WELLS FARGO
Investment Institute

April **2021**

Market Charts

Take a longer-term view during market volatility

All data shown in the charts as of March 31, 2021 unless stated otherwise and reflect the most recent information available. Please see disclosures for the risks associated with the asset classes and for the definitions of market-based and economic indexes.

Putting market volatility into perspective

- Market uncertainty is always present to some degree, and volatility is a normal part of market behavior.
- We expect periods of market uncertainty in the near term, but volatility can present opportunities for investors.
- Market corrections can be difficult to endure; however, they can offer opportunities for investors to purchase high-quality stocks at reasonable prices.
- Since each asset class has a unique set of characteristics, a diversified portfolio has the potential to provide more consistent returns with lower volatility.
- Attempting to reduce downside volatility is critical to long-term performance, as it can allow a portfolio to recover more quickly after a crisis event.
- It's important to recognize that the more you lose in a downturn, the longer it normally takes to recoup those losses.
- We do not advocate market timing, but we do believe that modest tactical shifts have the potential to take advantage of short-term investment opportunities or help mitigate short-term risks.
- An appropriate asset allocation that aligns an investor's return objective, risk tolerance, and time horizon can be a beneficial way to capture upside potential and mitigate downside risk over time.

Where are we headed?

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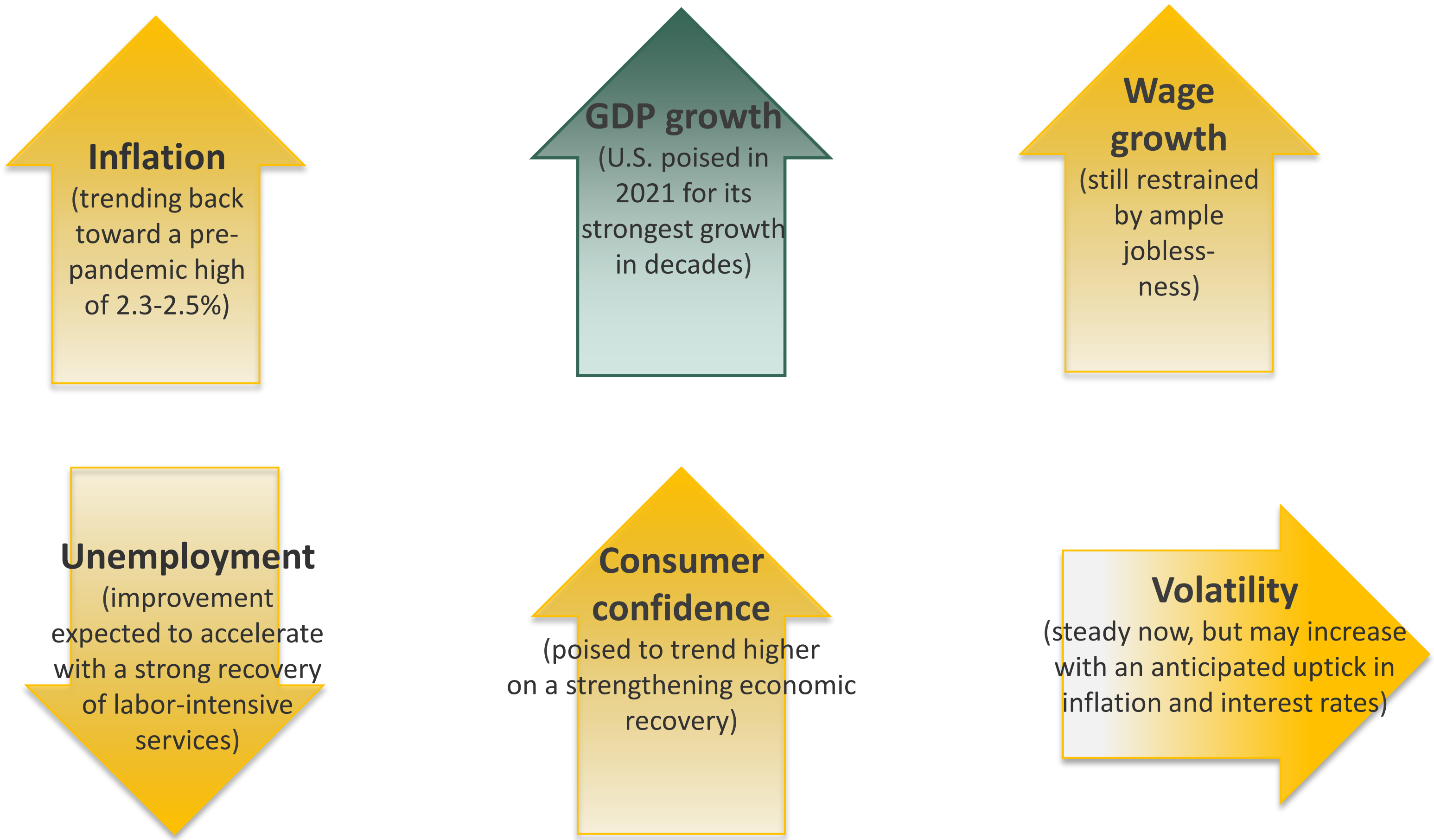
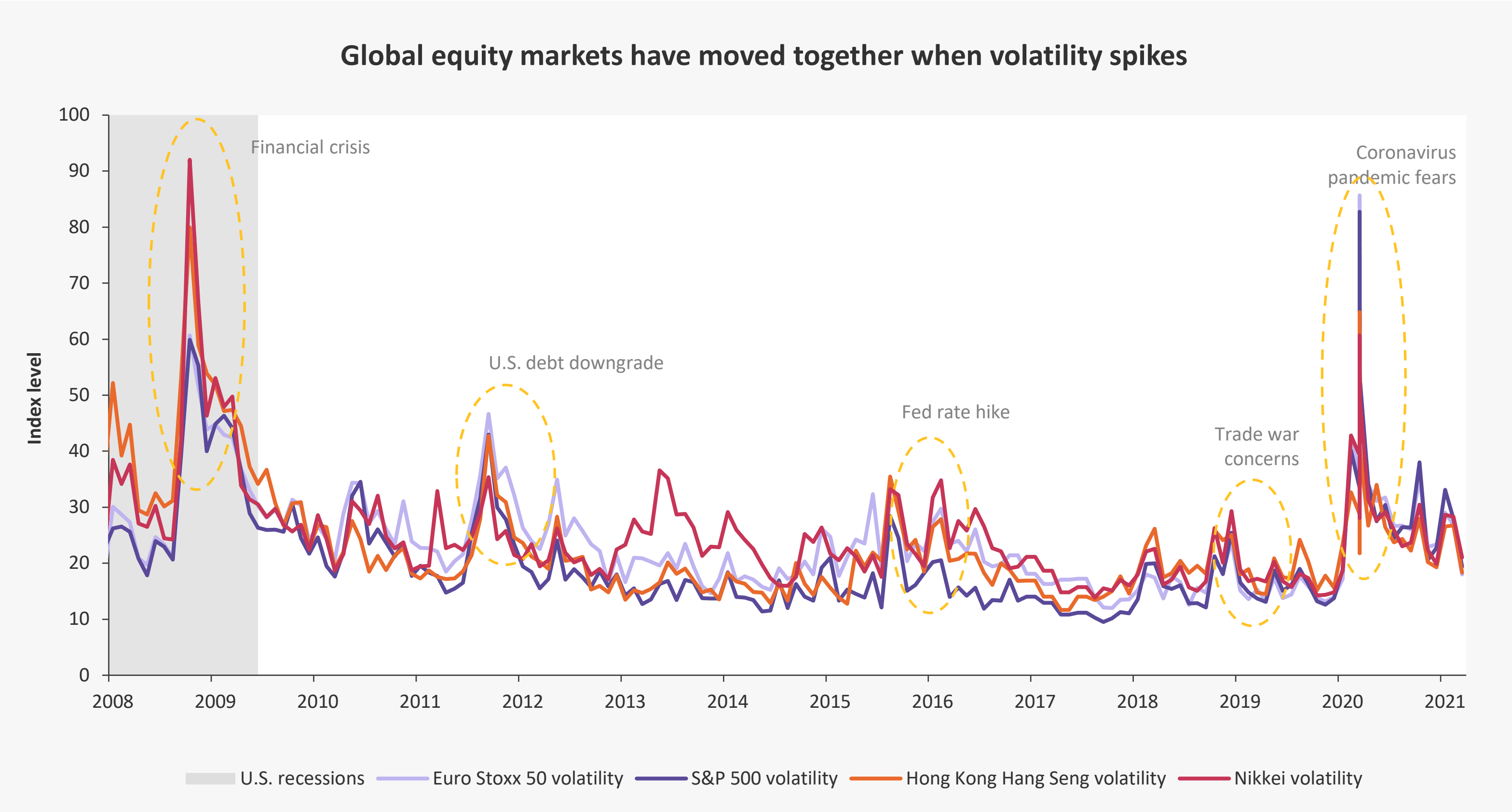


Source: Wells Fargo Investment Institute, as of March 31, 2021. Subject to change. GDP = gross domestic product.

Key takeaways

- The U.S. economy is on track for its strongest growth since the mid 1980s, the result of successful vaccine deployment, a huge stockpile of household cash, and massive government support.
- Monetary and fiscal stimulus is set to continue while the economic recovery is strong. Overheating could lead to unexpected increases in inflation and interest rates.
- The job market is expected to continue improving due to the Biden administration’s efforts to boost union power.

Volatility rose several times during this cycle



Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 2008 to March 31, 2021. For illustrative purposes only. S&P 500 volatility measured by the CBOE Volatility Index® (VIX®). Euro STOXX 50 volatility measured by the VSTOXX Index. Hong Kong Hang Seng volatility measured by the HSI Volatility Index. Nikkei volatility measured by the VNKY Index. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Please see the end of the report for the definitions of the indexes.

Key takeaways

- Volatility receded quickly following the pandemic spike, and has settled at slightly higher levels than prior to the pandemic, indicating a bit of residual uneasiness among investors.
- We expect periods of market uncertainty in 2021, but volatility can often present opportunities to invest in markets at a lower price point.

