

The Value of Asset Allocation

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	'08-'22 Average
Dev Ex-U.S. Fixed Inc 11.4%	Emg-Mkt Equities 79.0%	U.S. Small-Cap Equities 26.9%	Emg-Mrk Fixed Inc 8.5%	Emg-Mkt Equities 18.6%	U.S. Small-Cap Equities 38.8%	U.S. Large-Cap Equities 13.7%	U.S. Large-Cap Equities 1.4%	U.S. Small-Cap Equities 21.3%	Emg-Mkt Equities 37.8%	CPI 1.9%	U.S. Large-Cap Equities 31.5%	U.S. Small-Cap Equities 20.0%	U.S. Large-Cap Equities 28.7%	Commodities 16.1%	U.S. Large-Cap Equities 8.8%
Inv-Grade Fixed Inc 5.2%	High-Yield Fixed Inc 58.2%	U.S. Mid-Cap Equities 25.5%	Inv-Grade Fixed Inc 7.8%	Emg-Mrk Fixed Inc 18.5%	U.S. Mid-Cap Equities 34.8%	U.S. Mid-Cap Equities 13.2%	Emg-Mrk Fixed Inc 1.2%	High-Yield Fixed Inc 17.1%	Dev Ex-U.S. Equities 25.6%	Cash Alternatives 1.8%	U.S. Mid-Cap Equities 30.5%	Emg-Mkt Equities 18.7%	Commodities 27.1%	CPI 6.8%	U.S. Mid-Cap Equities 8.4%
Cash Alternatives 1.8%	U.S. Mid-Cap Equities 40.5%	Emg-Mkt Equities 19.2%	Dev Ex-U.S. Fixed Inc 5.9%	Dev Ex-U.S. Equities 17.9%	U.S. Large-Cap Equities 32.4%	60%/40% Blend 10.6%	60%/40% Blend 1.2%	U.S. Mid-Cap Equities 13.8%	U.S. Large-Cap Equities 21.8%	Inv-Grade Fixed Inc 0.0%	U.S. Small-Cap Equities 25.5%	U.S. Large-Cap Equities 18.4%	U.S. Mid-Cap Equities 22.6%	Cash Alternatives 1.5%	U.S. Small-Cap Equities 7.2%
CPI 0.1%	Dev Ex-U.S. Equities 32.5%	Commodities 16.8%	High-Yield Fixed Inc 5.0%	U.S. Mid-Cap Equities 17.3%	Dev Ex-U.S. Equities 23.3%	MG&I (Liquid) 6.2%	CPI 0.7%	U.S. Large-Cap Equities 12.0%	U.S. Mid-Cap Equities 18.5%	Dev Ex-U.S. Fixed Inc -1.7%	Dev Ex-U.S. Equities 22.7%	U.S. Mid-Cap Equities 17.1%	60%/40% Blend 16.0%	Hedge Funds -4.3%	60%/40% Blend 6.7%
Emg-Mrk Fixed Inc -10.9%	Emg-Mrk Fixed Inc 28.2%	High-Yield Fixed Inc 15.1%	60%/40% Blend 5.0%	U.S. Small-Cap Equities 16.3%	60%/40% Blend 17.7%	Inv-Grade Fixed Inc 6.0%	Inv-Grade Fixed Inc 0.5%	Commodities 11.8%	U.S. Small-Cap Equities 14.6%	High-Yield Fixed Inc -2.1%	60%/40% Blend 22.1%	60%/40% Blend 15.4%	U.S. Small-Cap Equities 14.8%	High-Yield Fixed Inc -11.2%	High-Yield Fixed Inc 6.1%
