

We created our one-page Dimensional Quick Takes to help with investor education, because we believe understanding markets is vital to having a good investment experience.

Each Quick Take is intended to visualize a succinct and straightforward message, reinforcing a key principle about long-term investing.

This collection presents the full series in one place. The Quick Takes are grouped by topics that you may encounter when having client conversations, covering subjects like how to respond to market volatility and the benefits of diversification.

We hope you find the resource useful!

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Click the titles to jump to each Quick Take.

# Investing Fundamentals

How do markets work?

 $Explore foundational \ principles, \ backed \ by \ data.$ 

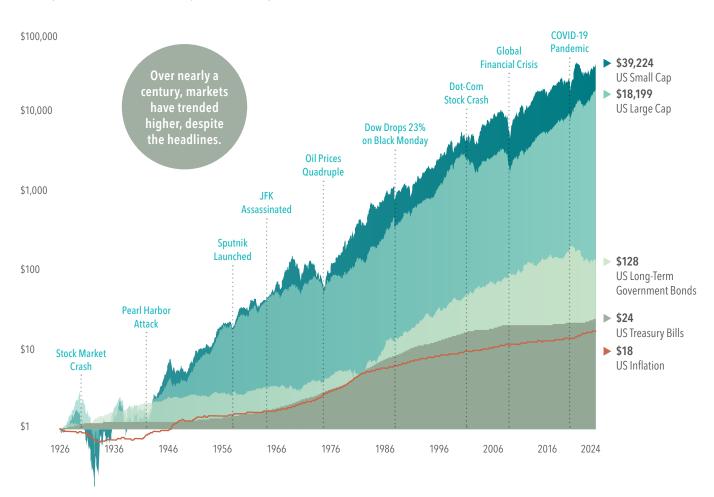




### Stocks Have Rewarded Investors over the Long Term

#### GROWTH OF A DOLLAR

January 1926—December 2024 (compounded monthly)



While daily news may challenge an investor's discipline, stock markets have a long history of delivering growth that has created substantial wealth over time.

- Looking at monthly performance since 1926 for different areas of the US financial markets, stock returns have far exceeded inflation and significantly outperformed bond returns.
- But not all stocks and bonds are the same.
   US Treasury bills barely covered inflation,
   while long-term government bonds fared
   better, albeit well short of stocks' performance.
   And US small cap stocks fared the best,
   beating US large cap stocks.
- Financial markets have steadily risen over the decades, weathering events like the 1929 crash, World War II, and the COVID pandemic.

Stocks and bonds have rewarded investors who can look past the headlines and remain disciplined over the long term.

#### STOCKS HAVE REWARDED INVESTORS OVER THE LONG TERM

Past performance is not a guarantee of future results. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

In USD. US Small Cap is the CRSP 6–10 Index. US Large Cap is the S&P 500 Index. US Long-Term Government Bonds is the Dimensional US 20-Year Treasury Index. US Treasury Bills is the IA SBBI US 30 Day TBill TR USD. US Inflation is measured as changes in the US Consumer Price Index. CRSP data is provided by the Center for Research in Security Prices, University of Chicago. S&P data © 2025 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Treasury bills data provided by Ibbotson Associates via Morningstar Direct. US Consumer Price Index data is provided by the US Department of Labor, Bureau of Labor Statistics. Data presented in the Growth of a Dollar chart is hypothetical and assumes reinvestment of income and no transaction costs or taxes. The chart is for illustrative purposes only and is not indicative of any investment.

Dimensional US 20-Year Treasury Index: February 1999—present: Compiled by Dimensional from Bloomberg securities data. Based on securities in the universe of the Bloomberg US Treasury Index, the index selects the bond with beginning-of-month maturity closest to 20 years. If there are two bonds with the same time to maturity, the most recently issued bond is selected. Rebalanced monthly. The index has been retrospectively calculated by Dimensional and did not exist prior to February 2025. Accordingly, results shown during the periods prior to February 2025 do not represent actual returns of the index. Other periods selected may have different results, including losses. Prior to February 1999: Morningstar Long-Term Government Bonds.