Timing the market is risky

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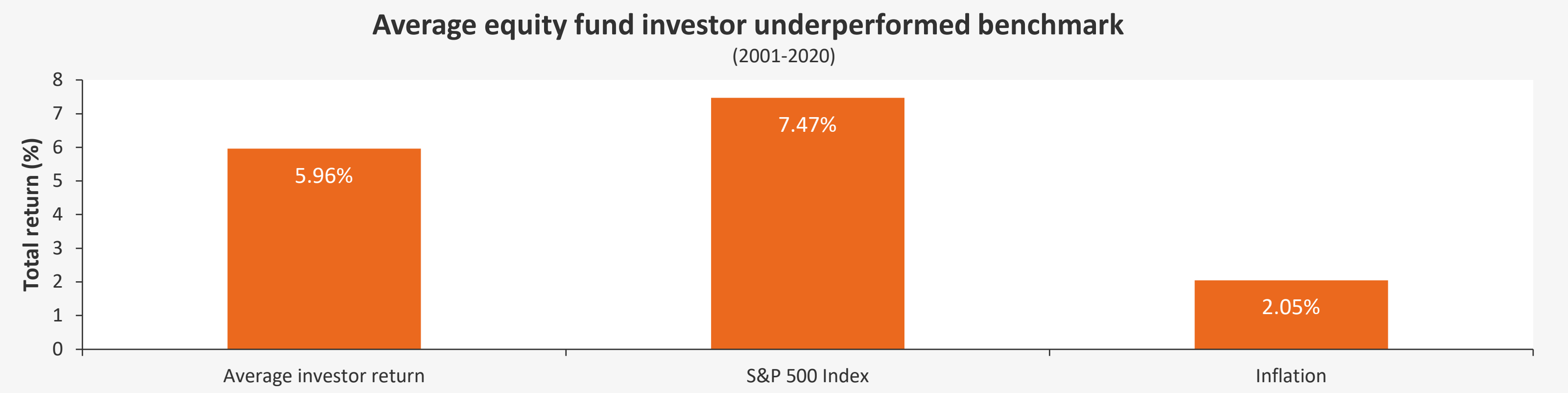
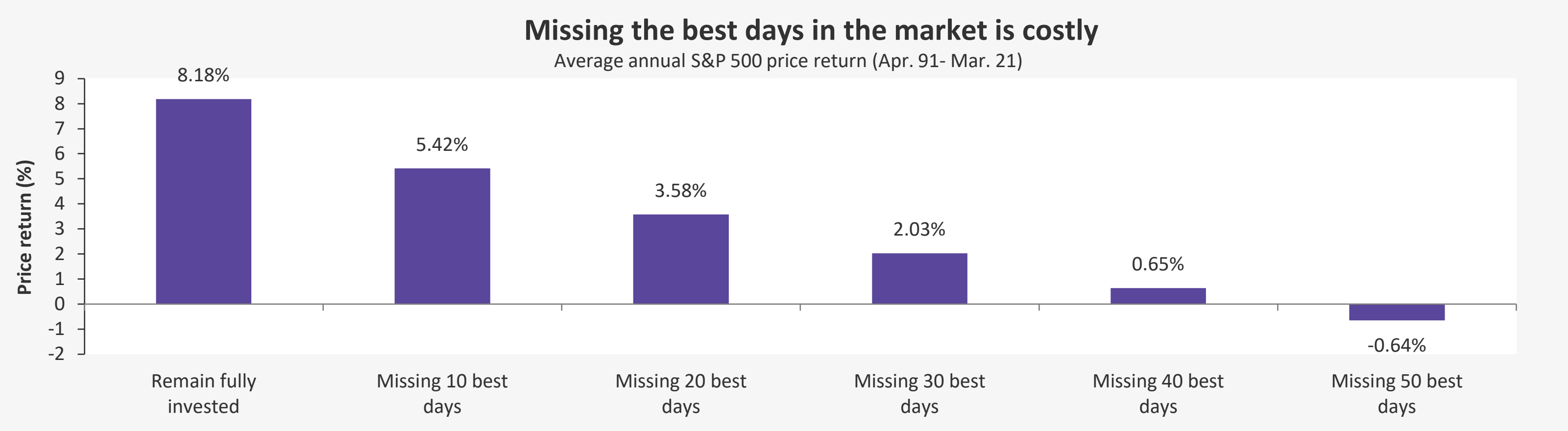




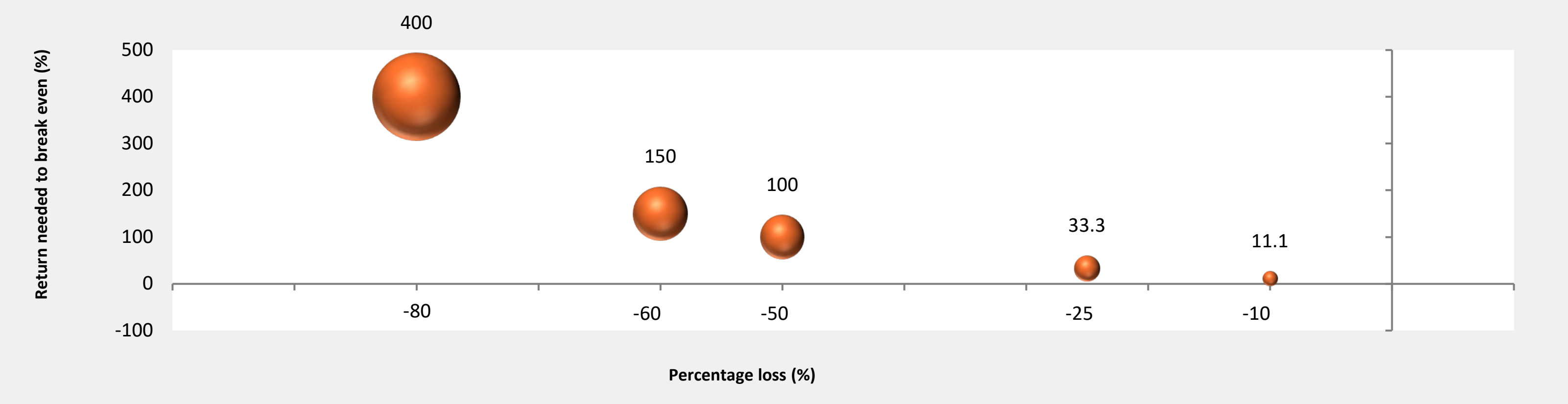
Sources: Top chart: Dalbar, Inc., 20 years from 2000–2019; "Quantitative Analysis of Investor Behavior," 2020, DALBAR, Inc., www.dalbar.com. Bottom chart: Bloomberg and Wells Fargo Investment Institute. Data from February 1, 1991 to March 31, 2021. For illustrative purposes only. Dalbar computed the 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. The S&P 500 Index is a market capitalization weighted index composed of 500 stocks generally considered representative of the U.S. stock market. The fact that buy and hold has been a successful strategy in the past does not guarantee that it will continue to be successful in the future. The performance shown is not indicative of any particular investment. 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. Total returns assume reinvestment of dividends and capital gain distributions. **Past performance is no guarantee of future results.**

Key takeaways

- Market timing is difficult. Investors who allow their emotions to get the best of them can suffer lower returns.
- We do not advocate market timing, but we do believe that modest tactical shifts have the potential to take advantage of short-term investment opportunities or help mitigate short-term risks.

The greater the loss, the longer it takes to break even

To break even in one period		Periods necessary to break even given a percentage return of		
If you lose	**You need …**	**1%**	**5%**	**10%**
10%	11.1%	10.6	2.2	1.1
25%	33.3%	28.9	5.9	3.0
50%	100%	69.7	14.2	7.3
60%	150%	92.1	18.8	9.6
80%	400%	161.7	33.0	16.9