Hedge Funds -19.0%	U.S. Small-Cap Equities 27.2%	U.S. Large-Cap Equities 15.1%	CPI 3.0%	U.S. Large-Cap Equities 16.0%	MG&I (Liquid) 10.7%	Emg-Mrk Fixed Inc 5.5%	Cash Alternatives 0.0%	Emg-Mkt Equities 11.6%	60%/40% Blend 14.3%	60%/40% Blend -2.3%	MG&I (Liquid) 19.5%	MG&I (Liquid) 14.8%	Dev Ex-U.S. Equities 11.8%	Inv-Grade Fixed Inc -13.0%	MG&I (Liquid) 5.4%
60%/40% Blend -21.6%	MG&I (Liquid) 26.6%	MG&I (Liquid) 14.0%	U.S. Large-Cap Equities 2.1%	High-Yield Fixed Inc 15.8%	Hedge Funds 9.1%	U.S. Small-Cap Equities 4.9%	Dev Ex-U.S. Equities -0.4%	Emg-Mrk Fixed Inc 10.2%	MG&I (Liquid) 13.6%	U.S. Large-Cap Equities -4.4%	Emg-Mkt Equities 18.9%	Hedge Funds 11.8%	MG&I (Liquid) 10.2%	Dev Ex-U.S. Equities -14.0%	Emg-Mkt Fixed Inc 4.3%
MG&I (Liquid) -24.2%	U.S. Large-Cap Equities 26.5%	60%/40% Blend 12.2%	MG&I (Liquid) 1.7%	MG&I (Liquid) 12.2%	High-Yield Fixed Inc 7.4%	Hedge Funds 3.0%	Hedge Funds -1.1%	MG&I (Liquid) 9.1%	Dev Ex-U.S. Fixed Inc 9.9%	Emg-Mkt Fixed Inc -4.6%	Emg-Mkt Fixed Inc 14.4%	Dev Ex-U.S. Fixed Inc 10.5%	Hedge Funds 10.2%	MG&I (Liquid) -14.7%	Hedge Funds 3.6%
High-Yield Fixed Inc -26.2%	Hedge Funds 20.0%	Emg-Mrk Fixed Inc 12.0%	Cash Alternatives 0.1%	60%/40% Blend 11.4%	CPI 1.5%	High-Yield Fixed Inc 2.5%	MG&I (Liquid) -2.0%	60%/40% Blend 8.2%	Emg-Mrk Fixed Inc 9.3%	Hedge Funds -4.7%	High-Yield Fixed Inc 14.3%	Dev Ex-U.S. Equities 8.3%	CPI 7.0%	60%/40% Blend -15.9%	Inv-Grade Fixed Inc 2.7%
U.S. Small-Cap Equities -33.8%	Commodities 18.9%	Hedge Funds 10.2%	U.S. Mid-Cap Equities -1.5%	Hedge Funds 6.4%	Cash Alternatives 0.0%	CPI 0.8%	U.S. Mid-Cap Equities -2.4%	Hedge Funds 5.4%	Hedge Funds 8.6%	MG&I (Liquid) -4.8%	Hedge Funds 10.4%	Inv-Grade Fixed Inc 7.5%	High-Yield Fixed Inc 5.3%	Emg-Mkt Fixed Inc -16.5%	CPI 2.4%