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### The Rewarding Distribution of US Stock Market Returns

CRSP 1-10 INDEX RETURNS BY YEAR 1926-2024

25 Negative Years (25%)



1974 –27.0%

-50% to -40% -40% to -30% -30% to -20% -20% to -10% -10% to 0%

74 Positive Years (75%)

		:
		:
		:
		:
	1994	:
	-0.1%	:
1957	2015	:
-10.0%	-0.5%	:
1941	1981	
-10.1%	-3.6%	:
1962	1977	:
-10.2%	-4.3%	:
1969	2018	:
-10.9%	-5.0%	:
2001		:
-11.1%	-6.0%	
2000		:
-11.4%	-6.2%	
1929		:
-15.2%	-7.1%	:
1973		
-18.1%	-8.6%	:
2022		
-19.8%	-8.7%	1

0%	0% to 10%	10% to 20%	20% to 30%	30% to 40%	40% to 50%	50% to 60%
	1970 0.0%	1993 11.1%	1949 20.2%	2019 30.4%	1935 44.4%	1933 56.7%
	0.7%	11.6%	20.7%	31.4%	45.0%	4000
	0.8% 1953	12.0% 2014	21.0% 1951	31.6% 1997	50.0% 1958	
	2011	12.7% 2004	21.0% 1963	32.2% 2003	1954	
		1959	1982	1985		
:	1987 1.7%	1952 13.4%		1936 32.3%		
	2.1%	13.6%	21.4%	32.8%		
	2.8%	14.1%	21.5%	33.5% 1980		
	3.6% 1939	14.5% 1968	22.0% 1944	34.7% 1927		
	1947	1965	1983	1991		
	1934 4.1%	2006 15.5%	1979 22.6%	2013 35.2%		
	1984 4.5%		2020 23.5%	1995 36.8%		
. !	2007 5.8%	1964 16.1%	2021 24.0%	1928 38.4%		
:	6.2%	16.1%	24.3%	38.5%		
:	7.5% 2005	16.2% 1971	25.2% 1998	38.8% 1945		
	8.3% 1978	16.2% 2012	25.2% 2024	1975		
:		1986	1955			
:	1926 8.4%	1972 16.8%	1999 25.2%			
:	1992 9.8%	2010 17.7%	2023 <b>26.6</b> %			
		18.0%	1976 26.8%			
		1988	26.9%			
			28.2% 1961			
			28.4% 1938			
			28.7% 1943			
			28.8% 1967			
			2009			

Annual stock market returns are unpredictable, but the long history of positive returns may be reassuring to investors who find market downturns unsettling.

- "Up" years have occurred much more frequently than "down" years in the US stock market from 1926 through 2024.
- The market averaged gains of 10.2% per year during this period.
- About three-quarters of the down years were followed by up years. The most recent example: a 19.8% loss in 2022 followed by a 26.6% gain in 2023.

The stock market tends to reward investors who can weather annual ups and downs and stay committed to a long-term plan.

#### THE REWARDING DISTRIBUTION OF US STOCK MARKET RETURNS

Past performance is no guarantee of future results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful. Indices are not available for direct investment. Index returns are not representative of actual portfolios and do not reflect costs and fees associated with an actual investment.

In USD. Return in 1970 was 0.002%. CRSP data provided by the Center for Research in Security Prices, University of Chicago. The CRSP 1–10 Index measures the performance of the total US stock market, which it defines as the aggregate capitalization of all US securities listed on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market.

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### How Asset Allocation Impacts Risk and Return

LARGEST, SMALLEST, AND AVERAGE RETURNS BASED ON CALENDAR-YEAR PERFORMANCE 2000–2024



Asset allocation plays an important role in an investment portfolio. For example, the proportion of stocks versus bonds can have a big impact on risk and return.