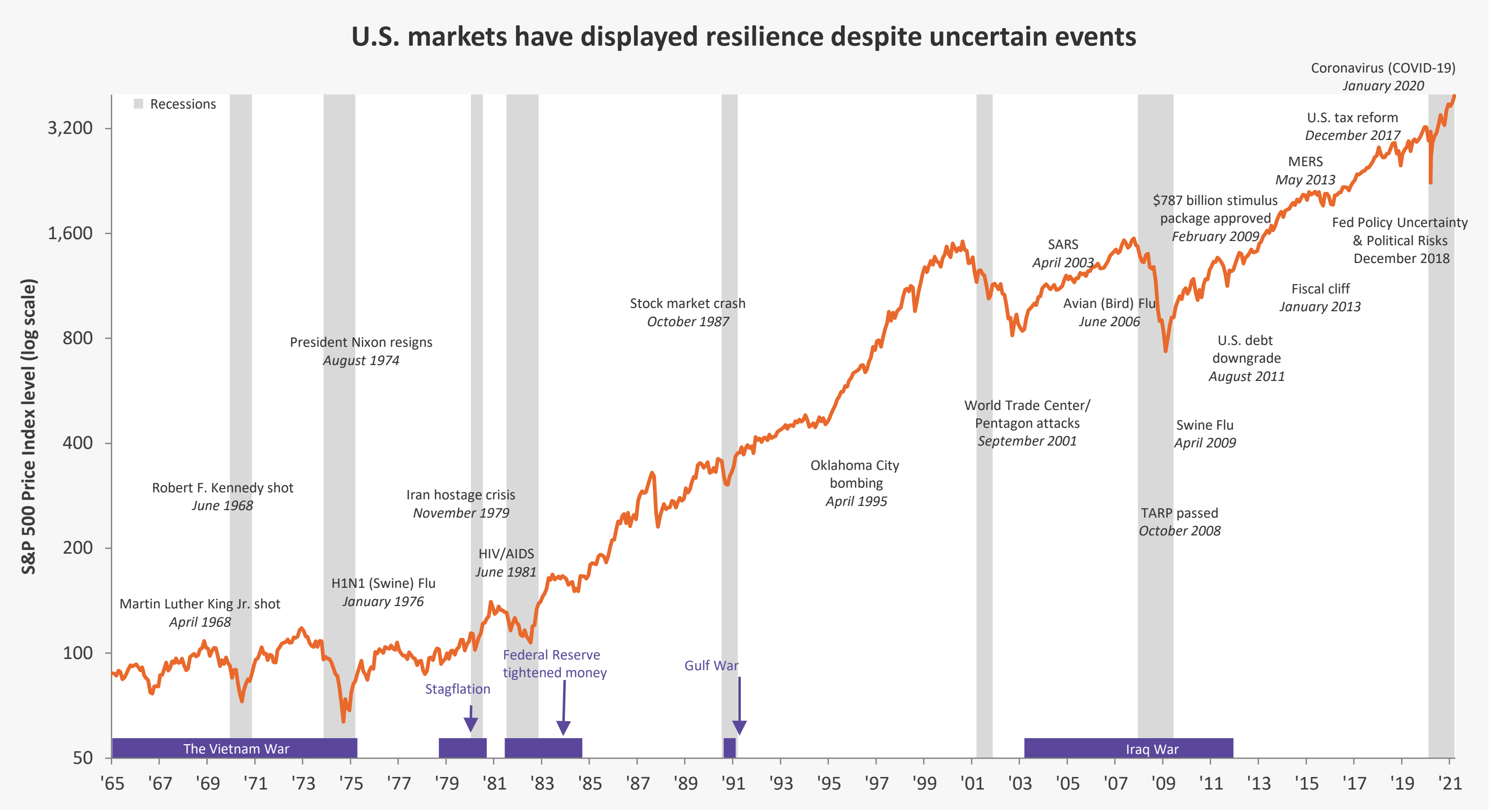


Source: Wells Fargo Investment Institute, as of March 31, 2021. For illustrative purposes only. There is no guarantee it will be possible to break even. All investing involves risk including the possible loss of principal. **Past performance is no guarantee of future results.**

Key takeaways

- It's important to recognize that the more you lose in a downturn, the longer it takes to recoup those losses.

Market resilience

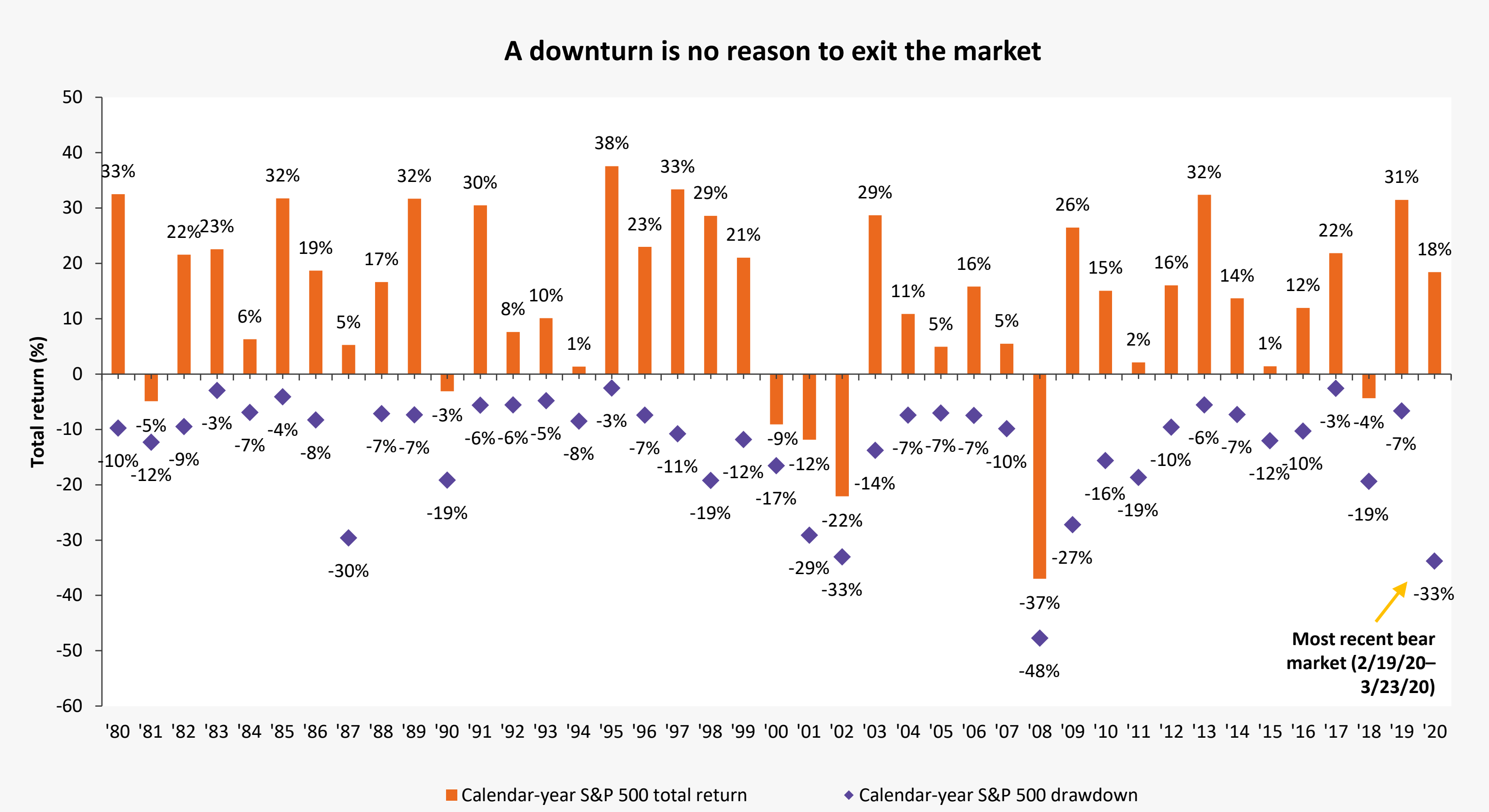


Sources: Wells Fargo Investment Institute, Bloomberg, and Ned Davis Research. Monthly data from January 1, 1965 to March 31, 2021. For illustrative purposes only. A price index is not a total return index and does not include the reinvestment of dividends. The S&P 500 Index is a market-capitalization-weighted index considered representative of the U.S. stock market. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** There is no guarantee equity markets will perform similarly during other periods of uncertainty. All investing involves risk including the possible loss of principal. Note that shaded areas reflect recessions.

Key takeaways

- Volatility is a normal part of market behavior and can present opportunities for long-term investors.
- Geopolitical crises, terrorist attacks, economic recessions, epidemics, or consequential central bank policies can trigger short-lived yet influential market disruptions.

Staying the course

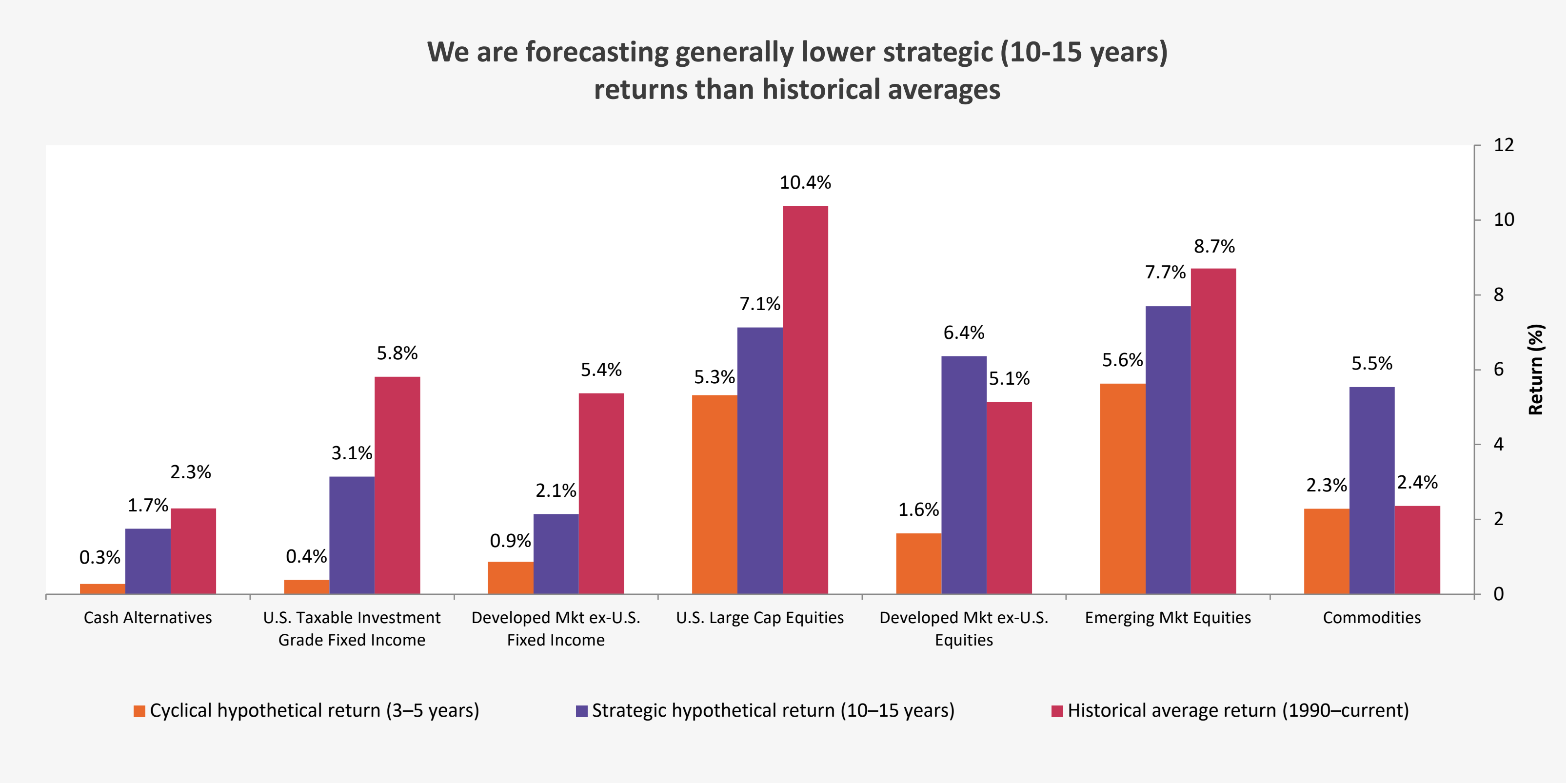


Sources: © 2020 – Morningstar Direct, All Rights Reserved[1] and Wells Fargo Investment Institute. Annual data from January 1, 1980 to December 31, 2020. For illustrative purposes only. Severe intra-year corrections do not necessarily indicate subpar performance for the calendar year. Analysis was compiled using the daily price of the S&P 500 Total Return Index. The S&P 500 Index is a market-capitalization-weighted index considered representative of the U.S. stock market. Calendar-year drawdowns represent the largest market drops from peak to trough for each year. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Key takeaways

- A severe market downturn does not necessarily mean that markets will perform poorly for the year.
- Market corrections and downturns can be difficult to endure. However, they can offer opportunities for investors to purchase high-quality stocks at reasonable prices.

