FPA Puget Sound

Leading Market Themes

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Senior Investment Director and Vice President

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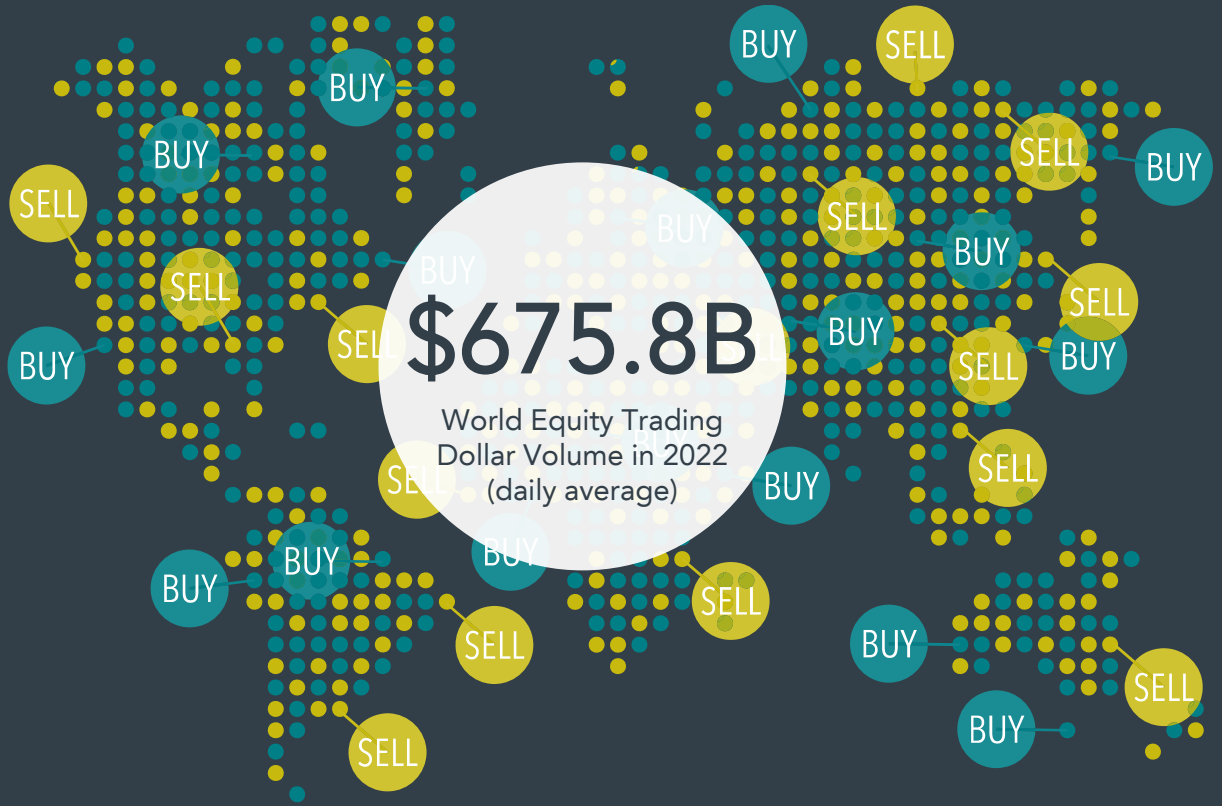
"If you see ten troubles coming down the road, you can be sure that nine will run into the ditch before they reach you."

—Calvin Coolidge

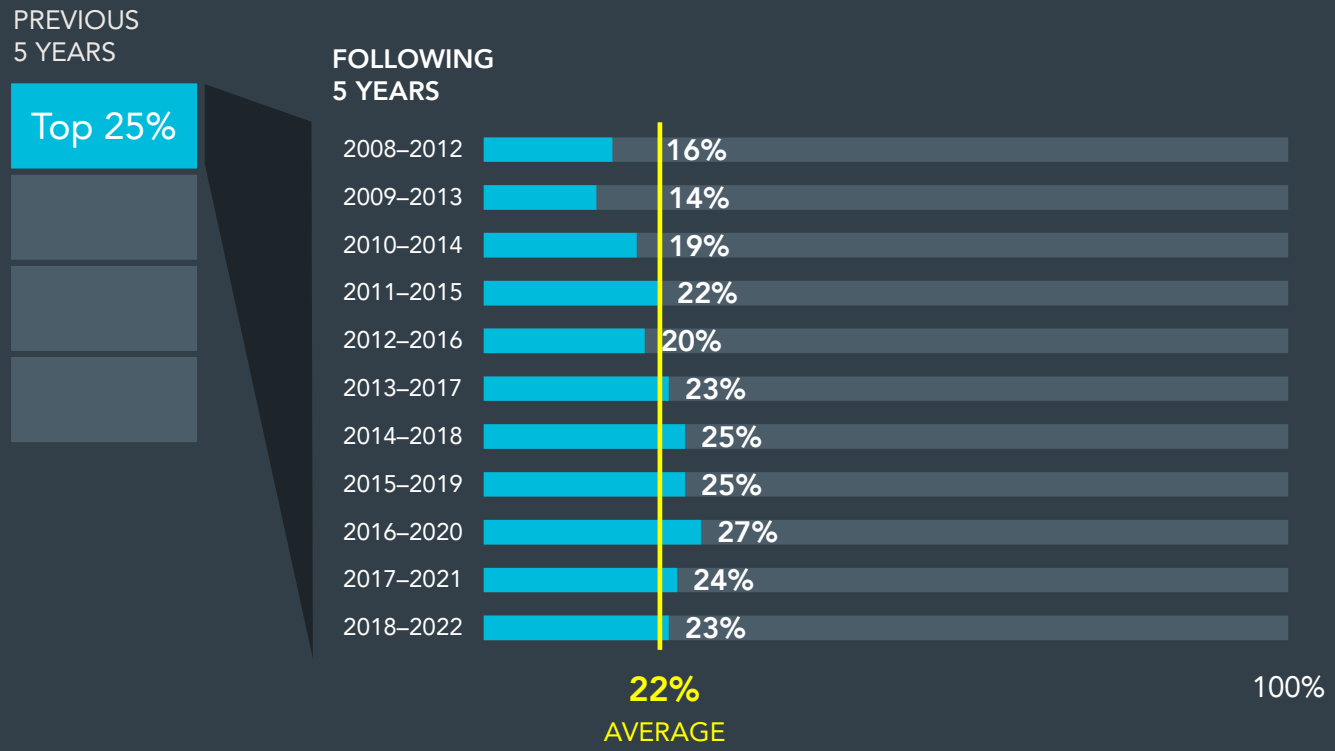
Markets Integrate the Combined Knowledge of All Participants



Trading aggregates a vast amount of dispersed information and drives it into security prices.

In US dollars. Source: Dimensional, using data from Bloomberg LP. Includes primary and secondary exchange trading volume globally for equities. ETFs and funds are excluded. Daily averages were computed by calculating the trading volume of each stock daily as the closing price multiplied by shares traded that day. All such trading volume is summed up and divided by 252 as an approximate number of annual trading days.