- The average calendar-year gain on a portfolio with 100% stocks was +9.59% from 2000 to 2024, but the largest and smallest returns varied widely.
- Investors who opted for a portfolio with 100% bonds saw much less of a swing between the largest and smallest returns—but with less than half the average gain.
- As exposure to bonds increased and exposure to stocks declined, average gains and the range between largest and smallest outcomes both went down.

When choosing an asset allocation for your portfolio, it's important to understand how stock and bond exposure impacts risk and return.

#### HOW ASSET ALLOCATION IMPACTS RISK AND RETURN

EQUITY	0%	20%	40%	60%	80%	100%
Dimensional US Core Equity Market Index	0.0	14.2	28.4	42.6	56.8	71.0
Dimensional International Core Equity Market Index	0.0	3.8	7.6	11.4	15.2	19.0
Dimensional Emerging Markets Core Equity Market Index	0.0	1.6	3.2	4.8	6.4	8.0
S&P Global REIT Index	0.0	0.4	0.8	1.2	1.6	2.0
FIXED INCOME	100%	80%	60%	40%	20%	0%
Bloomberg US TIPS Index	20.0	10.0	0.0	0.0	0.0	0.0
Dimensional US Ultra-Short Fixed Income Index	20.0	10.0	0.0	0.0	0.0	0.0
Dimensional Short-Term Extended Quality Index	60.0	50.0	40.0	25.0	10.0	0.0
Dimensional US Core Fixed Income Index	0.0	10.0	20.0	15.0	10.0	0.0

#### Past performance is no guarantee of future results.

In USD. Weights as of December 31, 2024. Rebalanced monthly. Totals may not equal 100% due to rounding. S&P data © 2025 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Bloomberg data provided by Bloomberg.

Performance results of the asset allocations are based on performance of indices with backtested performance results; the performance was achieved with the benefit of hindsight; it does not represent actual investment strategies. The allocation's performance does not reflect advisory fees or other expenses associated with the management of an actual portfolio. There are limitations inherent in asset allocations. In particular, performance may not reflect the impact that economic and market factors may have had on the advisor's decision-making if the advisor were actually managing client money.

The Dimensional indices have been retrospectively calculated by Dimensional Fund Advisors LP and did not exist prior to their index inception dates. Accordingly, results shown during the periods prior to each index's inception date do not represent actual returns of the 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.

The Dimensional 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. Their performance does not reflect the expenses associated with the management of an actual portfolio.

Dimensional US Core Equity Market Index: Inception: August 2020. Compiled by Dimensional from CRSP and Compustat data. Targets all securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market with an emphasis on companies with smaller capitalization, lower relative price, and higher profitability, excluding those with the lowest profitability and highest relative price within the small cap universe. The index also excludes those companies with the highest asset growth within the small cap universe. Profitability is defined as operating income before depreciation and amortization minus interest expense divided by book equity. Asset growth is defined as change in total assets from the prior fiscal year to current fiscal year. Exclusions: non-US companies, REITs, UITs, and investment companies.

Dimensional International Core Equity Market Index: Inception: August 2020. Compiled by Dimensional using data provided by Bloomberg. Targets all the securities in the eligible markets with an emphasis on companies with smaller capitalization, lower relative price, and higher profitability, excluding those with the lowest profitability and highest relative price within their country's small cap universe. The index also excludes those companies with the highest asset growth within their country's small cap universe. Profitability is defined as operating income before depreciation and amortization minus interest expense divided by book equity. Asset growth is defined as change in total assets from the prior fiscal year to current fiscal year. Countries currently included are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the UK. Exclusions: REITs and investment companies.

Dimensional Emerging Markets Core Equity Market Index: Inception: August 2020. Compiled by Dimensional from Bloomberg securities data. Targets all the securities in the eligible markets with an emphasis on companies with smaller capitalization, lower relative price, and higher profitability, excluding those with the lowest profitability and highest relative price within their country's small cap universe. The index also excludes those companies with the highest asset growth within their country's small cap universe. Profitability is defined as operating income before depreciation and amortization minus interest expense divided by book equity. Asset growth is defined as change in total assets from the prior fiscal year to current fiscal year. Countries currently included are Brazil,

Chile, China, Colombia, the Czech Republic, Greece, Hungary, India, Indonesia, Kuwait, Malaysia, Mexico, Peru, the Philippines, Poland, Qatar, South Africa, Saudi Arabia, South Korea, Taiwan, Thailand, Turkey, and the UAE. Exclusions: REITs and investment companies.