Expect lower returns for longer

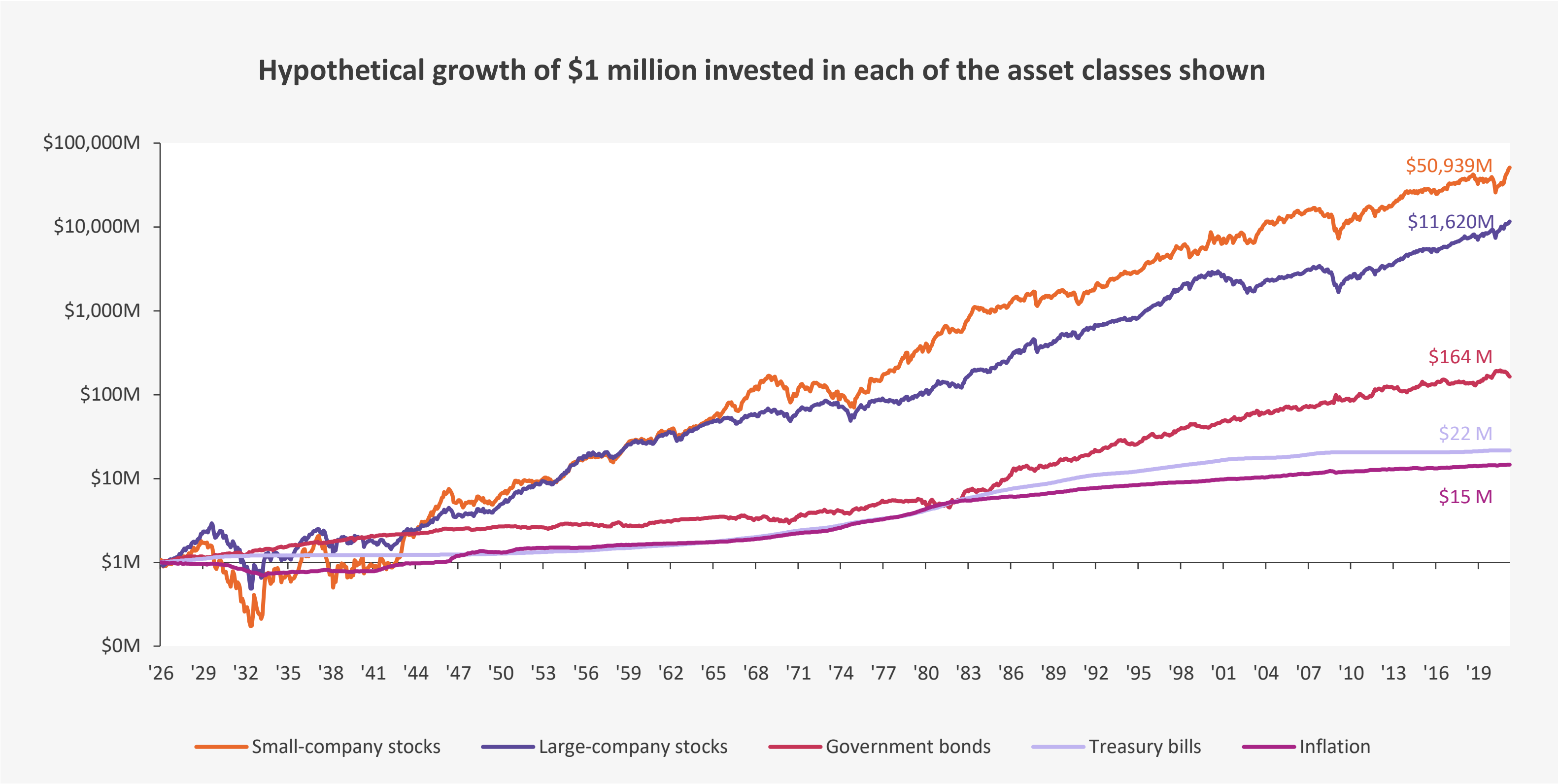


Sources: Bloomberg, and Wells Fargo Investment Institute. Data from February 1, 1990 to March 31, 2021. For illustrative purposes only. Cyclical return assumptions as of April 1, 2021. Strategic return assumptions are as of July 16, 2020. Cyclical and strategic hypothetical returns are forward-looking geometric return estimates from Wells Fargo Investment Institute of how asset classes and combinations of classes may respond during various market environments. Hypothetical returns do not represent the returns that an investor should expect in any particular year. They are not designed to predict actual performance and may differ greatly from actual performance. There are no assurances that any estimates given will be achieved. An index is unmanaged and not available for direct investment. **Hypothetical and past performance is no guarantee of future results.** Indexes in order represented by Bloomberg Barclays U.S. Treasury Bill (1–3 Month) Index, Bloomberg Barclays U.S. Aggregate Bond Total Return Index, JP Morgan GBI Global Ex U.S. Total Return Index, S&P 500 Total Return Index, MSCI EAFE Total Return Index, MSCI Emerging Markets Total Return Index, Bloomberg Commodity Index. Please see the end of the report for the definitions of the indexes. Please see the end of the report for the definitions of the indexes. Forecasts and targets are based on certain assumptions and on views of market and economic conditions which are subject to change.

Key takeaways

- Investors may need to consider saving more or spending less in this environment to reach their financial goals.

Asset values have grown over time



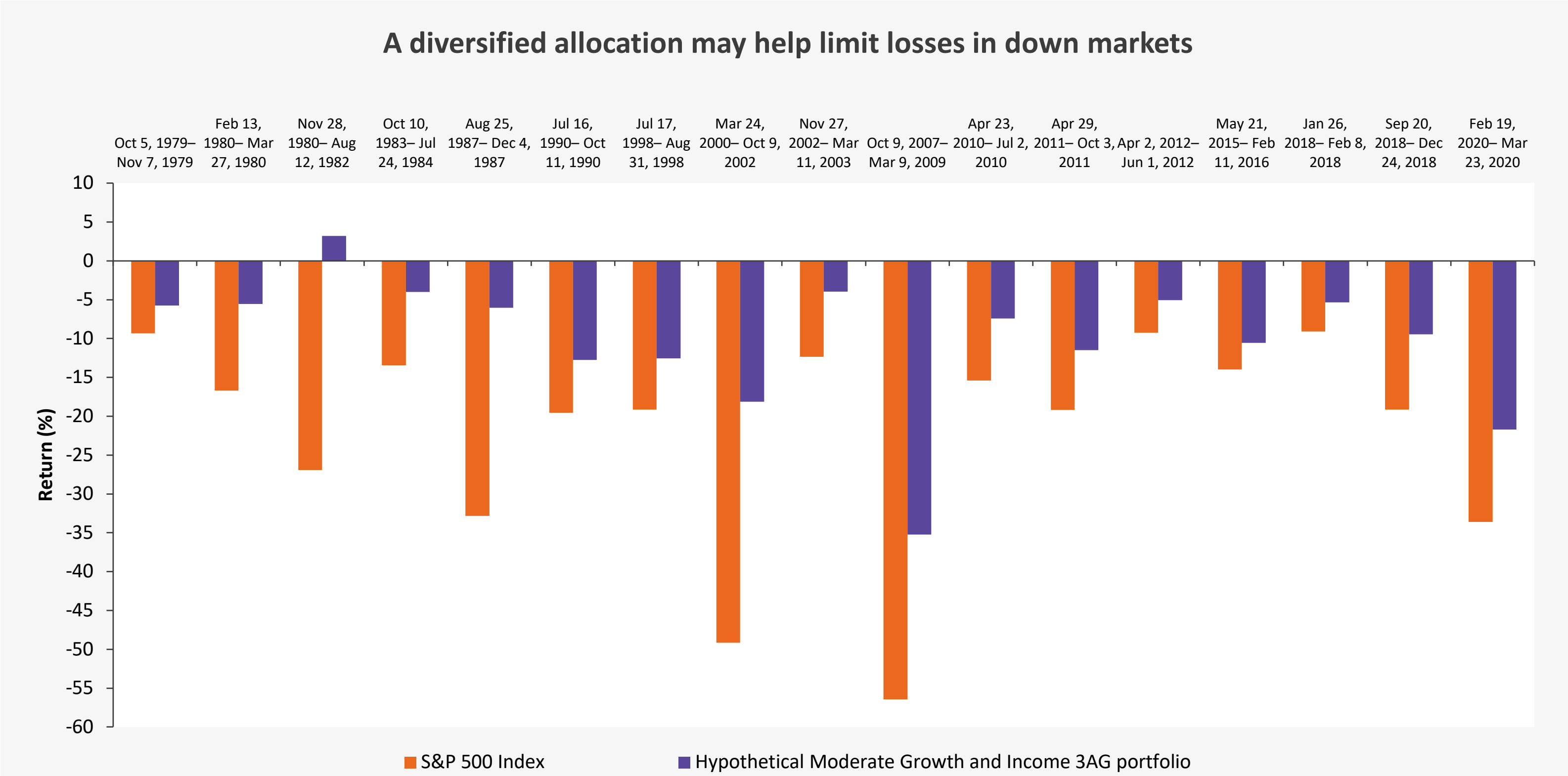
Sources: © 2020 – Morningstar Direct, All Rights Reserved[1] and Wells Fargo Investment Institute. Monthly data from December 1, 1925 to March 31, 2021. **Small-company stocks**: IA SBBI U.S. Small Stock Index. **Large-company stocks**: S&P 500 Index. **Government bonds**: IA SBBI U.S. Long-Term Government Bond Index. **Treasury bills**: IA SBBI U.S. 30-Day Treasury Bill Index. **Inflation**: IA SBBI U.S. Inflation Index. For illustrative purposes only. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Hypothetical and past performance is no guarantee of future results.** Please see the end of the report for the definitions of the indexes.