Commodities -35.6%	60%/40% Blend 18.5%	Dev Ex-U.S. Equities 8.2%	U.S. Small-Cap Equities -4.2%	Inv-Grade Fixed Inc 4.2%	Inv-Grade Fixed Inc -2.0%	Cash Alternatives 0.0%	U.S. Small-Cap Equities -4.4%	Inv-Grade Fixed Inc 2.6%	High-Yield Fixed Inc 7.5%	U.S. Mid-Cap Equities -9.1%	Inv-Grade Fixed Inc 8.7%	High-Yield Fixed Inc 7.1%	Cash Alternatives 0.0%	U.S. Mid-Cap Equities -17.3%	Dev Ex-U.S. Equities 2.3%
U.S. Large-Cap Equities -37.0%	Inv-Grade Fixed Inc 5.9%	Dev Ex-U.S. Fixed Inc 6.8%	Hedge Funds -5.3%	CPI 1.7%	Emg-Mkt Equities -2.3%	Emg-Mkt Equities -1.8%	High-Yield Fixed Inc -4.5%	CPI 2.1%	Inv-Grade Fixed Inc 3.5%	U.S. Small-Cap Equities -11.0%	Commodities 7.7%	Emg-Mkt Fixed Inc 5.9%	Emg-Mkt Fixed Inc -1.5%	U.S. Large-Cap Equities -18.1%	Emg-Mkt Equities 1.0%
U.S. Mid-Cap Equities -41.5%	Dev Ex-U.S. Fixed Inc 3.9%	Inv-Grade Fixed Inc 6.5%	Dev Ex-U.S. Equities -11.7%	Dev Ex-U.S. Fixed Inc 0.8%	Dev Ex-U.S. Fixed Inc -5.1%	Dev Ex-U.S. Fixed Inc -2.5%	Dev Ex-U.S. Fixed Inc -4.8%	Dev Ex-U.S. Fixed Inc 1.9%	CPI 2.1%	Commodities -11.2%	Dev Ex-U.S. Fixed Inc 5.2%	CPI 1.4%	Inv-Grade Fixed Inc -1.5%	Emg-Mkt Equities -19.7%	Cash Alternatives 0.6%
Dev Ex-U.S. Equities -43.1%	CPI 2.7%	CPI 1.5%	Commodities -13.3%	Cash Alternatives 0.1%	Emg-Mrk Fixed Inc -6.6%	Dev Ex-U.S. Equities -4.5%	Emg-Mkt Equities -14.6%	Dev Ex-U.S. Equities 1.5%	Commodities 1.7%	Dev Ex-U.S. Equities -13.4%	CPI 2.3%	Cash Alternatives 0.5%	Emg-Mkt Equities -2.2%	U.S. Small-Cap Equities -20.4%	Dev Ex-U.S. Fixed Inc 0.3%
Emg-Mkt Equities -53.2%	Cash Alternatives 0.1%	Cash Alternatives 0.1%	Emg-Mkt Equities -18.2%	Commodities -1.1%	Commodities -9.5%	Commodities -17.0%	Commodities -24.7%	Cash Alternatives 0.3%	Cash Alternatives 0.8%	Emg-Mkt Equities -14.2%	Cash Alternatives 2.2%	Commodities -3.1%	Dev Ex-U.S. Fixed Inc -9.5%	Dev Ex-U.S. Fixed Inc -21.9%	Commodities -2.6%