Past Performance Is Not Enough to Predict Future Results in Equity Funds



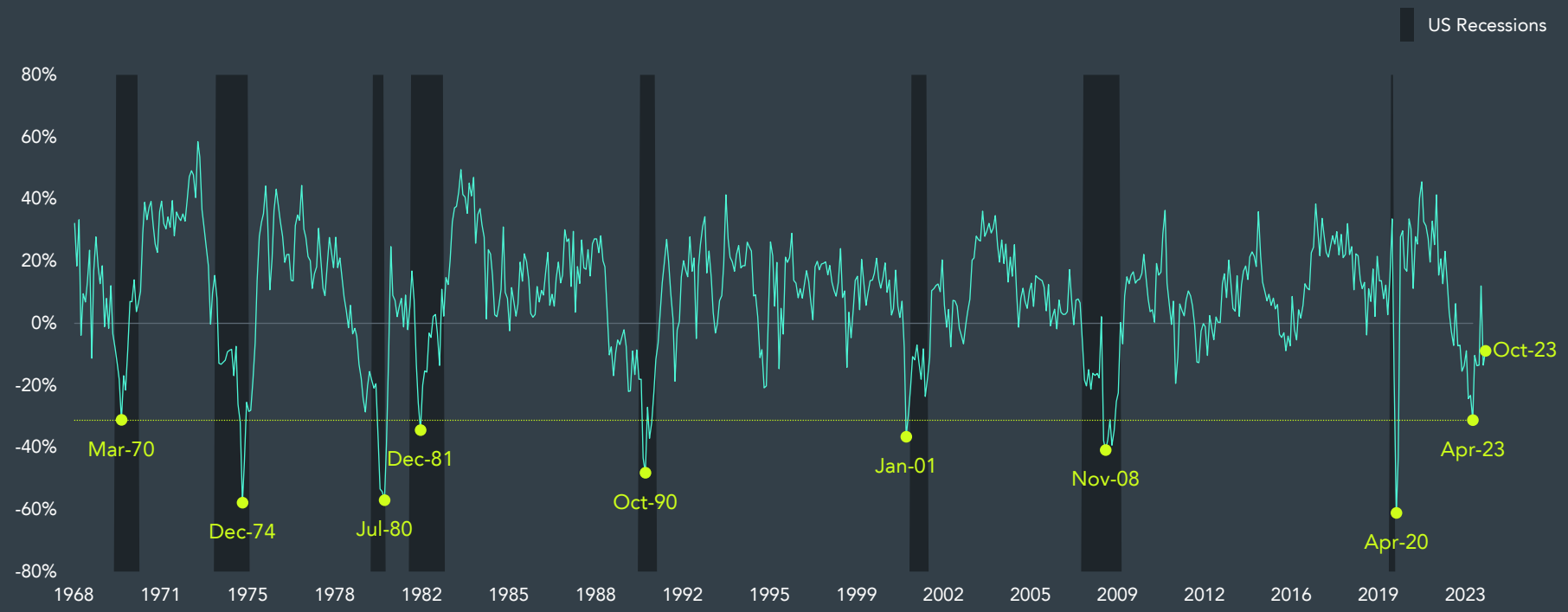
Most US-domiciled funds in the top quartile of past five-year returns did not repeat their top-quartile ranking over the following five years.

Past performance is no guarantee of future results. At the end of each year, funds are sorted within their category based on their five-year total return. The exhibit shows the percentage of funds in the top quartile of five-year performance that ranked in the top quartile of performance over the following five years. Example (2018–2022): For equity funds ranked in the top quartile of performance in their category in the previous period (2013–2017), only 23% also ranked in the top quartile in the subsequent period (2018–2022). US-domiciled, USD-denominated, non-Dimensional open-end and exchange-traded fund data is from Morningstar. See The Fund Landscape Appendix for more information. US-domiciled mutual funds and US-domiciled ETFs are not generally available for distribution outside the US.

Economic Outlook

Check Engine Light?

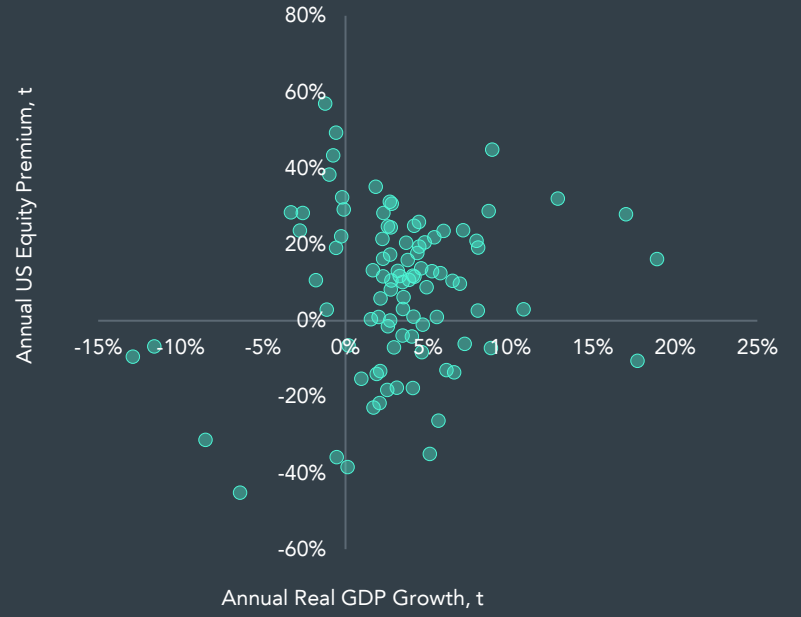
Philadelphia Fed Business Outlook Index, May 1968–October 2023



Past performance is no guarantee of future results. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. Returns in USD. Manufacturing Business Outlook Survey data from the Federal Research Bank of Philadelphia. Index is computed as the percentage of respondents indicating an increase minus the percentage indicating a decrease. Recession periods sourced from the National Bureau of Economic Research and begin the month after a business cycle peak month and continue through the business cycle trough month.

Stock Prices Are Forward Looking

Scatter plots of annual GDP growth against lagged and contemporaneous stock returns, 1930–2022



Past performance is no guarantee of future results. In USD.
Annual GDP growth rates obtained from the US Bureau of Economic Analysis. GDP growth numbers are adjusted to 2012 USD terms to remove the effects of inflation. US Equity Premium represented by the Fama/French Mkt-Rf factor. Data provided by Fama/French. Eugene Fama and Ken French are members of the Board of Directors of the general partner of, and provide consulting services to, Dimensional Fund Advisors LP. Please see "Data Appendix—Fama/French Factors" for a description of the Fama/French Factors.

