WELLS FARGO
Investment Institute

Special Report

September 28, 2021

Global Asset Allocation Strategy Team

The perils of trying to time volatile markets

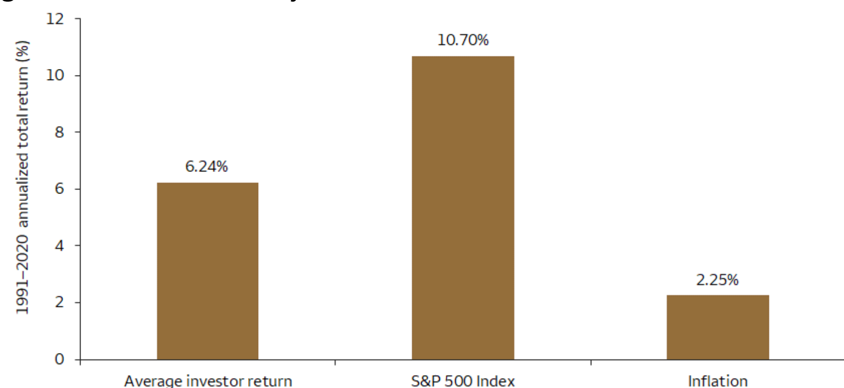
Key takeaways

- Missing a handful of the best days in the market over long time periods can drastically reduce the average annual return an investor could gain just by holding on to their equity investments during sell-offs.
- While missing the worst days can potentially offer higher returns than a "buy and hold" strategy, disentangling the best and worst days can be difficult, since they often occur in a very tight time frame — sometimes even on consecutive trading days.

What it may mean for investors

- There appears to be some benefit to missing both the best and the worst days, so an investor may wish to use tactical asset allocation adjustments in an effort to reduce equity exposure when the risk of a recession or bear market rises.

Chart 1. Market timing is difficult. Investors who allow their emotions to get the best of them may suffer lower returns.



Source: Dalbar, Inc., 30 years from 1991–2020; "Quantitative Analysis of Investor Behavior," 2021, DALBAR, Inc., www.dalbar.com. For illustrative purposes only. DALBAR computed the average stock fund investor return by using industry cash flow reports from the Investment Company Institute. The average stock fund return figure represents the average return for all funds listed in Lipper's U.S. Diversified Equity fund classification model. All DALBAR returns were computed using the S&P 500 Index. Returns assume reinvestment of dividends and capital gain distributions. **The performance shown is hypothetical and not indicative of any particular investment. An index is unmanaged and not available for direct investment. Past performance is not a guarantee of future results.** Inflation is represented by the Consumer Price Index. The Consumer Price Index measures the average price of a basket of goods and services. Lipper's classification model is described at the end of the report.

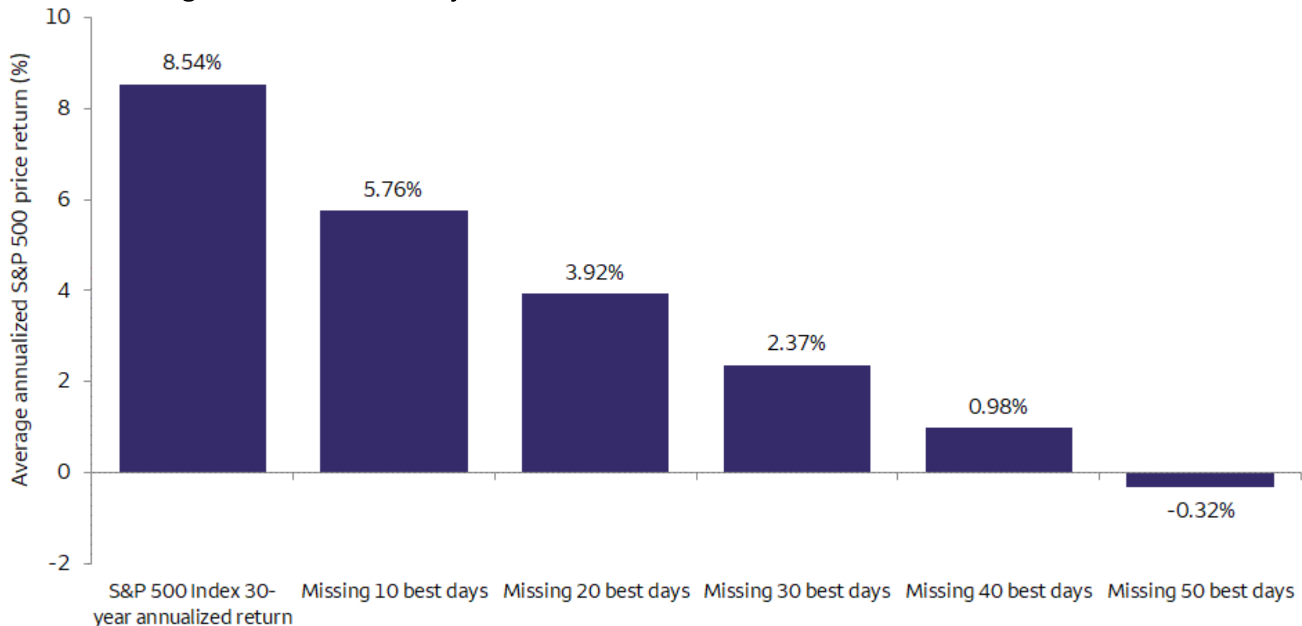
Investment and Insurance Products: NOT FDIC Insured ➤ NO Bank Guarantee ➤ MAY Lose Value