Sources: Wells Fargo Investment Institute, © 2023- Morningstar Direct. All Rights Reserved.¹ Asset allocation does not guarantee a profit or protect against loss. Average is calculated as geometric mean. Average is calculated as 15 years from 2008-2022. Allocation blends are rebalanced quarterly. Moderate Growth & Income and 60/40 blend are for illustrative purposes only. Performance results for Moderate Growth & Income and the 60/40 blend are calculated using blended index returns. **Past performance does not guarantee future results.** An index is unmanaged and not available for direct investment.

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 reflect deduction for fees. Because the HFR indexes are calculated based on information that is voluntarily provided actual returns may be lower than those reported.

Index Definitions

- 60%/40% Blend is composed of 60% S&P 500 Index and 40% Bloomberg U.S. Aggregate Bond Index.
- Moderate Growth & Income (Liquid) is composed of 2% Bloomberg U.S. Treasury Bills (1-3M) Index, 30% Bloomberg U.S. Aggregate Bond Index, 6% Bloomberg U.S. Corporate High Yield Index, 5% JPMorgan EMBI Global Index, 24% S&P 500 Index, 10% Russell Midcap Index, 6% Russell 2000 Index, 8% MSCI EAFE Index, 7% MSCI Emerging Markets Index, 2% Bloomberg Commodity Index. U.S. Investment Grade Fixed Income encompasses the allocations to Short Term, Intermediate Term, and Long Term.
The compositions of the Moderate Growth & Income and the 60%/40% Blend are for illustrative purposes only. Dynamic allocations change as needed with adjustments to the strategic allocations. Results do not represent actual trading, and the results achieved do not represent the experience of any individual investor. In addition, results do not reflect the impact of any fees, expenses, or taxes applicable to an actual investment. The indexes reflect the historical performance of the represented assets and assume the reinvestment of dividends and other distributions. **Past performance does not guarantee future results.**
- Cash Alternatives: Bloomberg U.S. Treasury Bills (1-3M) Index is representative of money markets.
- 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.
- Emerging-Market Equities: MSCI Emerging Markets Index (MSCI EM GR) is a free float-adjusted market capitalization index designed to measure equity market performance of emerging markets.
- Developed Market Ex-U.S. Fixed Income: JP Morgan Global Ex. United States Index (JPM GBI Global Ex-U.S.) is a total return, market capitalization weighted index, rebalanced monthly, consisting of the following countries: Australia, Germany, Spain, Belgium, Italy, Sweden, Canada, Japan, United Kingdom, Denmark, Netherlands, and France.
- Emerging-Market Fixed Income: JPM EMBI Global Index 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.
- High-Yield Taxable Fixed Income: Bloomberg U.S. Corporate High-Yield Bond Index covers the U.S. dollar-denominated, non-investment grade, fixed-rate, taxable corporate bond market. Securities are classified as high-yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB= or below. Included issues must have at least one year until final maturity.
- Inflation-CPI: IA SBBI U.S. Inflation Index is a custom unmanaged index designed to track the U.S. inflation rate.
- Developed Market Ex-U.S. Equities: MSCI EAFE Index (Europe, Australasia, Far East) Index (MSCI EAFE GR) is a free float-adjusted market capitalization index designed to measure the equity market performance of developed markets, excluding the U.S. and Canada.
- U.S. Taxable Investment-Grade Fixed Income: Bloomberg U.S. Aggregate Bond Index is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities.
- U.S. 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.
- U.S. Mid-Cap Equities: Russell Midcap® Index measures the performance of the 800 smallest companies in the Russell 1000® Index, which represent approximately 25% of the total market capitalization of the Russell 1000® Index.
- U.S. 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.
- Hedge Funds: HFRI Fund Weighted Composite Index is a fund-weighted (equal-weighted) index designed to measure the total returns (net of fees) of the approximately 2,000 hedge funds that compose the index. Constituent funds must have either \$50 million under management or a track record of greater than 12 months.

CPI (consumer price index) measures the price of a fixed basket of goods and services purchased by an average consumer.

Note: HFRI indexes have limitations (some of which are typical of other widely used indexes). These limitations include survivorship bias (the returns of the indexes 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 indexes, and, therefore, the index may omit funds, the inclusion of which might significantly affect the performance shown). The HFRI indexes are based on information self-reported by hedge fund managers that 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 indexes 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.

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Asset Class Risks

Asset allocation is an investment method used to help manage risk. It does not ensure a profit or protect against a loss.

Commodities: The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates, or other factors affecting a particular industry or commodity.

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.

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 the decline in the bond's price. Credit risk is the risk that an issuer will default on payments of interest and principal. This risk is higher when investing in high yield bonds, also known as junk bonds, which have lower ratings and are subject to greater volatility. 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. 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 and 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.

Hedge Funds: Hedge Funds are available only to persons who are "accredited investors" or "qualified purchasers" within the meaning of U.S. securities laws. Hedge funds 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 investor.

Small/Mid-Cap: The prices of small/mid-company stocks are generally more volatile than large-company stocks. They often involve higher risks because of smaller and mid-sized companies may lack the management expertise, financial resources, product diversification, and competitive strengths to endure adverse economic conditions.

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