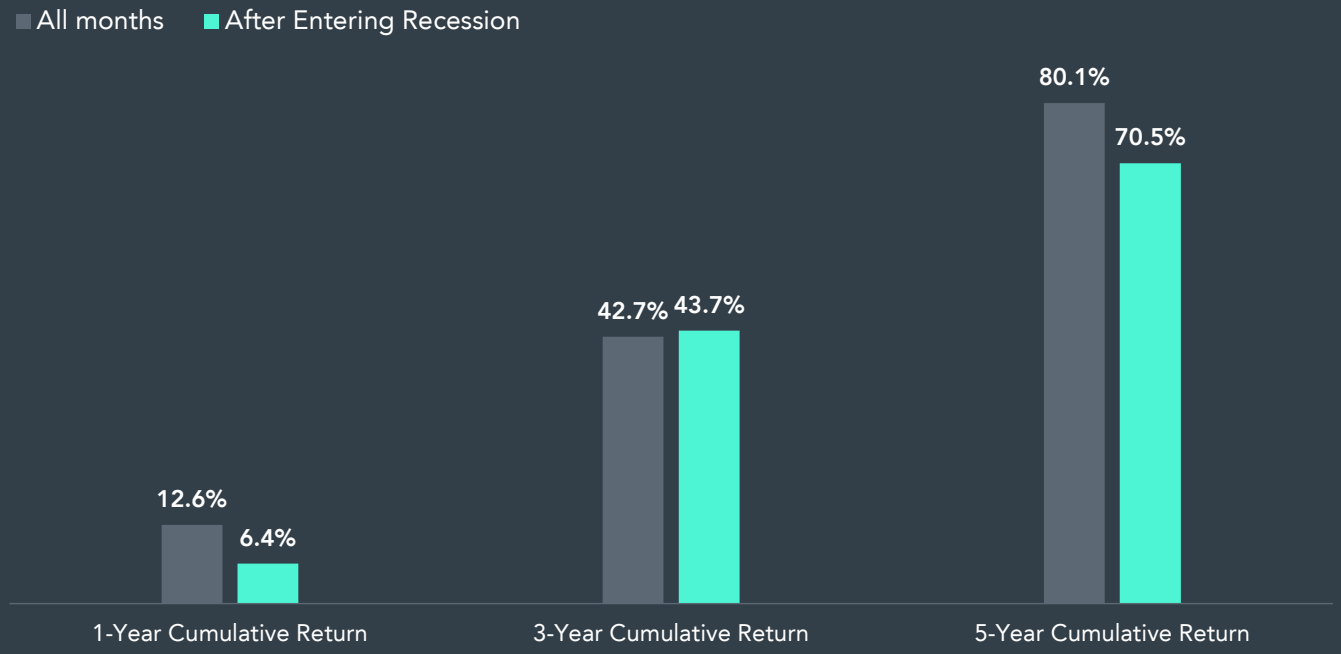
Tell Us Something We Don't Know

5-Year US Credit Default Swap Spread (bps), January 31, 2023–August 2, 2023

Source: Bloomberg.
The news of the downgrade was circulated after US market hours on August 1.

Average Returns Post-Recession Start Have Been Positive

S&P 500 Index returns, 1947–2022



S&P 500 returns following the start of a recession have generally been positive and similar to all months.

In USD.

Past performance is no guarantee of future results. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. Returns data based on monthly S&P 500 Index returns from January 1947 to December 2022. Returns are calculated for the 1-, 3-, and 5-year look-ahead periods for all months and post-recession start months. The sample start date is based on quarterly US gross domestic product data, a key measure used to identify changes in economic activity across the business cycle, that is first available starting in 1947. Business cycle recession dates sourced from the National Bureau of Economic Research (NBER). S&P data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

Growing Pains vs. Market Gains

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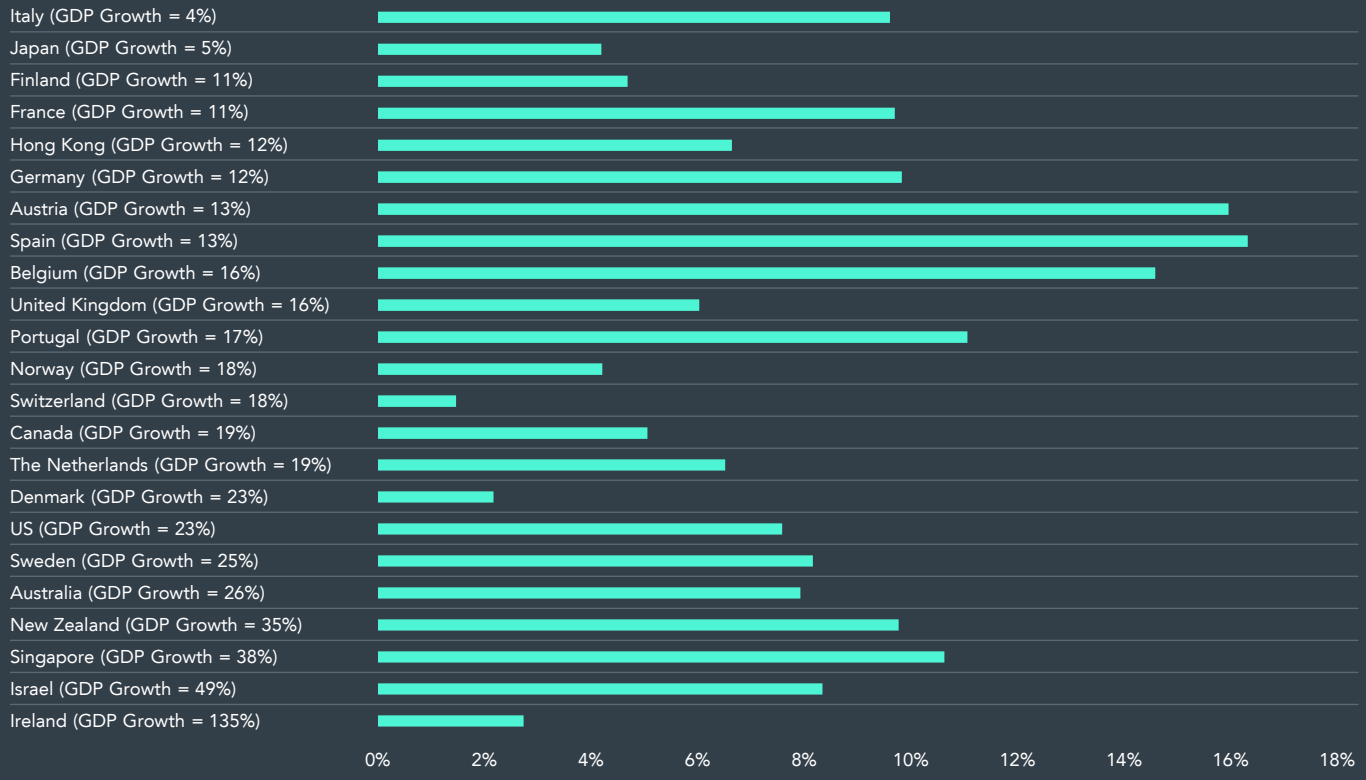
Annualized returns for developed countries sorted on cumulative GDP growth, January 2012–December 2022



GDP growth is not a predictor of stock market performance.

In USD. GDP growth data is from the IMF World Economic Outlook. Country Returns are MSCI Country Indices (net div.). Data provided by MSCI. Countries ordered by their 10-year cumulative GDP Growth with highest (top) to lowest (bottom). **Past performance is no guarantee of future results. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio.** MSCI data © MSCI 2023, all rights reserved.

High Debt Not a Dealbreaker for Markets

Government debt vs. stock market return for developed market countries, 1975–2022