Dimensional US Ultra-Short Fixed Income Index: Inception: October 2023. February 1999—present: Compiled by Dimensional using data provided by Bloomberg. Based on securities in the universe of the Bloomberg Global Aggregate Bond Index and includes government and corporate AAA—BBB USD bonds, with maturity 1–2 years. The Dimensional US Ultra-Short Fixed Income Index is 50% ICE BofA US 3-Month Treasury Bill Index and 50% Dimensional US 1–2 Year Government/Corporate AAA—BBB bonds. Relative to the US 1–2 Year Government/Corporate bond market weights, the index can overweight corporate bonds with respect to the government bonds when the credit spreads between corporate and government bonds are wide. Within the corporate bonds, it can also overweight corporate BBB bonds with respect to their market weights, when the expected returns of BBB corporate bonds are higher than those of other corporate bonds. Rebalanced monthly. Prior to February 1999: ICE BofA US 3-Month Treasury Bill Index.

Dimensional Short-Term Extended Quality Index: Inception: January 2020. Compiled by Dimensional using data provided by Bloomberg. Includes securities in Bloomberg US 3-5 Year Government, Credit Aaa, Aa, A, Baa indices, and Bloomberg US 1-3 Year Government, Credit Aaa, Aa, A, Baa indices. Securities can be over- or underweighted based on government/credit spreads. When the difference in yields between credit and government bonds is narrow, government bonds may be overweighted. When the difference in yields between credit and government bonds is wide, government bonds may be underweighted. Securities can be over- or underweighted with respect to their market cap weight based on credit spreads. When the difference in yields between AAA+AA and A+BBB is narrow, AAA+AA bonds may be held above market cap weight. When the difference in yields between AAA+AA and A+BBB is wide, AAA+AA bonds may be held below market cap weight. When the difference in yields between AAA+AA and BBB is narrow, BBB bonds may be held below market cap weight. When the difference in yields between AAA+AA and BBB is wide, BBB bonds may be held above market cap weight. The duration of the index is based on the term spread between the 3-5 year government/credit bonds and 1-3 year government/credit bonds. When the term spread is wide, the duration of the index can be longer than the duration of the Bloomberg US Credit 1-5 Year Index. When the term spread is narrow, the duration of the index can be shorter than the duration of the Bloomberg US Credit 1-5 Year Index. The duration of the government component is based on the term spread between 3-5 year government bonds and 1-3 year government bonds. When the term spread is wide, the duration of the index can be longer than the duration of the Bloomberg US Government 1-5 Year Index. When the term spread is narrow, the duration of the index can be shorter than the duration of the Bloomberg US Government 1–5 Year Index. Rebalanced monthly.