Key takeaways

- Since 1926, riskier assets have outperformed less risky assets.
- U.S. Treasury bills have tracked inflation fairly closely over this time frame. More recently, T-bill yields have been lower than inflation.

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Small-cap stocks are generally more volatile, subject to greater risks and are less liquid than large company stocks. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. Government bonds are guaranteed as to payment of principal and interest if held to maturity and are subject to interest rate risk.

Diversification may reduce downside risk

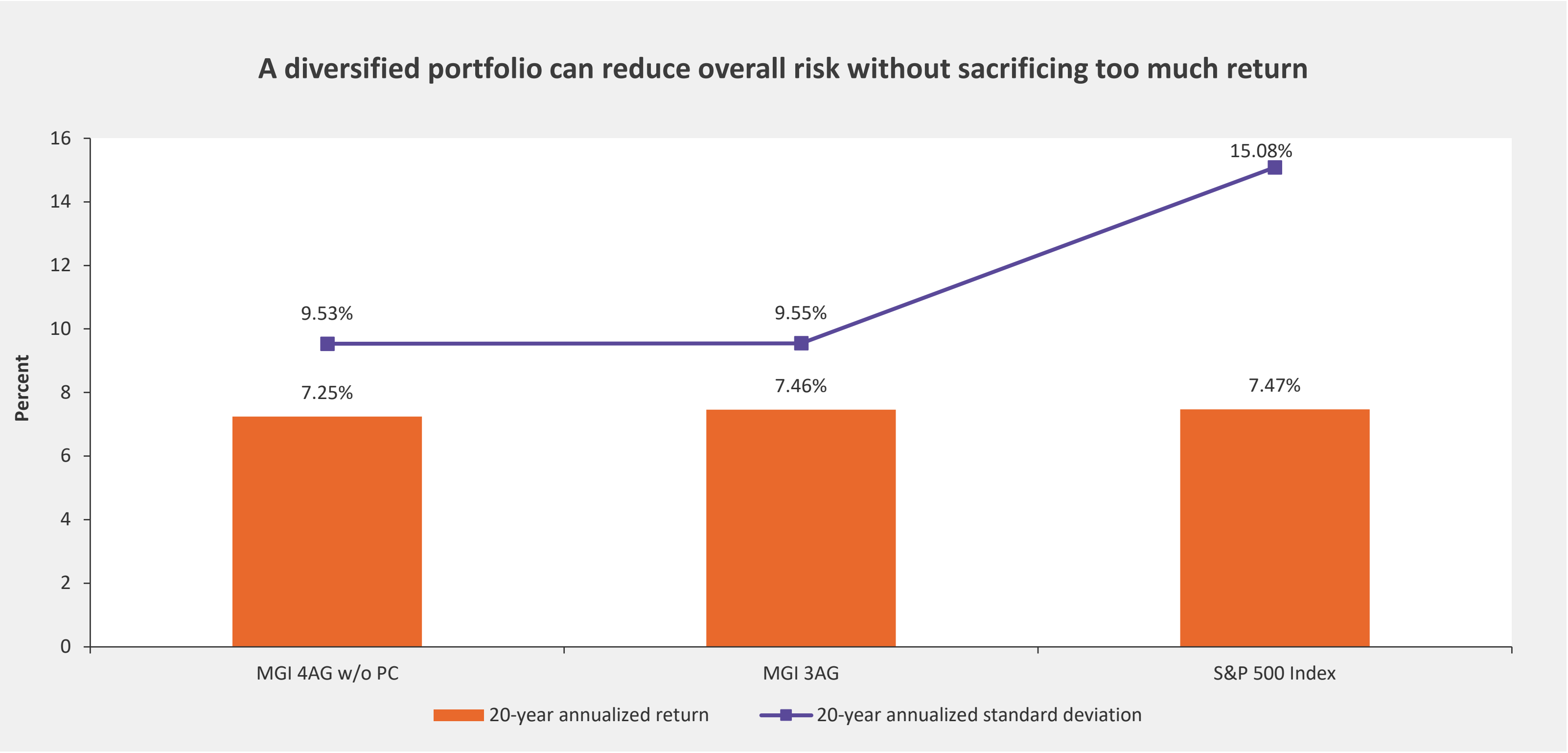


Sources: © 2020 – Morningstar Direct, All Rights Reserved[1], and Wells Fargo Investment Institute. Data from October 5, 1979 to March 31, 2021. Performance results for the Moderate Growth and Income 3AG Portfolio is hypothetical and is presented for illustrative purposes only. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Hypothetical and past performance does not guarantee future results.** Composition of the Portfolios provided at the end of the report.
Diversification strategies do not guarantee investment returns or eliminate the risk of loss.
Note: Corrections are declines of 10% or more. Bear markets are declines of 20% or more.

Key takeaways

- A diversified allocation may not experience losses as sharp as an all-equity position during an equity correction or bear market.
- Attempting to reduce downside volatility is critical to long-term performance, as it can allow a portfolio to recover more quickly after a crisis event.

Diversification may improve risk-adjusted returns



Sources: © 2020 – Morningstar Direct, All Rights Reserved[1], and Wells Fargo Investment Institute. Data from January 1, 2001 to December 31, 2020. Performance for the MGI 4AG w/o PC and the MGI 3AG Portfolios are hypothetical and for illustrative purposes only. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. Unlike most asset class Indexes, HFR Index returns are net of all fees. Because the HFR Indexes are calculated based on information that is voluntarily provided, actual returns may be lower than those reported. An index is unmanaged and not available for direct investment. **Hypothetical and past performance does not guarantee future results.** Standard deviation is a measure of the volatility of returns. The higher the standard deviation, the greater volatility has been. The risk associated with the representative asset classes and the definitions of the Indexes are provided at the end of the report. Diversification does not guarantee investment returns or eliminate risk of loss. Composition of the Portfolios provided at the end of the report.

Key takeaways

- Over time, a diversified portfolio can help mitigate volatility during times of market uncertainty and help smooth returns.
- Real assets and alternative investments add an element of diversification to a traditional portfolio comprised of stocks and bonds.

Finding balance between risk and reward

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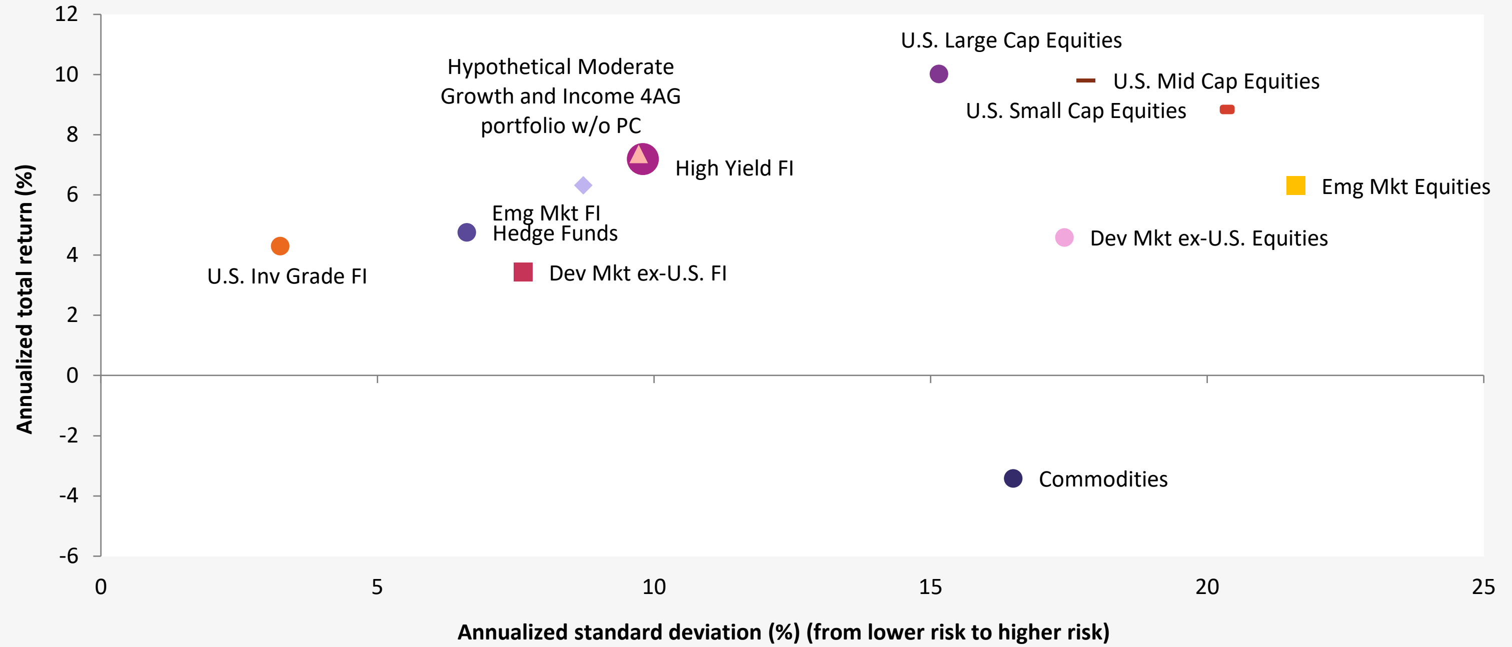
Performance versus risk: 15 years

(April 2006 –March 2021)



Sources: © 2020 – Morningstar Direct, All Rights Reserved[1], and Wells Fargo Investment Institute. Data from February 1, 2006 to March 31, 2021. Performance results for the MGI 4AG w/o PC Portfolio is hypothetical and is for illustrative purposes only. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. Unlike most asset class Indexes, HFR Index returns are net of all fees. Because the HFR Indexes are calculated based on information that is voluntarily provided actual returns may be lower than those reported. An index is unmanaged and not available for direct investment. **Hypothetical and past performance is no guarantee of future results**. Standard deviation is a measure of the volatility of returns. The higher the standard deviation, the greater volatility has been. Composition of the MGI 4AG w/o PC provided at the end of the report.