© 2021 Wells Fargo Investment Institute. All rights reserved.

Our findings

Our research suggests that missing a handful of the best days over longer time periods drastically reduces the average annual return an investor could gain by simply holding on to their equity investments during market sell-offs. Over the past 30 years, missing the best 30 days (based on S&P 500 Index returns from September 16, 1991 through September 15, 2021) took the annual average return from 8.5% per year down to just above the average inflation rate of 2.2% over that same period. Our research also showed that over the same time period, missing the best 40 days took the average annual return to below 1%, and missing the best 50 days resulted in a -0.3% annual return, on average.

Chart 2. Missing the market's best days



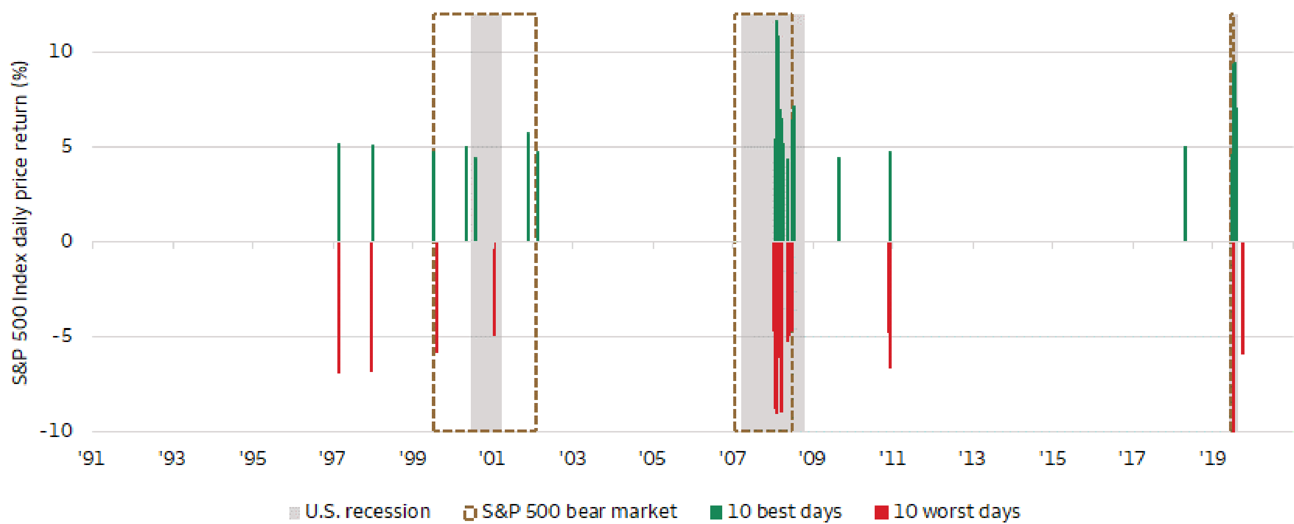
Sources: Bloomberg and Wells Fargo Investment Institute. Daily data: September 16, 1991 through September 15, 2021 for the S&P 500 Index. Best days are calculated using daily returns. For illustrative purposes only. An index is unmanaged and not available for direct investment. A price index is not a total return index and does not include the reinvestment of dividends. **Past performance is no guarantee of future results.**

Based on this study, equities accumulated most of their gains over just a few trading days.

