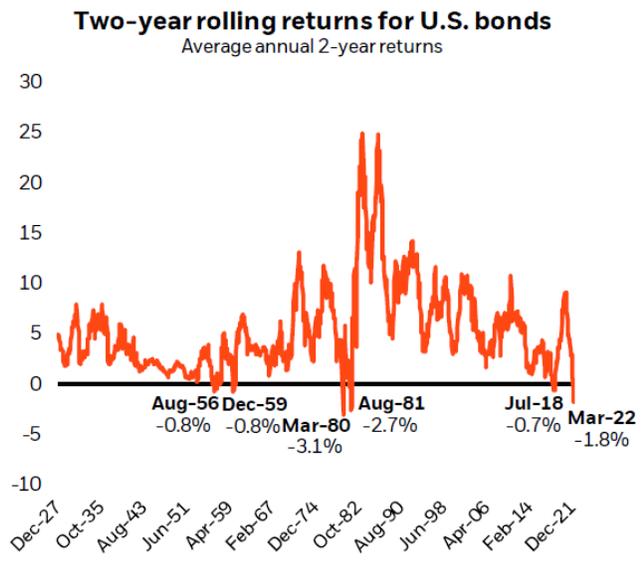
The decline is significant. Since 1976 bond prices have only fallen more on one occasion.

So, the question is what to do about that? When the bond market has historical losses does it make sense to get out of bonds or stay invested and wait for the turnaround?

The historical data shows that rising interest rates and falling bond prices have little predictive value. That is, the fact that rates are rising, and bond prices are falling in one period tells you next to nothing about how bonds will perform in future time periods. Bad news today can turn into good news tomorrow.

In fact, this is what we have seen historically when bond prices have fallen significantly.

The graphic below shows what happened in other periods where bond performance has been particularly bad. It shows that when bonds have had their worst 2-year performance, the subsequent 2 years have usually produced very good returns.



Worst 2-year periods for U.S. bonds

Since 1926, Average annual 2-year return periods

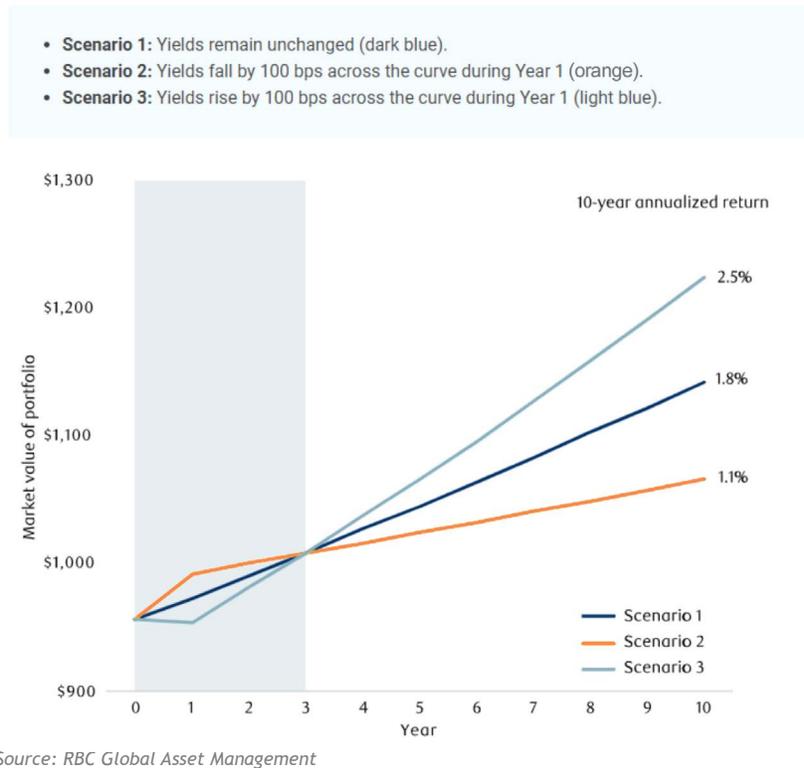
	U.S. Bonds	Next 2 Years
Mar-80	-3.1%	11.4%
Aug-81	-2.7%	23.0%
Mar-22	-1.8%	?
Aug 1956	-0.8%	3.1%
Dec-59	-0.8%	6.7%
Jul-18	-0.7%	9.1%

Source: Morningstar as of 3/31/22. U.S. bonds represented by the Bloomberg U.S. Agg Bond TR Index from 1/3/89 to 3/31/22 and the IA SBBI US Gov IT Index from 1/1/26 to 1/3/89. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

If this pattern holds, we could see a similar pattern emerge in the near future and that would be good news. So, sitting tight makes sense now.