Diversification strategies do not guarantee investment returns or eliminate the risk of loss. Indexes represented: U.S. Investment Grade FI = Bloomberg Barclays U.S. Aggregate Bond Index. Hedge Funds = HFRI Fund Weighted Index. Emerging Market FI = JP Morgan EMBI Global Index. High Yield FI = Bloomberg Barclays U.S. Corporate HY Bond Index. U.S. Mid Cap Equities = Russell Midcap Index. U.S. Small Cap Equities = Russell 2000 Index. Developed Market Ex-U.S. FI = JP Morgan GBI Global Ex U.S. Index. U.S. Large Cap Equities = S&P 500 Index. Developed Market Ex-U.S. Equities = MSCI EAFE Index. Emerging Market Equities = MSCI Emerging Markets Index. Commodities = Bloomberg Commodity Index. Please see the end of the report for the definitions of the indexes.

Key takeaways

- A diversified portfolio allocation may strike a good balance between risk and return.

Broadly speaking...

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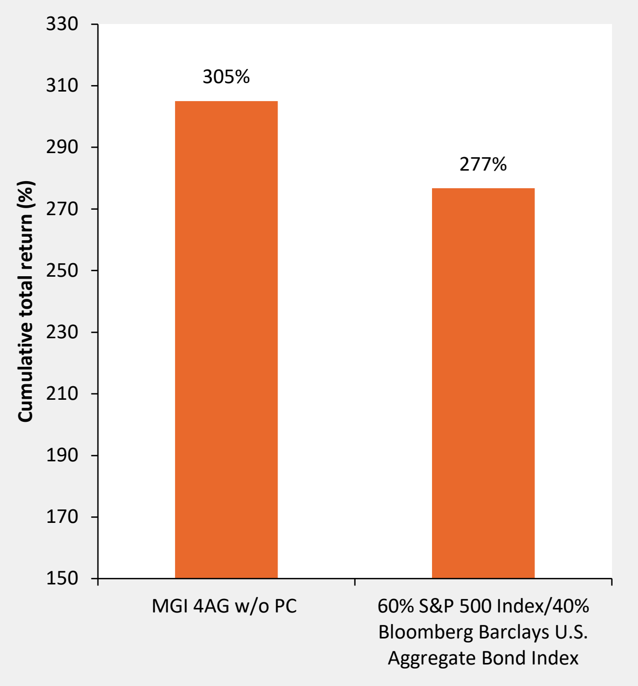
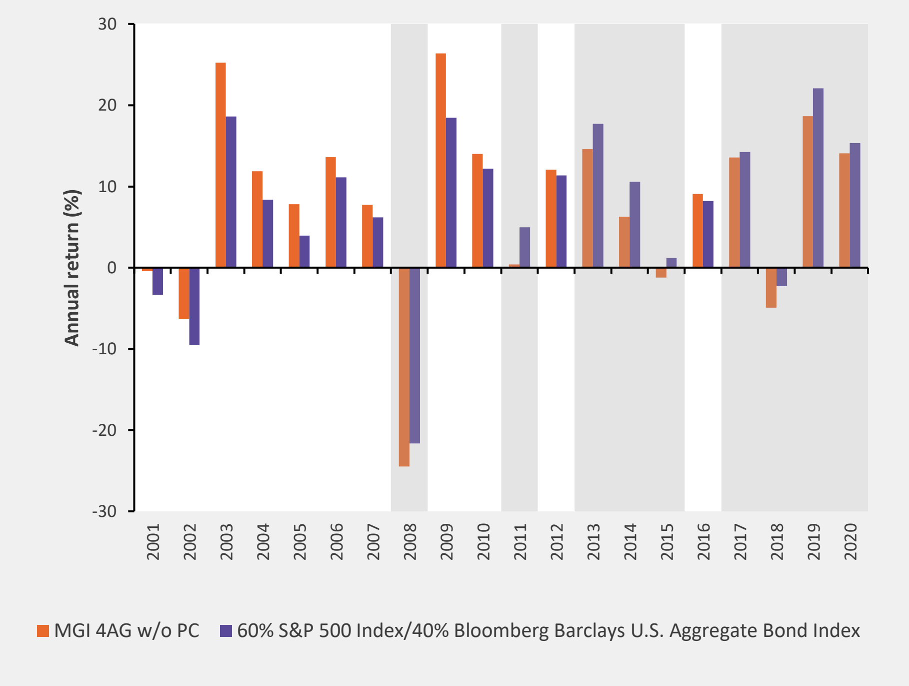
Broad diversification strategies outperformed in 11 of the past 20 years





Sources: © 2020 – Morningstar Direct, All Rights Reserved[1], and Wells Fargo Investment Institute. Data from January 1, 2001 to December 31, 2020. Performance results for the MG&I 4AG w/o PC and the 60% S&P 500 Index/40% Bloomberg Barclays Aggregate Bond Index Portfolios are hypothetical and for illustrative purposes only. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. Unlike most asset class Indexes, HFR Index returns are net of all fees. Because the HFR Indexes are calculated based on information that is voluntarily provided actual returns may be lower than those reported. An index is unmanaged and not available for direct investment. **Hypothetical and past performance is no guarantee of future results.** Composition of the Portfolios provided at the end of this presentation.

Diversification strategies do not guarantee investment returns or eliminate the risk of loss.

Key takeaways

- Historical performance may serve as a useful guide for investors, but markets frequently trade on factors outside of fundamental valuations for long periods of time.
- In recent years, a narrowly diversified, U.S.-focused allocation outperformed as U.S. assets led the way. In the coming years, we expect international asset classes to improve, benefitting a more globally diversified allocation.

Asset performance—correlations

	Cash	U.S. Taxable IG FI	Municipal FI	HY Taxable FI	DM ex-U.S. FI	EM FI	U.S. LC Equities	U.S. MC Equities	U.S. SC Equities	DM ex-U.S. Equities	EM Equities	Commodity	Hedge Funds
Cash	1.00	0.24	0.08	-0.19	0.00	0.00	-0.20	-0.13	-0.14	-0.12	-0.07	0.15	0.02
U.S. Taxable IG FI		1.00	0.78	-0.07	0.55	0.35	-0.36	-0.30	-0.37	-0.24	-0.19	-0.07	-0.24
Municipal FI			1.00	0.18	0.39	0.51	-0.13	-0.07	-0.20	-0.02	0.04	0.07	0.01
HY Taxable FI				1.00	-0.01	0.71	0.70	0.74	0.67	0.70	0.75	0.47	0.74
DM ex-U.S. FI					1.00	0.27	-0.10	-0.10	-0.14	0.16	0.10	0.14	-0.05
EM FI						1.00	0.49	0.54	0.44	0.53	0.63	0.40	0.57
U.S. LC Equities							1.00	0.96	0.92	0.88	0.78	0.35	0.83
U.S. MC Equities								1.00	0.95	0.89	0.81	0.45	0.90
U.S. SC Equities									1.00	0.84	0.76	0.34	0.84
DM ex-U.S. Equities										1.00	0.88	0.47	0.87
EM Equities											1.00	0.49	0.88
Commodity												1.00	0.57
Hedge Funds													1.00

Source: Wells Fargo Investment Institute, January 1, 2000 to December 31, 2019. For illustrative purposes only. Correlation measures the degree to which asset classes move in sync; it does not measure the magnitude of that movement. There is no guarantee that future correlations between the Indexes will remain the same. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. Unlike most asset class Indexes, HFR index returns are net of all fees. Because the HFR Indexes are calculated based on information that is voluntarily provided, actual returns may be lower than those reported. An index is unmanaged and not available for direct investment. Index correlations represent past performance. **Past performance is no guarantee of future results.**

Key takeaways

- Correlations play an important role in portfolio diversification. In addition to risk and return, correlations are primary components of portfolio construction.

Indexes in order represented by Bloomberg Barclays U.S. Treasury Bill 1(–3 Month) Index, Bloomberg Barclays U.S. Aggregate Bond Index, Bloomberg Barclays U.S. Municipal Index, Bloomberg Barclays U.S. Corporate High Yield Bond Index, Bloomberg Barclays High Yield Muni Index, JPM GBI Global Ex U.S. Index, JPM EMBI Global Index, S&P 500 Index, Russell Midcap Index, Russell 2000 Index, MSCI EAFE Index, MSCI EM Index, Bloomberg Commodity Index, HFRI Fund Weighted Index. IG = investment grade. FI = fixed income. LC = large cap. MC = mid cap. SC = small cap. HY = high yield. DM = developed market. EM = emerging market. Please see the end of the report for the definitions of the indexes.