What if an investor could somehow remain invested in the markets during the best days, but avoid the worst days? That would be the best of circumstances—and would result in far higher returns over the course of the holding period. But is that possible? Our work shows that the best days occurred in the S&P 500 in the midst of a bear market or recession, and some of the worst days occurred during bull markets. Of the 10 best trading days in terms of percentage gains, all 10 took place during recessions and five took place during a bear market, with three of those in March and April 2020. Disentangling the best and worst days can be quite difficult, history suggests, since they often occur in a very tight time frame, sometimes even on consecutive trading days. In our view, these findings argue strongly for most investors to remain invested in the equity markets even in the most volatile markets.

© 2021 Wells Fargo Investment Institute. All rights reserved.

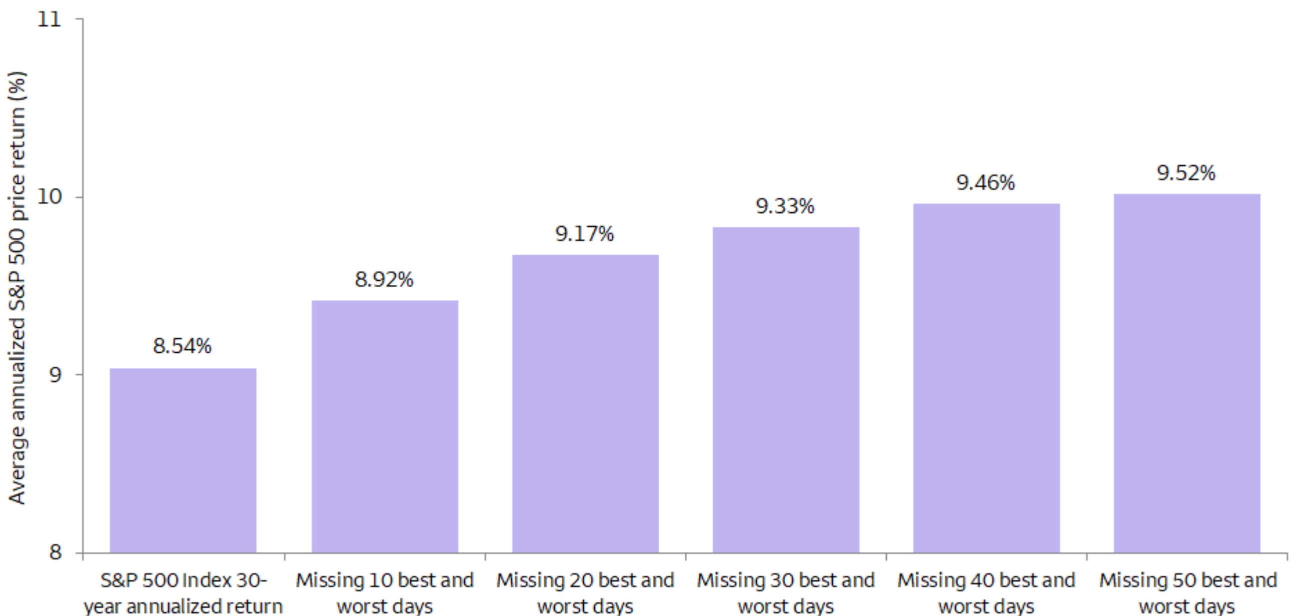
Chart 3. Market performance — The best days and worst days have often occurred close together



Sources: Bloomberg and Wells Fargo Investment Institute. Daily data: September 16, 1991 through September 15, 2021 for the S&P 500 Index. Best and worst days are calculated using daily returns. For illustrative purposes only. A price index is not a total return index and does not include the reinvestment of dividends. There are difficulties assessing index performance during certain correction periods, in part, because index results do not represent actual trading and cannot completely account for the impact financial risk has on actual trading. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Not only have the best and worst days typically clustered together, they often occurred during bear markets or recessions, when markets were at their most volatile. Another historical study we conducted shows that missing both the best and the worst trading days during various time periods can result in somewhat higher equity returns than those of a traditional buy-and-hold strategy (see Chart 4). Although the difference may not be enough to account for trading and tax costs, it is interesting to note that, based on the historical returns in Chart 4, reducing equity exposure during periods with significant market volatility improved returns.