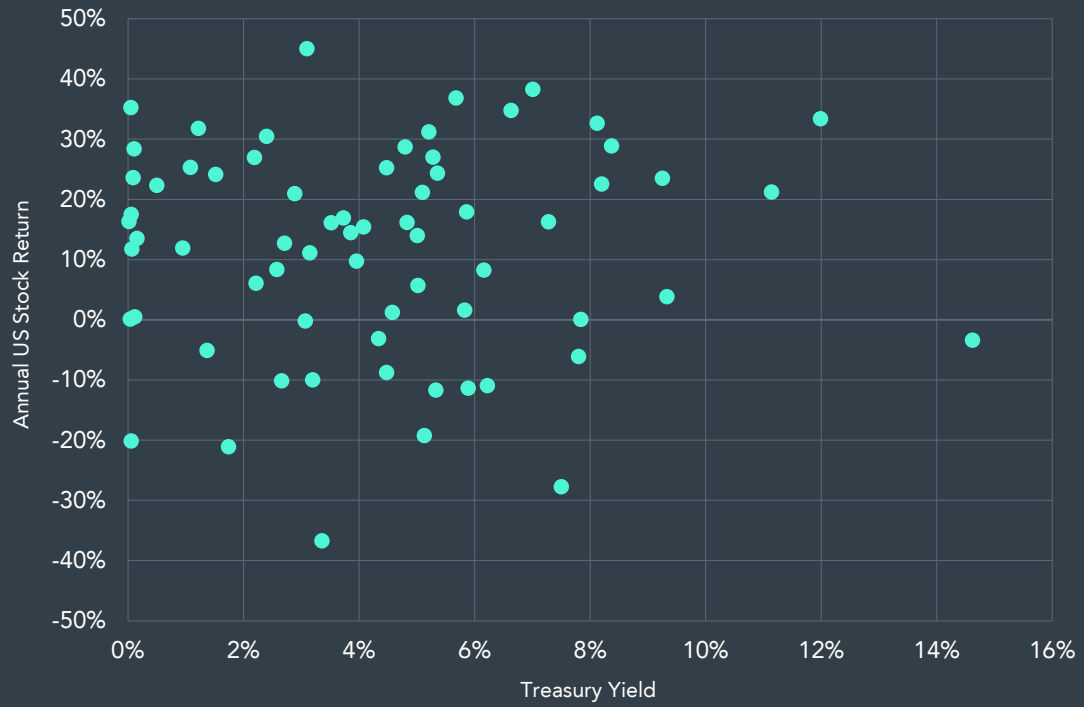
In USD.

Past performance is no guarantee of future results. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. Debt figures are based on General Government Debt data from the Global Debt Database from the International Monetary Fund. Chart represents calendar year returns for each country over the sample period.

MSCI data © MSCI 2023, all rights reserved.

High Rates Don’t Put the Brakes on Stocks

US stock market return vs. 3-month US Treasury Yield, 1955–2022

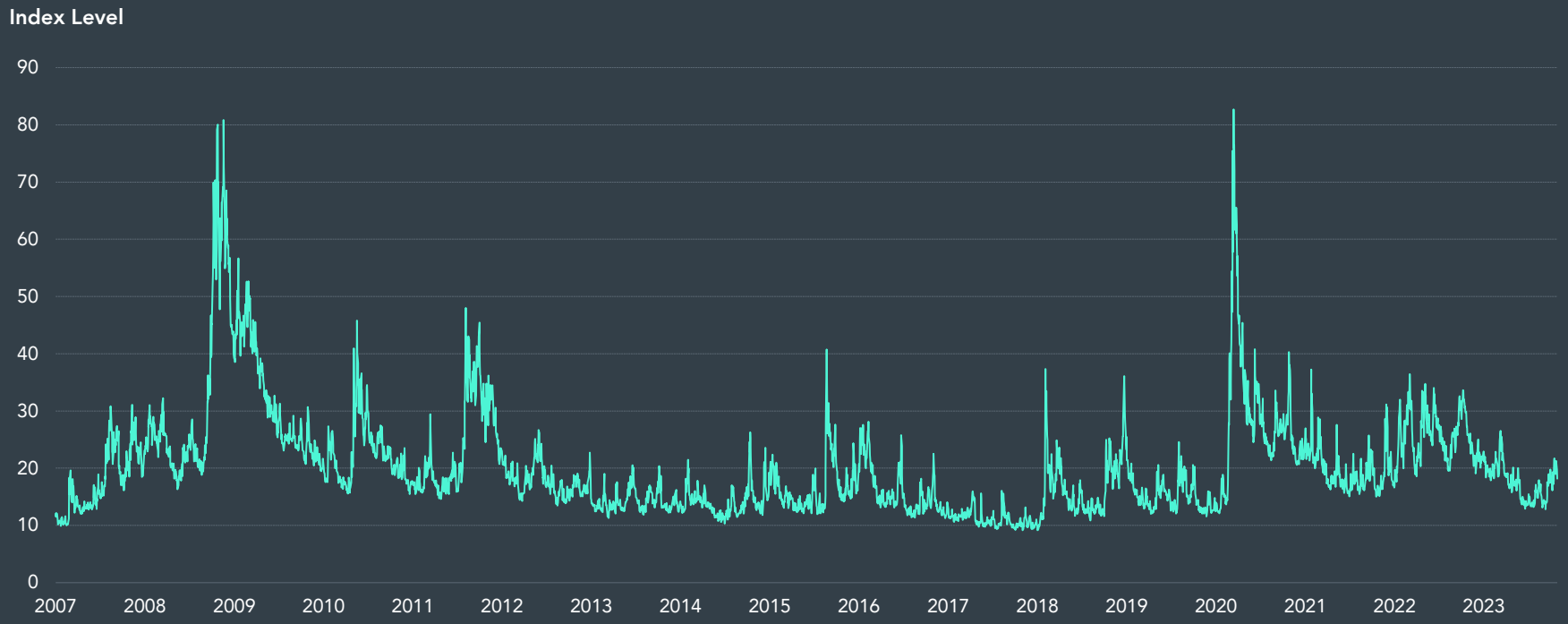


In USD.

Past performance is no guarantee of future results. Actual returns may be lower. The Fama/French Indices represent academic concepts that may be used in portfolio construction and are not available for direct investment or for use as a benchmark. Index returns are not representative of actual portfolios and do not reflect costs and fees associated with an actual investment. See “Index Descriptions” in the appendix for descriptions of the Fama/French index data.US stocks represented by the Fama/French Total US Market Research Index from the data library of Ken French. Beginning-of-month Treasury yields sourced from FactSet.

Expected Volatility Remains Low

The “fear index” shows normal market volatility at present



Data from January 1, 2007 to October 31, 2023. **Past performance is not guarantee of future results.** Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. The VIX Index is a calculation designed to produce a measure of constant, 30-day expected volatility of the U.S. stock market, derived from real-time, mid-quote prices of S&P 500® Index (SPX℠) call and put options. Source: Chicago Board Options Exchange.