This graphic shows the long-term effect on investors when interest rates go up, stay the same, or go down.

Long-Term Effects of Bond Interests Rates



The orange line shows what happens when interest rates go down. You see that, in the short-term, bond prices go up, which feels good at the time. But, in subsequent years, because interest rates are lower, the long-term return to investors is also lower.

The dark blue line shows what happens when interest rates stay the same. You just continue to get the current interest rate on your bonds.

The light blue line shows what happens when interest rates rise—that’s the situation we are in today. You see that initially bond prices fall as we’ve seen recently. But after a while you get the benefit of those higher interest rates in your portfolio and your long-term return is higher.

There are two other reasons why it makes sense to continue holding bonds in your portfolio. The first is capital preservation. Bonds are much less volatile than stocks. The second is diversification. Holding bonds is a very good way to offset the volatility of stocks.

The graphic below helps illustrate this point.

Risk of Stocks vs. Bonds

Jan. 1927 - May 2013

	Using rolling 12-month data		Using calendar-year data	
	US stocks	US bonds	US stocks	US bonds
Annualised 12-month return	10.2%	5.6%	10.0%	5.5%
Percentage of negative 12-month returns	26.4	15.1	28.7	14.9
Percentage of 12-month return that was less than -10%	13.8	0.2	13.8	0.0
Percentage of 12-month return that was less than -20%	6.3	0.0	6.9	0.0
Worst one-year return	-67.6	-13.9	-43.1	-8.1

Notes: When determining which index to use and for what period, we selected the index that, in our view, best represented the characteristics of the referenced market, given the information then available. Thus, US stock market represented by Standard & Poor's 90 from 2/1926 through 3/3/1957; S&P 500 Index from 4/3/1957 through 1974; Wilshire 5000 Index from 1975 through 22 April 2005; and MSCI US Broad Market Index thereafter. US bond market represented by S&P High Grade Corporate Bond Index from 1926 through 1968; Citigroup High Grade Index from 1969 through 1972; Lehman Brothers US Long Credit AA Index from 1973 through 1975; Barclays US Aggregate Bond Index from 1976 through 2009; and Spliced Barclays US Aggregate Float Adjusted Bond Index thereafter. Data assume portfolio was rebalanced monthly. Data through May 2013.

Source: Vanguard.

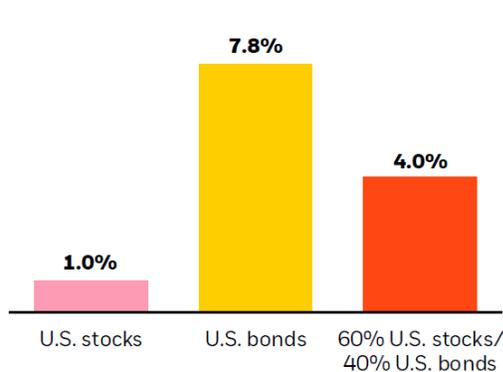
You can see that between 1927 and 2013 stocks returned about twice as much as bonds on an annualized basis. But you also see that stocks had negative returns in about a quarter of those time periods and bonds had negative returns about half as often as stocks. So, often bonds provided positive returns to the portfolio while stocks were struggling.

On the third and fourth lines you see that stocks experienced losses of 10% and even 20% with some frequency, while bonds rarely, if ever, did. You also see that when stocks had their worst years, their value declined dramatically. The worst years for bonds were mild by comparison.

The graphic below also shows the value of combining stocks and bonds in a portfolio to protect the portfolio's value during difficult periods.

Average Performance During a Recession

Since 1929 (Last 90 Years)



Recessions	U.S. stocks	U.S. bonds	60/40 portfolio
1929-09-01 to 1933-03-31	-33.6	4.9	-19.1
1937-06-01 to 1938-06-30	-22.4	6.4	-9.9
1945-03-01 to 1945-10-31	19.5	1.0	12.4
1948-12-01 to 1949-10-31	15.2	2.5	10.1
1953-08-01 to 1954-05-31	24.2	5.1	16.6
1957-09-01 to 1958-04-30	-1.5	9.7	3.3
1960-05-01 to 1961-02-28	20.3	7.2	14.9
1970-01-01 to 1970-11-30	-2.0	16.2	5.3
1973-12-01 to 1975-03-31	-5.9	5.7	0.0
1980-02-01 to 1980-07-31	9.6	9.5	9.5
1981-08-01 to 1982-11-30	10.5	29.1	17.9
1990-08-01 to 1991-03-31	8.0	7.5	8.1
2001-04-01 to 2001-11-30	-0.9	5.9	1.9
2008-01-01 to 2009-06-30	-25.0	4.8	-11.5
2020-03-01 to 2020-04-30	-1.1	1.2	-0.1
Average	1.0	7.8	4.0