Chart 4. Missing the best and worst days — Reduced exposure during market volatility



Sources: Bloomberg and Wells Fargo Investment Institute. Daily data: September 16, 1991 through September 15, 2021 for the S&P 500 Index. Best and worst days are calculated using daily returns. For illustrative purposes only. An index is unmanaged and not available for direct investment. A price index is not a total return index and does not include the reinvestment of dividends. **Past performance is no guarantee of future results.**

© 2021 Wells Fargo Investment Institute. All rights reserved.

Market volatility has been higher than markets experienced during the 2009-2020 bull market and uncertainty surrounding the impact of coronavirus on the global economy and markets persists. As risks remain, we suggest focusing on quality at the asset class level. We currently prefer U.S. and Emerging Market Equities over Developed Market ex-U.S. Equities. At this point in the market cycle, we are favorable on U.S. Large Cap and Small Cap Equities and cyclical sectors such as Industrials, Financials, and Consumer Discretionary. In Fixed Income, we prefer higher credit quality securities over high-yield debt. During times of heightened volatility, we encourage investors to review portfolio allocations and strategies. When opportunities arise, we typically use our tactical asset allocation strategy (increasing or decreasing exposure to asset classes over shorter time periods) in an effort to improve potential returns while decreasing volatility risk.

DALBAR Study and Market Timing

- In 2020, the **Average Equity Fund Investor** underperformed the S&P 500 by 131 basis points[1] (18.40% for S&P 500 vs. 17.09% for Average Equity Fund Investor).[2]

- In the first quarter of 2020, which included a brief but deep bear market, the Average Equity Fund Investor underperformed the S&P 500 by 233 basis points. (-19.60% for S&P 500 vs. -21.93% for Average Equity Fund Investor).

Since 1994, DALBAR's Quantitative Analysis of Investor Behavior (QAIB) has measured the effects of investor decisions to buy, sell, and switch into and out of mutual funds over short- and long-term time frames. These effects are measured from the perspective of the investor and do not represent the performance of the investments themselves. The results consistently showed that the Average Investor earned less—in many cases, much less—than mutual fund performance reports would suggest.[3]

DALBAR has analyzed investors' market timing successes and failures through net purchases and sales of funds since 1994. This form of analysis, known as the "Guess Right Ratio," examines fund inflows and outflows as a potential mean to determine how often investors correctly anticipate the direction of the market the following month. Investors tend to "guess right" when a net inflow is followed by a market gain or when a net outflow is followed by a decline.

Based on DALBAR findings, investors have guessed right at least half the time in 12 out of the past 20 years, but guessed correctly only four months in 2020. Unfortunately for the Average Investor, guessing right has not produced superior gains because the dollar volume of bad guesses exceeded the dollar volume of right guesses. Even one month of wrong guesses can potentially wipe out what's gained from several months of right ones.

Over the past20 years, there has been a gap between net inflows and outflows of the Average Equity Fund Investor and the direction in the market. Flows out of equities in March 2020 were consistent with this trend, but overall, the withdrawals out of equities were nowhere near the panic levels that are typically seen during historical market crashes. For perspective, in October 2008, equity outflows were 1.42% of assets and in October 1987, the Average Equity Fund Investor withdrew 3.06% of assets. In March 2020, the Average Equity Fund Investor withdrew only 0.29% of equity assets.

---

[1] One hundred basis points equal 1%.

[2] Average Equity Fund Investor: The Average Equity Fund Investor is comprised of a universe of both domestic and world equity mutual funds. It includes growth, sector, alternative strategy, value, blend, emerging markets, global equity, international equity, and regional equity funds.

[3] 2021 DALBAR QIAB Report.

© 2021 Wells Fargo Investment Institute. All rights reserved.

While the equity outflows during the 2020 bear market were much less than historic levels, retention rates did retract to historic low levels. Examination of retention rates within equity funds reveals that investors were busy moving out of equity funds, but the lack of any significant equity outflows suggests that money was moving to different equity funds. The Average Equity Fund Investor's retention rate retracted from an average of 4.5 years in 2019 to 1.7 years in March 2020. A retention rate of 1.7 years ranks among the lowest since the beginning of its measurement in 1985.