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Technological Terrors

Reboot: Interest in Artificial Intelligence Reignites

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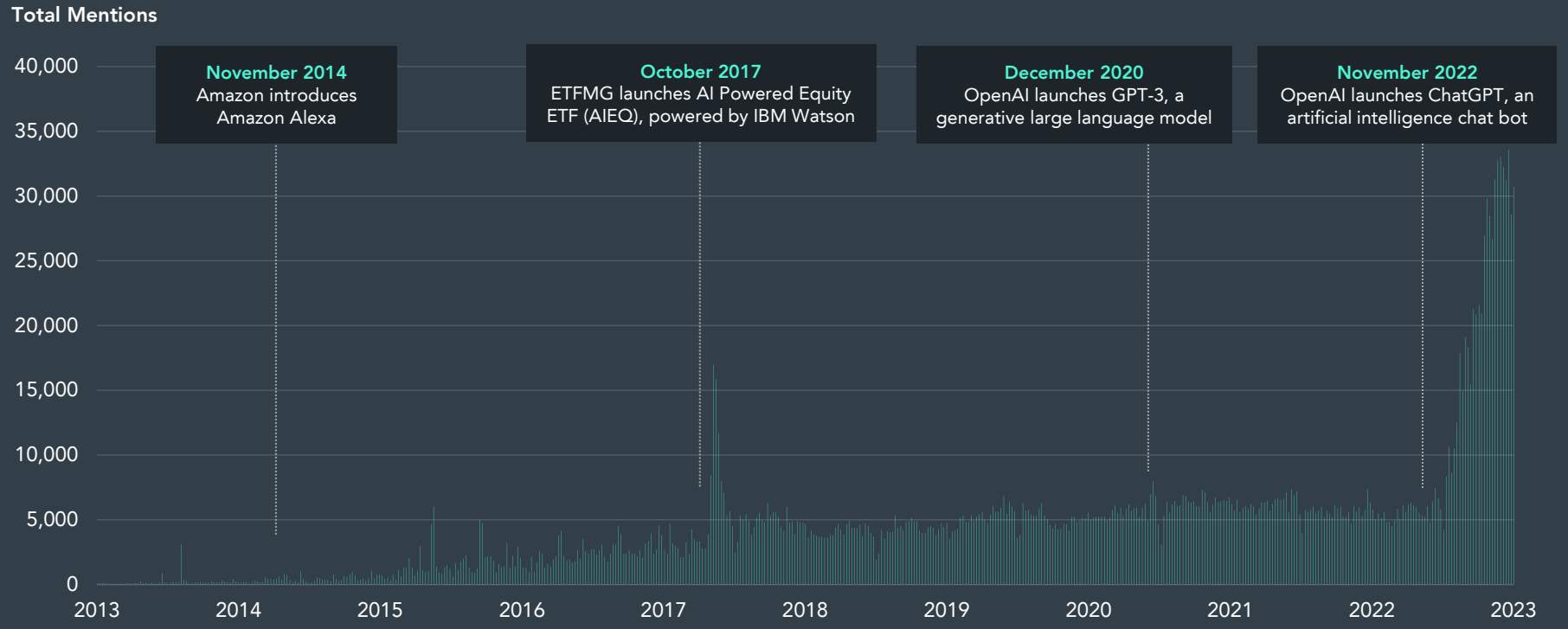
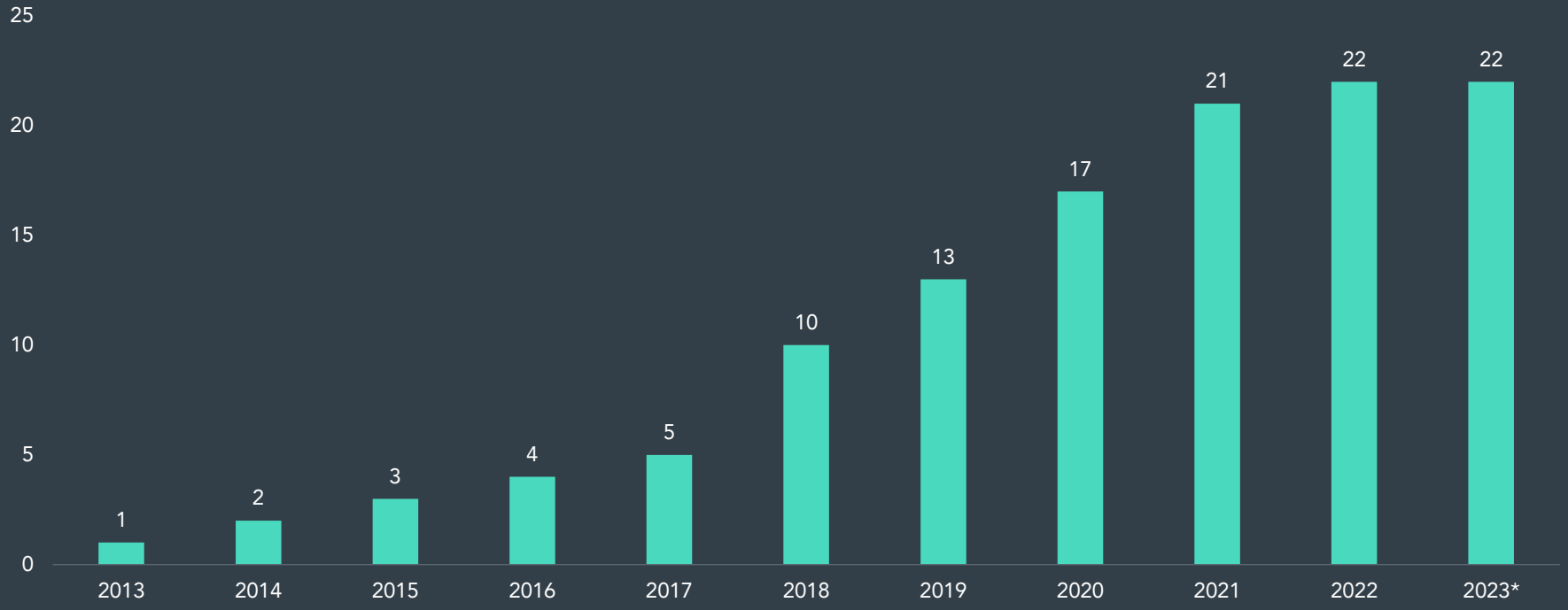
Artificial Intelligence media mentions by week, June 30, 2013–June 30, 2023



Source: Bloomberg

Is AI the Answer?

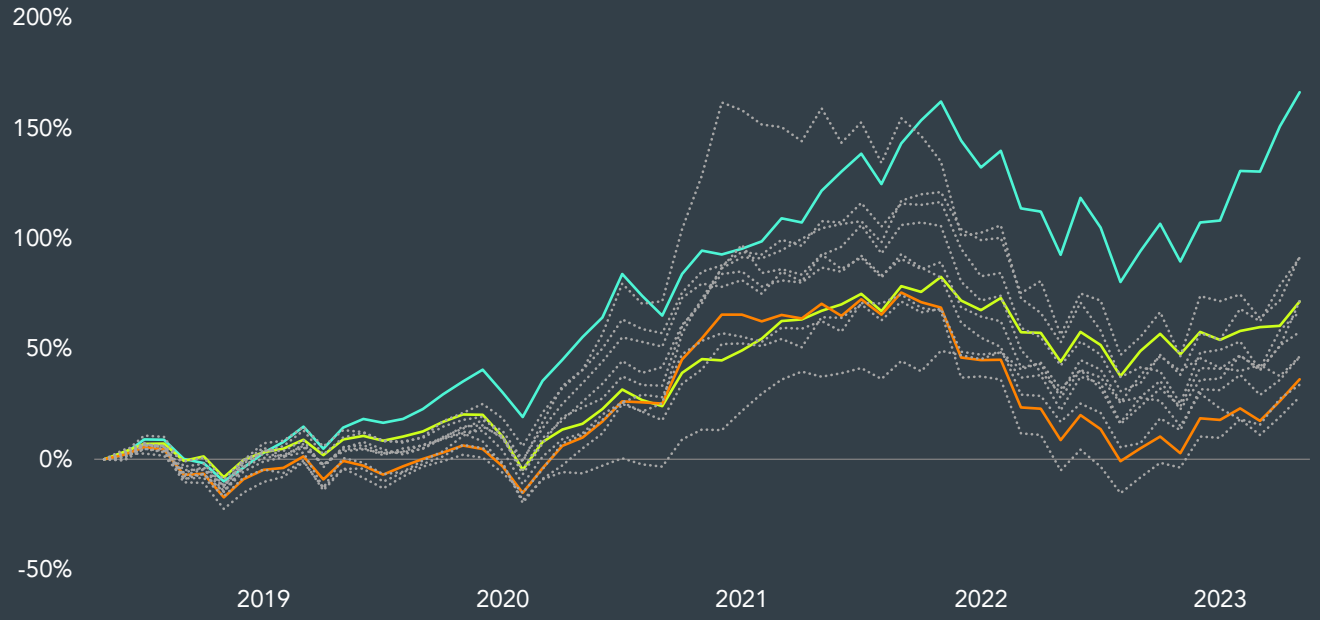
Number of AI Driven or Thematic Funds, 2013–2023[1]



Data for 2023 is as of June 2023.
1. Eligible universe includes US domiciled funds in the following Morningstar category groups that invest in US equities: Sector Equity and US Equity. Artificial Intelligence (AI) Funds include those with one or more of the following terms in the fund name: " AI ", "AI-Enhanced", "AI Powered", "Data", "Quantum", "Intelligent Machines", "Autonomous", "Deep Learning", "Artificial Intelligence", "Machine Learning". The sample excludes leveraged funds, fund of funds, and the US Fund Real Estate and US Fund Infrastructure categories.