Source: Morningstar as of 3/31/22. U.S. Stocks represented by the S&P 500 Index from 3/4/57 to 3/31/22 and the IA SBBI U.S. Lrg Stock TR USD Index from 1/1/26 to 3/4/57. U.S. bonds represented by the Bloomberg U.S. Agg Bond TR Index from 1/3/89 to 3/31/22 and the IA SBBI US Gov IT Index from 1/1/26 to 1/3/89. Recession periods are those defined by the National Bureau of Economic Research (NBER). Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

On the right you see all the recessions we've had in the US since 1929. You can also see the returns of stocks and bonds during those periods, as well as the returns of a portfolio consisting of 60% stocks and 40% bonds. Stocks frequently experienced negative returns during recessionary periods. Bonds never did. By combining stocks and bonds in the 60/40 portfolio you reduced the number and the magnitude of the negative returns.

Then if you look on the left of the slide, you'll see that stocks did poorly during recessionary periods, returning only 1% annually on average. Bonds, on the other hand, did well, returning 7.8% annually. By combining stocks and bonds in the 60/40 portfolio the bonds were able to lift the performance of the portfolio to a respectable 4% during these recessionary periods.

Resist the Temptation to Try to Time the Markets

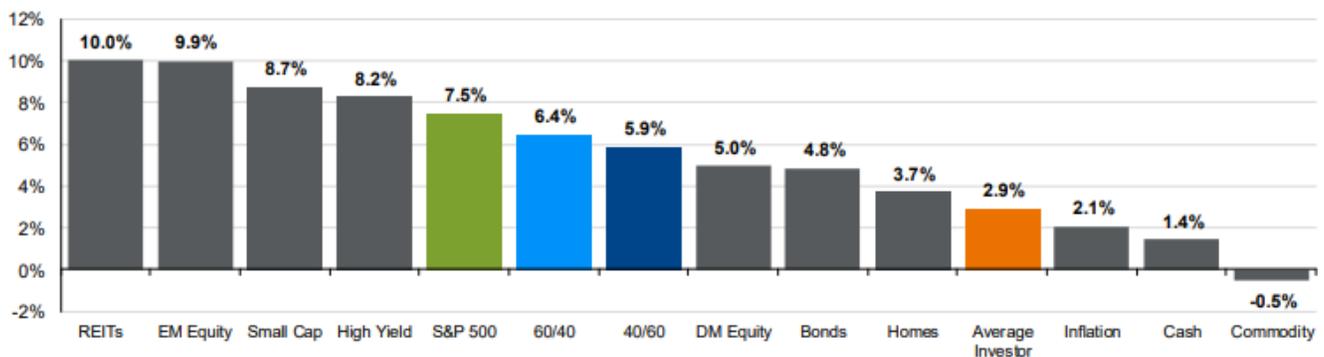
Many people are tempted during difficult times in the markets to cash in their chips and head to the sidelines until things look brighter. Or they may want to reduce exposure to particular asset classes that aren't doing well and then jump back in when performance improves.

This kind of behavior is called "market timing" and it just doesn't work. The problem is that it is impossible to know ahead of time if you are heading into a bad period and it is impossible to know ahead of time when things have finally turned around.

The graphic below shows just how damaging trying to time the markets can be to an investor's performance. It shows the returns of various asset classes from 2001 through 2020. It also shows the return for the average investor during this period in the orange bar.

20-Year Annualized Returns by Asset Class

2001 - 2020



Source: JP Morgan Asset Management. Data Source: Bloomberg, FactSet, Standard & Poor's, J.P. Morgan Asset Management, (Bottom) Dalbar Inc., MSCI, NAREIT, Russell. Indices are used as follows: REITs: NAREIT Equity REIT Index, Small Cap: Russell 2000, EM Equity: MSCI EM, DM Equity: MSCI EAFE, Commodity: Bloomberg 1-3m Treasury, Inflation: CPL 60/40: A balanced portfolio with 60% invested in S&P 500 Index and 40% invested in high-quality U.S. fixed income, represented by the Bloomberg U.S. Aggregate Index. The portfolio is rebalanced annually. Average asset allocation investor return is based on analysis by Dalbar Inc., which utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior.

The average investor generated only 2.9% annually during a period when almost every asset class including stocks and bonds did much better. How could this be? It's because many investors try to time the market and they almost always get it wrong.

Successful investors have patience and discipline. While it is not usually comfortable or easy, they learn to sit tight during difficult periods and wait for the better times that always come.

You don't have to predict the future to be a successful investor. Look at the two blue bars representing the 60/40 portfolio and the 40/60 portfolio. If you had invested in one of those portfolios and just stayed put, you would have done over twice as well as the average investor.