Dimensional US Core Fixed Income Index: Inception: December 2021. Compiled by Dimensional using data provided by Bloomberg, Includes securities in the Bloomberg US 5-10Y Government, Credit Aaa, Aa, A, Baa indices; Bloomberg US 1-5Y Government, Credit Aaa, Aa, A, Baa indices; and Bloomberg Remix Portfolio (TBA Proxy) Index. Securities can be over- or underweighted based on government/credit spreads. When the difference in yields between credit and government bonds is narrow, government bonds may be held above 50%. When the difference in yields between credit and government bonds is wide, government bonds may be held below 50%. Securities can be over- or underweighted with respect to their market cap weight based on credit spreads. When the difference in yields between AAA+AA and A+BBB is narrow, AAA+AA bonds may be held above market cap weight. When the difference in yields between AAA+AA and A+BBB is wide, AAA+AA bonds may be held below market cap weight. When the difference in yields between AAA+AA and BBB is wide, BBB bonds may be held above market cap weight. The duration of the index is based on the duration of its government/credit component and the duration of the Bloomberg Remix Portfolio (TBA Proxy) Index. The duration of the government/credit component of the index is based on the term spread between 5-10 year government/credit bonds and 1–5 year government/credit bonds. When the term spread is wide, the duration of the government/credit component can be slightly shorter than the duration of the Bloomberg US Aggregate Bond Index. When the term spread is narrow, the duration of the government/ credit component can be moderately shorter than the duration of the Bloomberg US Aggregate Bond Index. The duration of the government component is based on the term spread between 5–10 year government bonds and 1–5 year government bonds. When the term spread is wide, the duration of the government component can be slightly shorter than the duration of the Bloomberg US Government Index. When the term spread is narrow, the duration of the index can be moderately shorter than the duration of the Bloomberg US Government Index. The index's backtested performance is based on the performance of the government/credit component, the Bloomberg Remix Portfolio (TBA Proxy) Index, and the ICE 1M USD LIBOR Index. Rebalanced monthly. Data includes composite data from multiple sources or custom blends.

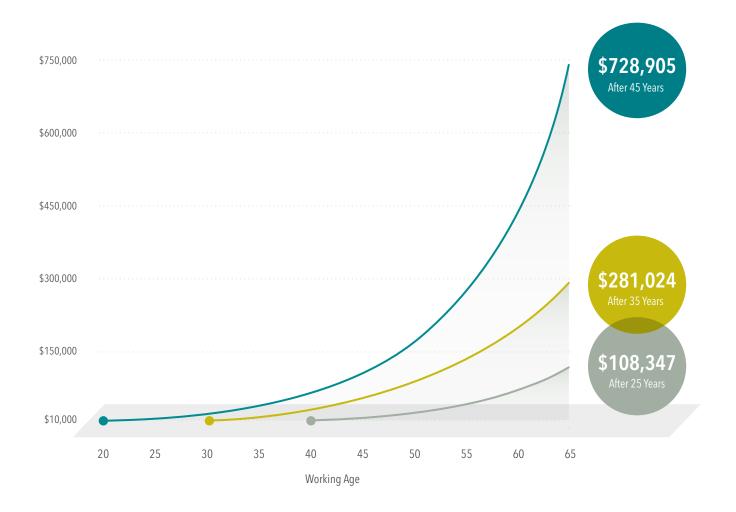
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### The Power of Compounded Returns

### HYPOTHETICAL GROWTH OF \$10,000 OVER 45, 35, AND 25 YEARS

10% annual compounded return



Compounding is a powerful force. When returns are reinvested, the investment's value can grow exponentially over time.

- Consider a hypothetical \$10,000 investment earning 10% a year—the S&P 500 Index's approximate annualized return since 1926.
   Over a 45-year working lifetime (age 20 to 65), \$10,000 would have grown to \$728,905.
- At a 10% annual return, an investment doubles in value about every seven years.
   So, the earlier you start investing, the larger the potential compounding effect.
- For example, investing \$10,000 at age 20 would result in a much higher end value at age 65 than investing the same amount at age 30 or 40.

Compounding can help turn a small investment into substantial wealth.

But to harness that power, the sooner you start, the better.

#### THE POWER OF COMPOUNDED RETURNS

Past performance is no guarantee of future results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful.

In USD. For illustrative purposes only. S&P 500 Index annualized return January 1926—December 2025 is 10.42%. S&P data © 2025 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

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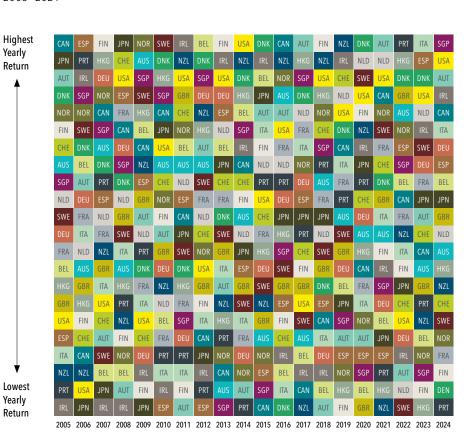
### Diversification

Why invest across different countries and sectors? The benefits of a diversified portfolio.