Artificial Performance

5-year cumulative returns, July 2018–June 2023



S&P Technology Select Sector Index

Global X Autonomous & Electric Vehicles ETF[1]
Global X Artificial Intelligence & Technology ETF[1]
ARK Autonomous Technology & Robotics ETF[1]

Russell 3000 Index

TCW Artificial Intelligence Equity Fund[1]
First Trust Nasdaq Artificial Intelligence and Robotics ETF[1]
JPMorgan U.S. Applied Data Science Value Fund[2]
iShares Robotics and Artificial Intelligence Multisector ETF[1]

AI Funds

Global X Robotics & Artificial Intelligence ETF[1]
AI Powered Equity ETF[2]

Past performance is no guarantee of future results. Returns for ETFs are based on NAV.
In USD. Eligible universe includes US domiciled funds in the Morningstar US Sector Equity and US Equity categories. Artificial Intelligence (AI) Funds include those with one or more of the following terms in the fund name: " AI ", "AI-Enhanced", "AI Powered", "Data", "Quantum", "Intelligent Machines", "Autonomous", "Deep Learning", "Artificial Intelligence", "Machine Learning". AI Fund cumulative return is calculated using the AUM weighted average monthly return of AI Funds. The cumulative return for individual AI Funds with 5-year track records as of June 2023 are also highlighted in the chart. The sample excludes leveraged funds, fund of funds, and the US Fund Real Estate and US Fund Infrastructure categories. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. S&P data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.
1. Funds that invest in AI-themed stocks.
2. Funds where the investment decisions are driven by AI.

Magnificent 7 Dominated Stock Returns in 2023

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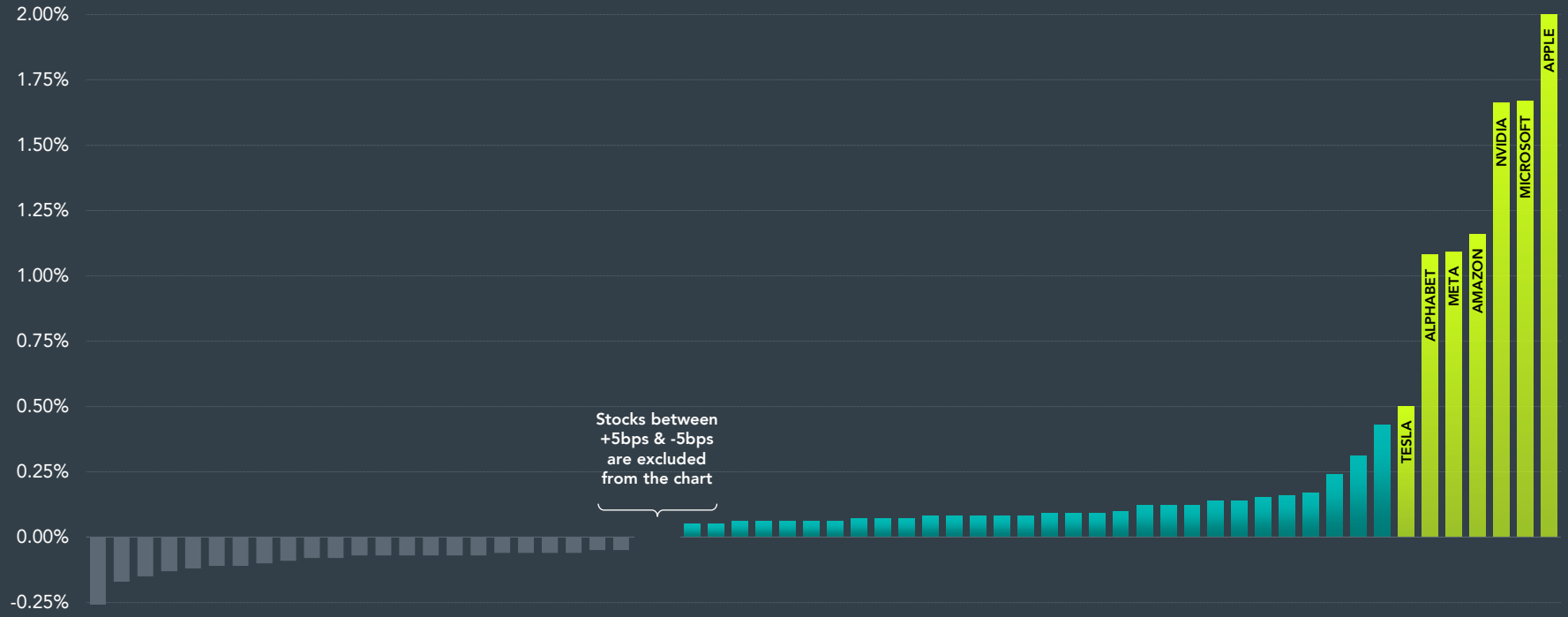
Contribution to Russell 3000 Index return YTD, as of October 31, 2023



Past performance is no guarantee of future results. Returns and weights are derived from Russell 3000 Index published security weights, Dimensional computed security returns. This information is intended for educational purposes and should not be considered a recommendation to buy or sell a particular security. Named securities may be held in accounts managed by Dimensional. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio.