Four-asset group w/o private capital—moderate growth and income

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2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD	'06 – '20 average
Emg Mkt Equity 32.6%	Emg Mkt Equity 39.8%	Dev ex US Fixed Inc 11.4%	Emg Mkt Equity 79.0%	US Small Cap Equity 26.9%	Emg-Mkt Fixed Inc 8.5%	Emg Mkt Equity 18.6%	US Small Cap Equity 38.8%	US Large Cap Equity 13.7%	US Large Cap Equity 1.4%	US Small Cap Equity 21.3%	Emg Mkt Equity 37.8%	CPI 1.9%	US Large Cap Equity 31.5%	US Small Cap Equity 20.0%	US Small Cap Equity 12.7%	US Large Cap Equity 9.9%
Dev ex US Equity 26.9%	Commod 16.2%	Inv Grade Fixed Inc 5.2%	High Yield Fixed Inc 58.2%	US Mid Cap Equity 25.5%	Inv Grade Fixed Inc 7.8%	Emg-Mkt Fixed Inc 18.5%	US Mid Cap Equity 34.8%	US Mid Cap Equity 13.2%	Emg-Mkt Fixed Inc 1.2%	High Yield Fixed Inc 17.1%	Dev ex US Equity 25.6%	Cash Alternative 1.8%	US Mid Cap Equity 30.5%	Emg Mkt Equity 18.7%	US Mid Cap Equity 8.1%	US Mid Cap Equity 9.8%
US Small Cap Equity 18.4%	Dev ex US Equity 11.6%	Cash Alternative 1.8%	US Mid Cap Equity 40.5%	Emg Mkt Equity 19.2%	Dev ex US Fixed Inc 5.9%	Dev ex US Equity 17.9%	US Large Cap Equity 32.4%	60%/40% Portf 10.6%	60%/40% Portf 1.2%	US Mid Cap Equity 13.8%	US Large Cap Equity 21.8%	Inv Grade Fixed Inc 0.0%	US Small Cap Equity 25.5%	US Large Cap Equity 18.4%	Commod 6.9%	US Small Cap Equity 8.9%
US Large Cap Equity 15.8%	Dev ex US Fixed Inc 11.3%	CPI 0.1%	Dev ex US Equity 32.5%	Commod 16.8%	High Yield Fixed Inc 5.0%	US Mid Cap Equity 17.3%	Dev ex US Equity 23.3%	Mod Grwth Inc Portf 6.3%	CPI 0.7%	US Large Cap Equity 12.0%	US Mid Cap Equity 18.5%	Dev ex US Fixed Inc -1.7%	Dev ex US Equity 22.7%	US Mid Cap Equity 17.1%	US Large Cap Equity 6.2%	60%/40% Portf 8.1%
US Mid Cap Equity 15.3%	Hedge Funds 10.0%	Emg-Mkt Fixed Inc -10.9%	Emg-Mkt Fixed Inc 28.2%	High Yield Fixed Inc 15.1%	60%/40% Portf 5.0%	US Small Cap Equity 16.3%	60%/40% Portf 17.7%	Inv Grade Fixed Inc 6.0%	Inv Grade Fixed Inc 0.5%	Commod 11.8%	US Small Cap Equity 14.6%	High Yield Fixed Inc -2.1%	60%/40% Portf 22.1%	60%/40% Portf 15.4%	Hedge Funds 6.1%	High Yield Fixed Inc 7.5%
Mod Grwth Inc Portf 13.6%	Mod Grwth Inc Portf 7.7%	Hedge Funds -19.0%	US Small Cap Equity 27.2%	US Large Cap Equity 15.1%	CPI 3.0%	US Large Cap Equity 16.0%	Mod Grwth Inc Portf 14.6%	Emg-Mkt Fixed Inc 5.5%	Cash Alternative 0.0%	Emg Mkt Equity 11.6%	60%/40% Portf 14.3%	60%/40% Portf -2.3%	Emg Mkt Equity 18.9%	Mod Grwth Inc Portf 14.1%	Dev ex US Equity 3.6%	Mod Grwth Inc Portf 7.3%
Hedge Funds 12.9%	Inv Grade Fixed Inc 7.0%	60%/40% Portf -21.6%	US Large Cap Equity 26.5%	Mod Grwth Inc Portf 14.0%	US Large Cap Equity 2.1%	High Yield Fixed Inc 15.8%	Hedge Funds 9.1%	US Small Cap Equity 4.9%	Dev ex US Equity -0.4%	Emg-Mkt Fixed Inc 10.2%	Mod Grwth Inc Portf 13.6%	US Large Cap Equity -4.4%	Mod Grwth Inc Portf 18.7%	Hedge Funds 11.8%	Mod Grwth Inc Portf 3.4%	Emg Mkt Equity 7.0%
High Yield Fixed Inc 11.8%	Emg-Mkt Fixed Inc 6.3%	Mod Grwth Inc Portf -24.5%	Mod Grwth Inc Portf 26.4%	60%/40% Portf 12.2%	Mod Grwth Inc Portf 0.4%	Mod Grwth Inc Portf 12.1%	High Yield Fixed Inc 7.4%	Hedge Funds 3.0%	Hedge Funds -1.1%	Mod Grwth Inc Portf 9.1%	Dev ex US Fixed Inc 9.9%	Emg-Mkt Fixed Inc -4.6%	Emg-Mkt Fixed Inc 14.4%	Dev ex US Fixed Inc 10.5%	60%/40% Portf 2.4%	Emg-Mkt Fixed Inc 6.8%
60%/40% Portf 11.1%	60%/40% Portf 6.2%	High Yield Fixed Inc -26.2%	Hedge Funds 20.0%	Emg-Mkt Fixed Inc 12.0%	Cash Alternative 0.1%	60%/40% Portf 11.4%	CPI 1.5%	High Yield Fixed Inc 2.5%	Mod Grwth Inc Portf -1.2%	60%/40% Portf 8.2%	Emg-Mkt Fixed Inc 9.3%	Hedge Funds -4.7%	High Yield Fixed Inc 14.3%	Dev ex US Equity 8.3%	Emg Mkt Equity 2.3%	Dev ex US Equity 5.0%
Emg-Mkt Fixed Inc 9.9%	US Mid Cap Equity 5.6%	US Small Cap Equity -33.8%	Commod 18.9%	Hedge Funds 10.2%	US Mid Cap Equity -1.5%	Hedge Funds 6.4%	Cash Alternative 0.0%	CPI 0.8%	US Mid Cap Equity -2.4%	Hedge Funds 5.4%	Hedge Funds 8.6%	Mod Grwth Inc Portf -4.9%	Hedge Funds 10.4%	Inv Grade Fixed Inc 7.5%	High Yield Fixed Inc 0.8%	Hedge Funds 4.7%
Dev ex US Fixed Inc 6.8%	US Large Cap Equity 5.5%	Commod -35.6%	60%/40% Portf 18.5%	Dev ex US Equity 8.2%	US Small Cap Equity -4.2%	Inv Grade Fixed Inc 4.2%	Inv Grade Fixed Inc -2.0%	Cash Alternative 0.0%	US Small Cap Equity -4.4%	Inv Grade Fixed Inc 2.6%	High Yield Fixed Inc 7.5%	US Mid Cap Equity -9.1%	Inv Grade Fixed Inc 8.7%	High Yield Fixed Inc 7.1%	CPI 0.7%	Inv Grade Fixed Inc 4.5%
Cash Alternative 4.8%	Cash Alternative 4.8%	US Large Cap Equity -37.0%	Inv Grade Fixed Inc 5.9%	Dev ex US Fixed Inc 6.8%	Hedge Funds -5.3%	CPI 1.7%	Emg Mkt Equity -2.3%	Emg Mkt Equity -1.8%	High Yield Fixed Inc -4.5%	CPI 2.1%	Inv Grade Fixed Inc 3.5%	US Small Cap Equity -11.0%	Commod 7.7%	Emg-Mkt Fixed Inc 5.9%	Cash Alternative 0.0%	Dev ex US Fixed Inc 3.9%
Inv Grade Fixed Inc 4.3%	CPI 4.1%	US Mid Cap Equity -41.5%	Dev ex US Fixed Inc 3.9%	Inv Grade Fixed Inc 6.5%	Dev ex US Equity -11.7%	Dev ex US Fixed Inc 0.8%	Dev ex US Fixed Inc -5.1%	Dev ex US Fixed Inc -2.5%	Dev ex US Fixed Inc -4.8%	Dev ex US Fixed Inc 1.9%	CPI 2.1%	Commod -11.2%	Dev ex US Fixed Inc 5.2%	CPI 1.4%	Inv Grade Fixed Inc -3.4%	CPI 1.9%
CPI 2.5%	High Yield Fixed Inc 1.9%	Dev ex US Equity -43.1%	CPI 2.7%	CPI 1.5%	Commod -13.3%	Cash Alternative 0.1%	Emg-Mkt Fixed Inc -6.6%	Dev ex US Equity -4.5%	Emg Mkt Equity -14.6%	Dev ex US Equity 1.5%	Commod 1.7%	Dev ex US Equity -13.4%	CPI 2.3%	Cash Alternative 0.5%	Emg-Mkt Fixed Inc -4.7%	Cash Alternative 1.2%
Commod 2.1%	US Small Cap Equity -1.6%	Emg Mkt Equity -53.2%	Cash Alternative 0.1%	Cash Alternative 0.1%	Emg Mkt Equity -18.2%	Commod -1.1%	Commod -9.5%	Commod -17.0%	Commod -24.7%	Cash Alternative 0.3%	Cash Alternative 0.8%	Emg Mkt Equity -14.2%	Cash Alternative 2.2%	Commod -3.1%	Dev ex US Fixed Inc -6.4%	Commod -4.0%

DATA AS OF 3/31/2021

Sources: © 2020 – Morningstar Direct, All Rights Reserved[1], and Wells Fargo Investment Institute. Average is calculated as geometric mean. Average is calculated as 15 years from 2006–2020. Portfolios are rebalanced quarterly. The moderate growth and income and 60/40 portfolios are hypothetical. **Hypothetical and past performance does not guarantee future results**. An index is unmanaged and not available for direct investment. Please see the end of the report for the definitions of the indexes that correlate to each asset class. NOTE: The 4 asset group without private capital Moderate Growth and Income Portfolio represents a balanced portfolio. A balanced portfolio composed of a variety of asset classes typically does not exhibit the same level of volatility as an individual asset class. This can help

Market conditions can determine the choice of strategy

Catastrophe
Cash
U.S. IG fixed income
Commodities
Hedge funds
Managed futures

Income
U.S. IG bonds
U.S. high-yield fixed income
Int'l bonds (DM/EM)
Large/Mid Cap equity
DM equity
Real estate

Volatility
U.S. IG fixed income
DM fixed income
Hedge funds
Managed futures

Liquidity
Cash
U.S. IG fixed income
DM fixed income
Large Cap equity
DM equity

Inflation
TIPS or short-term fixed income
DM bonds
Domestic equity
Int'l equity (DM/EM)
Real estate
Commodities

Growth
U.S. high-yield fixed income
EM fixed income
U.S. equity
Int'l equity (DM/EM)
Real estate
Private equity

Source: Wells Fargo Investment Institute, as of December 31, 2020. IG = investment grade. DM = developed markets. EM = emerging markets. TIPS = treasury inflation-protected securities.