Conclusion

We believe that staying fully invested in equity markets over a full market cycle is more beneficial than attempting to avoid the worst-performing days. Historically, there appears to be some benefit to missing both the best and the worst days, so an investor may wish to use tactical asset allocation to in an effort to reduce equity exposure when the risk of a recession and bear market rises and increase equity exposure as the economy and markets recover. We also suggest rebalancing—buying asset classes that have fallen below a portfolio's long-term allocations and selling those that are higher than long-term allocations—during periods of market volatility. We anticipate regular rebalancing can help to ensure that a portfolio's allocation stays diversified and aligned with desired goals. Diversification has the potential to provide more consistent returns and less downside risk through lowered volatility. Attempting to smooth the ride for investors is important as it can reduce the temptation to abandon a diversified portfolio when one asset class is outperforming or underperforming during a given time period. Attempting to reduce downside volatility can be critical to long-term performance as it can allow a portfolio to recover in the event of a catastrophic loss.

© 2021 Wells Fargo Investment Institute. All rights reserved.

Risk considerations

All investing involves risks including the possible loss of principal. Equity securities are subject to market risk which means their value may fluctuate in response to general economic and market conditions and the perception of individual issuers. Investments in equity securities are generally more volatile than other types of securities.

Each asset class has its own risk and return characteristics. The level of risk associated with a particular investment or asset class generally correlates with the level of return the investment or asset class might achieve. **Stock markets**, especially foreign markets, are volatile. Stock values may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors. **Foreign investing** has additional risks including those associated with currency fluctuation, political and economic instability, and different accounting standards. These risks are heightened in emerging markets. **Small- and mid-cap stocks** are generally more volatile, subject to greater risks and are less liquid than large company stocks

Definitions

S&P 500 Index is a market capitalization-weighted index composed of 500 widely held common stocks that is generally considered representative of the US stock market.

Lipper's U.S. Diversified Equity Fund classification for applies a "70%" rule to the Russell 3000 Index to determine the large-cap floor. All the stocks of the Russell 3000 are ranked by descending order of market cap; the total market capitalization of the index is computed by summing each constituent stock's capitalization; and then the large-cap/mid-cap breakpoint is calculated by adding each stock's capitalization weight until the 70th percentile of the total capitalization is reached.

An index is unmanaged and not available for direct investment.

General disclosures

Global Investment Strategy (GIS) is a division of Wells Fargo Investment Institute, Inc. (WFII). WFII is a registered investment adviser and wholly owned subsidiary of Wells Fargo Bank, N.A., a bank affiliate of Wells Fargo & Company.

The information in this report was prepared by Global Investment Strategy. Opinions represent GIS' opinion as of the date of this report and are for general information purposes only and are not intended to predict or guarantee the future performance of any individual security, market sector or the markets generally. GIS does not undertake to advise you of any change in its opinions or the information contained in this report. Wells Fargo & Company affiliates may issue reports or have opinions that are inconsistent with, and reach different conclusions from, this report.

The information contained herein constitutes general information and is not directed to, designed for, or individually tailored to, any particular investor or potential investor. This report is not intended to be a client-specific suitability or best interest analysis or recommendation, an offer to participate in any investment, or a recommendation to buy, hold or sell securities. Do not use this report as the sole basis for investment decisions. Do not select an asset class or investment product based on performance alone. Consider all relevant information, including your existing portfolio, investment objectives, risk tolerance, liquidity needs and investment time horizon.

Wells Fargo Advisors is registered with the U.S. Securities and Exchange Commission and the Financial Industry Regulatory Authority, but is not licensed or registered with any financial services regulatory authority outside of the U.S. Non-U.S. residents who maintain U.S.-based financial services account(s) with Wells Fargo Advisors may not be afforded certain protections conferred by legislation and regulations in their country of residence in respect of any investments, investment transactions or communications made with Wells Fargo Advisors.

Wells Fargo Advisors is a trade name used by Wells Fargo Clearing Services, LLC and Wells Fargo Advisors Financial Network, LLC, Members SIPC, separate registered broker-dealers and non-bank affiliates of Wells Fargo & Company. CAR 0921-02912

© 2021 Wells Fargo Investment Institute. All rights reserved.