Expected Returns for the Magnificent 7

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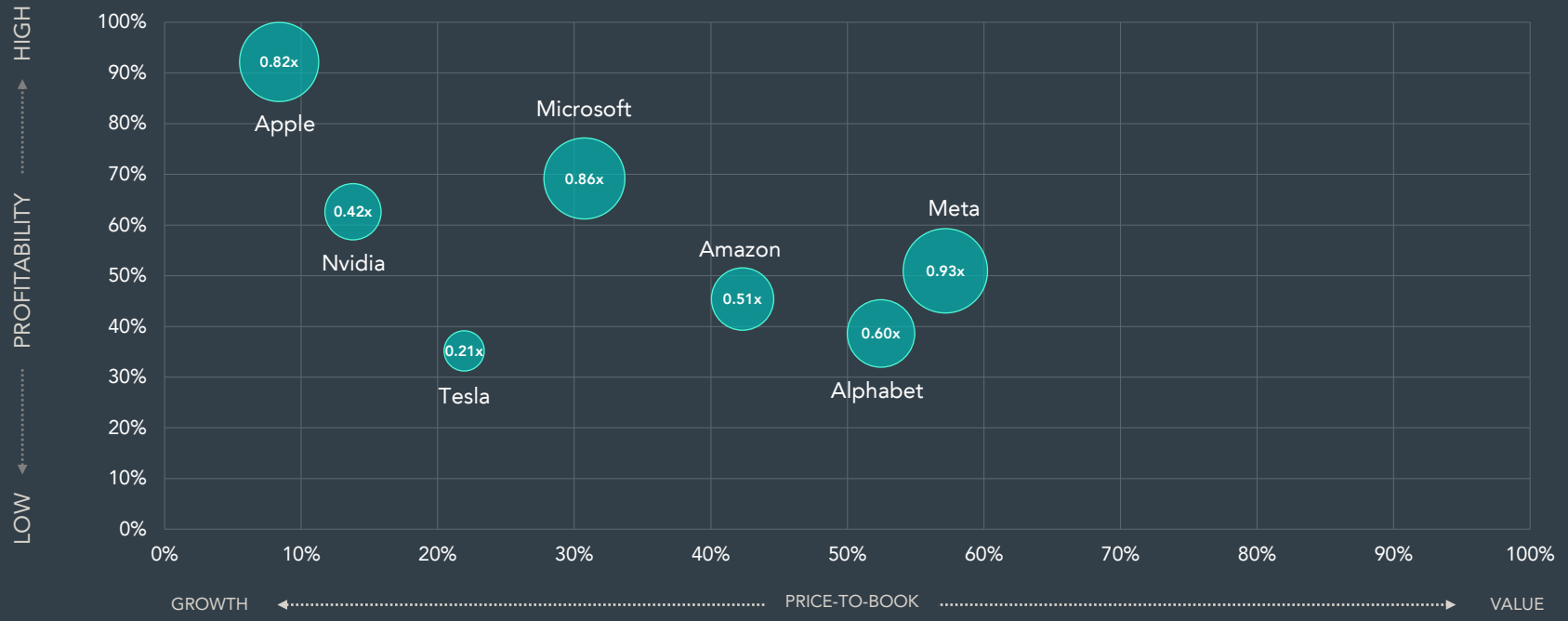
Percentile rankings on profitability and relative price for portfolio holdings as of October 31, 2023

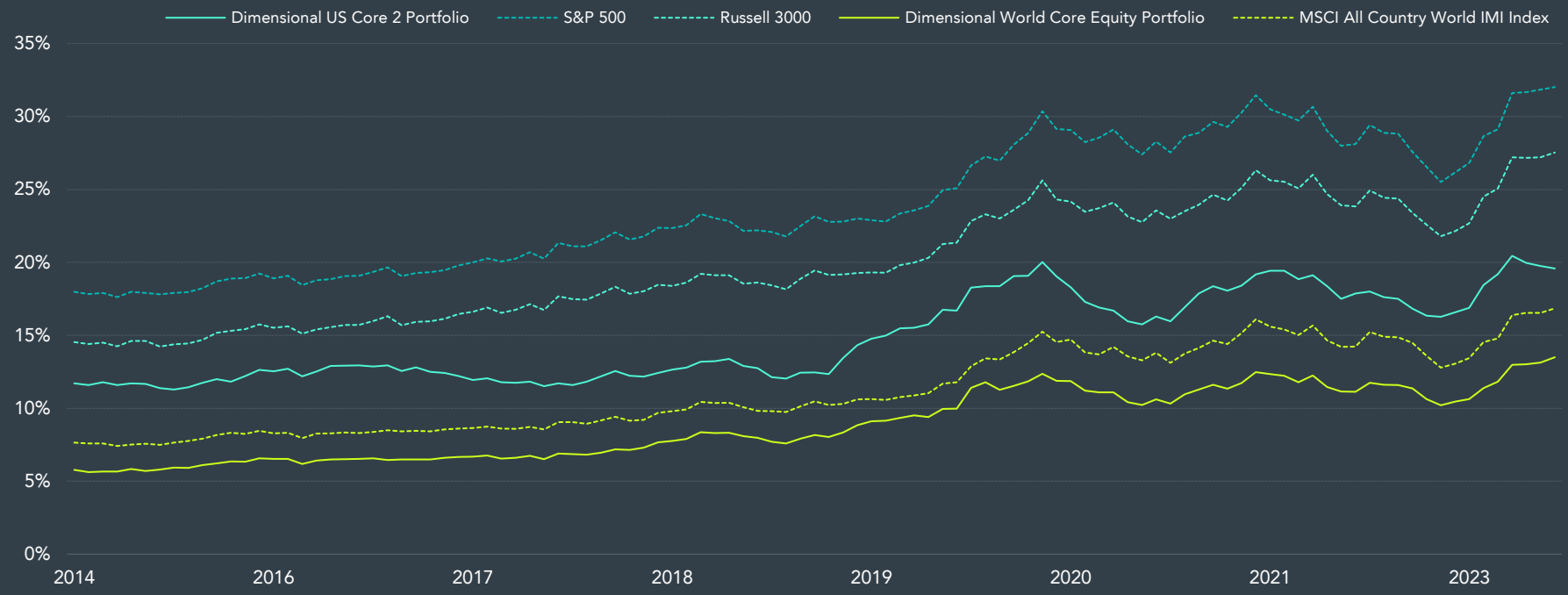
Weight in US Core Equity 2 Portfolio relative to market weight



Source: Dimensional. Stocks are plotted on price-to-book and profitability. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Excludes REITs and utilities, identified by GICS code, as well as underlying holdings in rights, warrants, cash, cash equivalents, ETFs, and bonds, plus stocks without size, relative price, or profitability metrics. Holdings are subject to change. Market is the Russell 3000 Index.

Core Portfolios Offer Diversification

Weight in top 10 holdings (%), January 2014–August 2023



Data sourced using end of month holdings. Weight determined by constituent percentage of each respective index at the issuer level. Indices are not available for direct investment. MSCI data © MSCI 2023, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. S&P data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. Holdings are subject to change.

Appendix

The Fund Landscape Appendix

Data Sample
The sample includes US-domiciled, USD-denominated open-end and exchange-traded funds (ETFs) in the following Morningstar categories. Non-Dimensional fund data provided by Morningstar. Dimensional fund data is provided by the fund accountant. Dimensional funds or subadvised funds whose access is or previously was limited to certain investors are excluded. Index funds, load-waived funds, and funds of funds are excluded from the industry sample.

Methodology
The beginning samples include funds as of the start of the 10-, 15-, and 20-year periods. Surviving funds are those with return observations for every month of the sample period. Each fund is evaluated relative to its primary prospectus benchmark. Where the full series of primary prospectus benchmark returns is unavailable, non-Dimensional funds are instead evaluated relative to their Morningstar category index. Outperformers are funds that survived the sample period and whose cumulative net return over the period exceeded that of their respective benchmark. We aggregate funds with multiple share classes to the strategy level.

Morningstar Categories (Equity)
Equity fund sample includes the following Morningstar historical categories: Diversified Emerging Markets, Europe Stock, Foreign Large Blend, Foreign Large Growth, Foreign Large Value, Foreign Small/Mid Blend, Foreign Small/Mid Growth, Foreign Small/Mid Value, Global Real Estate, Japan Stock, Large Blend, Large Growth, Large Value, Mid-Cap Blend, Mid-Cap Growth, Mid-Cap Value, Miscellaneous Region, Pacific/Asia ex-Japan Stock, Real Estate, Small Blend, Small Growth, Small Value, Global Large-Stock Blend, Global Large-Stock Growth, Global Large-Stock Value, and Global Small/Mid Stock.