Key takeaways

- Certain asset classes can be appropriate under different circumstances or for different investment objectives.

Hedge Funds, Managed Futures, Real Estate, and Private Equity funds are not suitable for all investors and are only open to "accredited" or "qualified" investors within the meaning of U.S. securities laws. Equity, fixed income, foreign, cash alternatives, and alternative investments are materially different investments with materially different risk and reward characteristics. These risk and reward characteristics should be evaluated carefully before making any investment decision.

Risk considerations

Asset allocation and diversification are investment methods used to help manage risk. They do not ensure a profit or protect against a loss. All investing involves risks, including the possible loss of principal. There can be no assurance that any investment strategy will be successful. Investments fluctuate with changes in market and economic conditions and in different environments due to numerous factors, some of which may be unpredictable. Each asset class has its own risk and return characteristics. Some of the risks associated with the representative index asset classes shown in the charts include:

Alternative investments: Alternative investments, including hedge funds and private capital funds, are speculative and entail significant risks, including those associated with potential lack of diversification, restrictions on transferring interests, no available secondary market, complex tax structures, delays in tax reporting, valuation of securities, and pricing. They trade in diverse complex strategies that are affected in different ways and at different times by changing market conditions. Strategies may, at times, be out of market favor for considerable periods with adverse consequences for the fund and the investor. An investment in these funds involves the risks inherent in an investment in securities and can include losses associated with speculative investment practices, including hedging and leveraging through derivatives, such as futures, options, swaps, short selling, investments in non-U.S. securities, junk bonds, and illiquid investments.

Commodities: Exposure to the commodities markets may subject an investment to greater share price volatility than an investment in traditional equity or debt securities. Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity. Products that invest in commodities may employ more complex strategies which may expose investors to additional risks.

Equity securities: Stocks are subject to market risk, which means their value may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors. The prices of **small/mid-company stocks** are generally more volatile than large-company stocks. They often involve higher risks because smaller and midsize companies may lack the management expertise, financial resources, product diversification, and competitive strengths to endure adverse economic conditions.

Fixed income: Investments in fixed-income securities are subject to interest rate, credit/default, liquidity, inflation, and other risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in a decline in the bond's price. Credit risk is the risk that an issuer will default on payments of interest and/or principal. This risk is heightened in lower-rated bonds. If sold prior to maturity, fixed-income securities are subject to market risk. All fixed-income investments may be worth less than their original cost upon redemption or maturity. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities. **Municipal bonds** offer interest payments exempt from federal taxes, and potentially state and local income taxes. Municipal bonds are subject to credit risk and potentially the alternative minimum tax (AMT). Quality varies widely depending on the specific issuer. **U.S. government securities** are backed by the full faith and credit of the federal government as to payment of principal and interest if held to maturity. Although free from credit risk, they are subject to interest rate risk.

Foreign/emerging markets: Investing in foreign securities presents certain risks not associated with domestic investments, such as currency fluctuation, political and economic instability, and different accounting standards. This may result in greater share price volatility. These risks are heightened in emerging markets.

Real estate: Investing in real estate investment trusts (REITs) has special risks, including possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions.

Treasury Inflation-Protected Securities (TIPS): TIPS are subject to interest rate risk, especially when real interest rates rise. This may cause the underlying value of the bond to fluctuate more than other fixed-income securities.

Portfolio compositions

Three-asset-group portfolios

Moderate Growth and Income: 3% Bloomberg Barclays U.S. Treasury Bill (1–3 Month) Index, 32% Bloomberg Barclays U.S. Aggregate Bond Index, 6% Bloomberg Barclays U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 21% S&P 500 Index, 12% Russell Midcap Index, 8% Russell 2000 Index, 6% MSCI EAFE Index, 7% MSCI Emerging Markets Index.

Four-asset-group portfolios without private capital

Moderate Growth and Income: 3% Bloomberg Barclays U.S. Treasury Bill (1–3 Month) Index, 22% Bloomberg Barclays U.S. Aggregate Bond Index, 6% Bloomberg Barclays U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 20% S&P 500 Index, 10% Russell Midcap Index, 8% Russell 2000 Index, 6% MSCI EAFE Index, 5% MSCI Emerging Markets Index, 15% HFRI Fund Weighted Composite Index.

Index definitions

Inflation:

IA SBBI U.S. Inflation Index is a custom unmanaged index designed to track the U.S. inflation rate.

Cash alternatives/Treasury bills:

Bloomberg Barclays U.S. Treasury Bills (1–3 Month) Index is representative of money markets**.**

IA SBBI U.S. 30-Day Treasury Bill Index is a custom index designed to measure the performance of U.S. Treasury bills maturing in 0 to 30 days.

Fixed income:

Investment-grade fixed income taxable:

Bloomberg Barclays U.S. Aggregate Bond Index is a broad-based measure of the investment grade, US dollar-denominated, fixed-rate taxable bond market.

High-yield fixed income taxable:

Bloomberg Barclays U.S. Corporate High Yield Bond Index covers the U.S.-dollar-denominated, non-investment-grade, fixed-rate, taxable corporate bond market.

Municipal fixed income:

Bloomberg Barclays Municipal Bond Index is an unmanaged index composed of long-term tax-exempt bonds with a minimum credit rating of Baa.

Bloomberg Barclays Municipal High Yield Index measures the non-investment grade and non-rated U.S. dollar-denominated, fixed-rate, tax-exempt bond market within the 50 United States and four other qualifying regions (Washington DC, Puerto Rico, Guam and the Virgin Islands).

Government bonds:

IA SBBI U.S. Long-Term Government Bond Index is a custom unmanaged index designed to measure the performance of long-term U.S. government bonds, which includes U.S. Treasury and U.S. government agency bonds with maturities of seven years or longer.

Emerging market fixed income:

J.P. Morgan EMBI Global Index (USD) is a U.S.-dollar-denominated, investible, market-cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt. While products in the asset class have become more diverse, focusing on both local currency and corporate issuance, there is currently no widely accepted aggregate index reflecting the broader opportunity set available, although the asset class is evolving. By using the same index provider as the one used in the developed market bonds asset class, there is consistent categorization of countries among developed international bonds (ex-U.S.) and emerging market bonds.

Developed market fixed income:

J.P. Morgan GBI Global ex-U.S. Index (Unhedged) in USD is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets.

Index definitions (continued)

Equities:

Small-cap equities:

Russell 2000® Index measures the performance of the 2,000 smallest companies in the Russell 3000® Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index.

Mid-cap equities:

Russell Midcap® Index measures the performance of the 800 smallest companies in the Russell 1000® Index, which represents approximately 25% of the total market capitalization of the Russell 1000® Index.

Large-cap equities:

S&P 500 Index consists of 500 stocks chosen for market size, liquidity, and industry group representation. It is a market-value-weighted index with each stock's weight in the index proportionate to its market value.

Emerging market equities:

MSCI Emerging Markets (EM) Index is a free-float-adjusted market-capitalization-weighted index designed to measure equity market performance of emerging markets.

Small-company stocks:

IA SBBI U.S. Small Stock Index is a custom index designed to measure the performance of small-capitalization U.S. stocks.

Developed market ex-U.S. equities:

MSCI EAFE Index is a free-float-adjusted market-capitalization-weighted index designed to measure the equity market performance of developed markets, excluding the U.S. and Canada.

Volatility indices:

VNKY Index: The Nikkei Stock Average Volatility Index is calculated by using prices of Nikkei 225 futures and Nikkei 225 options on the Osaka Securities Exchange. The real-time (every 15 seconds) calculation started from January 30, 2012. Final confirmation value (KAKUHOU) is 15:20 JPT.

VSTOXX Index is based on a new methodology jointly developed by Deutsche Borse and Goldman Sachs to measure volatility in the eurozone. VSTOXX is based on the EURO STOXX 50 Index options traded on Eurex. It measures implied volatility on options with a rolling 30-day expiry.

HSI Volatility Index aims to measure the 30-calendar-day expected volatility of the Hang Seng Index implicit in the prices of near-term and next-term Hang Seng Index Options, which are now trading on the Hong Kong Exchanges and Clearing Limited's derivatives market.

VIX: The Chicago Board Options Exchange Volatility Index reflects a market estimate of future volatility, based on the weighted average of the implied volatilities for a wide range of strikes. First- and second-month expirations are used until eight days from expiration, then the second and third are used.

Index definitions (continued)

Commodities:

Bloomberg Commodity Index represents futures contracts on 22 physical commodities. No related group of commodities (e.g., energy, precious metals, livestock and grains) may constitute more than 33 percent of the index as of the annual re-weightings of the components. No single commodity may constitute less than 2 percent of the index.

Hedge funds:

HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net-of-all-fees performance in U.S. Dollars and have a minimum of $50 Million under management or a 12-month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.

Note: While the HFRI Indices are frequently used, they have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and, therefore, the index may omit funds, the inclusion of which might significantly affect the performance shown. The HFRI Indices are based on information hedge fund managers decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. Returns of the underlying hedge funds are net of fees and are denominated in USD.

Disclosures

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