Morningstar Categories (Fixed Income)
Fixed income fund sample includes the following Morningstar historical categories: Corporate Bond, High Yield Bond, Inflation-Protected Bond, Intermediate Core Bond, Intermediate Core-Plus Bond, Long-Term Bond, Intermediate Government, Long Government, Muni California Intermediate, Muni California Long, Muni Massachusetts, Muni Minnesota, Muni National Intermediate, Muni National Long, Muni National Short, Muni New Jersey, Muni New York Intermediate, Muni New York Long, Muni Ohio, Muni Pennsylvania, Muni Single State Intermediate, Muni Single State Long, Muni Single State Short, Muni Target Maturity, Short Government, Short-Term Bond, Ultrashort Bond, Global Bond, and Global Bond-USD Hedged.

Index Data Sources
Index data provided by Bloomberg, MSCI, Russell, FTSE Fixed Income LLC, and S&P Dow Jones Indices LLC. Bloomberg data provided by Bloomberg. MSCI data © MSCI 2023, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. FTSE fixed income indices © 2023 FTSE Fixed Income LLC. All rights reserved. S&P data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

Indices are not available for direct investment. Their performance does not reflect the expenses associated with management of an actual portfolio. US-domiciled mutual funds and US-domiciled ETFs are not generally available for distribution outside the US.

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RISKS
Investments involve risks. The investment return and principal value of an investment may fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original value. Diversification neither assures a profit nor guarantees against a loss in a declining market. Past performance is not a guarantee of future results. There is no guarantee strategies will be successful.

Data Appendix—Fama/French Factors

Fama/French Mkt-Rf: The excess return on the market, value-weight return of all CRSP firms incorporated in the US and listed on the NYSE, AMEX, or NASDAQ that have a CRSP share code of 10 or 11 at the beginning of month t, good shares and price data at the beginning of t, and good return data for t minus the one-month Treasury bill rate (from Ibbotson Associates).

Fama/French US SMB Research Factor: Constructed from six size/book-to-market research portfolios, six size/profitability research portfolios, and six size/investment research portfolios. SMB (Small minus Big) for July of year t to June t + 1 includes all NYSE, AMEX, and NASDAQ stocks for which we have market equity for December t − 1 and June of t, (positive) book-to-market equity data for fiscal year ending in t − 1, non-missing revenues and at least one of the following: cost of goods sold, selling, general and administrative expenses, or interest expense for t − 1, and total assets data for t − 2 and t − 1. Exclusions: ADRs, investment companies, tracking stocks, non-US incorporated companies, closed end funds, certificates, shares of beneficial interests, and negative book values.

Fama/French US HML Research Factor: Constructed from four size/book-to-market research portfolios. HML for July of year t to June t + 1 includes all NYSE, AMEX, and NASDAQ stocks for which we have market equity for December t − 1 and June of t, and (positive) book-to-market equity data for fiscal year ending in t − 1. HML (High minus Low) is the average return on two value research portfolios minus the average return on two growth research portfolios: 1/2 (Small Value + Big Value) − 1/2 (Small Growth + Big Growth). Exclusions: ADRs, investment companies, tracking stocks, non-US incorporated companies, closed-end funds, certificates, shares of beneficial interests, and negative book values.

Fama/French US RMW Research Factor: Constructed from four size/profitability research portfolios. RMW for July of year t to June t + 1 includes all NYSE, AMEX, and NASDAQ stocks for which we have market equity data for June of t, (positive) book equity data for t − 1, non-missing revenues data for t − 1, and non-missing data for at least one of the following: cost of goods sold, selling, general and administrative expenses, or interest expense for t − 1. RMW (Robust minus Weak) is the average return on the two robust operating profitability portfolios minus the average return on the two weak operating profitability portfolios: 1/2 (Small Robust + Big Robust) − 1/2 (Small Weak + Big Weak). Exclusions: ADRs, investment companies, tracking stocks, non-US incorporated companies, closed-end funds, certificates, and shares of beneficial interests.

Fama/French US CMA Research Factor: Constructed from six size/investment research portfolios that do not include hold ranges. CMA for July of year t to June t + 1 includes all NYSE, AMEX, and NASDAQ stocks for which we have market equity data for June of t, total assets data for t – 2 and t – 1. CMA (Conservative Minus Aggressive) is the average return on the two conservative investment portfolios minus the average return on the two aggressive investment portfolios: 1/2 (Small Conservative + Big Conservative) − 1/2 (Small Aggressive + Big Aggressive). Exclusions: ADRs, investment companies, tracking stocks, non-US incorporated companies, closed-end funds, certificates, and shares of beneficial interests.

Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Eugene Fama and Ken French are members of the Board of Directors of the general partner of, and provide consulting services to, Dimensional Fund Advisors LP.

Index Descriptions

Fama/French Total US Market Research Index: July 1926–present: Fama/French Total US Market Research Factor + One-Month US Treasury Bills. Source: Ken French Website.

Fama/French US Small Cap Research Index: July 1926-present: Fama/French US Small Cap Research Index. Courtesy of Fama/French from CRSP and Compustat securities data. Includes NYSE securities (plus AMEX equivalents since July 1962 and NASDAQ equivalents since 1973) in the lower 50% market equity range of NYSE firms; rebalanced annually in June.

Fama/French US Large Cap Research Index: July 1926-present: Fama/French US Large Cap Research Index. Courtesy of Fama/French from CRSP and Compustat securities data. Includes NYSE securities (plus AMEX equivalents since July 1962 and NASDAQ equivalents since 1973) in the upper 50% market equity range of NYSE firms; rebalanced annually in June.

Fama/French US Value Research Index: Provided by Fama/French from CRSP securities data. Includes the lower 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973).

Fama/French US Growth Research Index: Provided by Fama/French from CRSP securities data. Includes the higher 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973).

Fama/French US Small Value Research Index: Provided by Fama/French from CRSP securities data. Includes the lower 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973) that have smaller market capitalization than the median NYSE company.

Fama/French US Small Growth Research Index: Provided by Fama/French from CRSP securities data. Includes the higher 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973) that have smaller market capitalization than the median NYSE company.

Fama/French US Large Value Research Index: Provided by Fama/French from CRSP securities data. Includes the lower 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973) that have larger market capitalization than the median NYSE company.

Fama/French US Large Growth Research Index: Provided by Fama/French from CRSP securities data. Includes the higher 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973) that have larger market capitalization than the median NYSE company.

Fama/French US High Profitability Index: July 1963–present: Fama/French US High Profitability Index. Courtesy of Fama/French from CRSP and Compustat securities data. Includes all stocks in the upper 30% operating profitability range of NYSE eligible firms; rebalanced annually in June. OP for June of year t is annual revenues minus cost of goods sold, interest expense, and selling, general, and administrative expenses divided by book equity for the last fiscal year end in t-1. Fama/French and multifactor data provided by Fama/French.

Fama/French US Low Profitability Index: July 1963–present: Fama/French US Low Profitability Index. Courtesy of Fama/French from CRSP and Compustat securities data. Includes all stocks in the lower 30% operating profitability range of NYSE eligible firms; rebalanced annually in June. OP for June of year t is annual revenues minus cost of goods sold, interest expense, and selling, general, and administrative expenses divided by book equity for the last fiscal year end in t-1. Fama/French and multifactor data provided by Fama/French.

Results shown during periods prior to each index's index inception date do not represent actual returns of the respective index. Other periods selected may have different results, including losses. Backtested index performance is hypothetical and is provided for informational purposes only to indicate historical performance had the index been calculated over the relevant time periods. Backtested performance results assume the reinvestment of dividends and capital gains. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Eugene Fama and Ken French are members of the Board of Directors of the general partner of, and provide consulting services to, Dimensional Fund Advisors LP.