### The Randomness of Global Stock Returns

### ANNUAL RETURNS FOR DEVELOPED MARKETS, RANKED 2005–2024



### Average Annualized Returns 2005–2024

DNK	Denmark	11.2%
USA	USA	9.8%
NLD	Netherlands	7.5%
SGP	Singapore	7.0%
CHE	Switzerland	6.8%
AUS	Australia	6.6%
CAN	Canada	6.5%
SWE	Sweden	6.0%
HKG	Hong Kong	5.3%
DEU	Germany	5.3%
FRA	France	4.7%
NZL	New Zealand	4.3%
NZL JPN	New Zealand Japan	4.3% 4.3%
JPN	Japan	4.3%
JPN GBR	Japan United Kingdom	4.3% 4.2%
JPN GBR NOR	Japan United Kingdom Norway	4.3% 4.2% 4.1%
JPN GBR NOR ESP	Japan United Kingdom Norway Spain	4.3% 4.2% 4.1% 3.2%
JPN GBR NOR ESP FIN	Japan United Kingdom Norway Spain Finland	4.3% 4.2% 4.1% 3.2% 2.7%
JPN GBR NOR ESP FIN ITA	Japan United Kingdom Norway Spain Finland Italy	4.3% 4.2% 4.1% 3.2% 2.7% 1.6%
JPN GBR NOR ESP FIN ITA BEL	Japan United Kingdom Norway Spain Finland Italy Belgium	4.3% 4.2% 4.1% 3.2% 2.7% 1.6% 1.3%

It is difficult to predict future returns by looking at the past, as shown by the performance of global markets since 2005.

- These charts show 20 years of annual returns in 22 developed markets, sorted from the highest-performing to the lowest.
- The scattered colors suggest it is hard to predict which country will outperform from one year to the next. New Zealand, for example, posted the highest market return in 2019 but the lowest in 2021.
- Investing in markets around the world can result in a more consistent experience, with higher returns in one market helping offset lower returns elsewhere.

A diverse global portfolio can help capture a broader range of returns and deliver more reliable outcomes over time.

#### THE RANDOMNESS OF GLOBAL STOCK RETURNS

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. Diversification neither assures a profit nor guarantees against loss in a declining market.

In USD. MSCI country indices (net dividends) for each country listed. Does not include Israel, which MSCI classified as an emerging market prior to May 2010. MSCI data © MSCI 2025, all rights reserved.

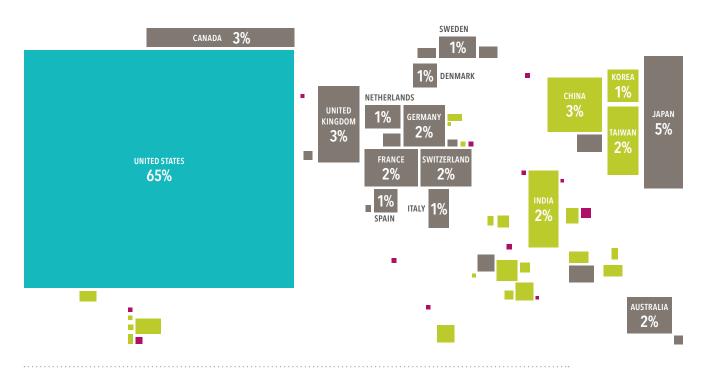
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### Global Diversification Can Make a World of Difference

#### PERCENT OF WORLD EQUITY MARKET CAPITALIZATION

As of December 31, 2024



#### **United States**

- -3,450 companies
- \$61 trillion
- 65% of world market cap

#### Developed ex US

- -6,274 companies
- \$22 trillion
- 23% of world market cap

#### Emerging

- 10,463 companies
- \$11 trillion
- 11% of world market cap

#### Other

- 1,459 companies
- \$404 billion
- 0.4% of world market cap

The US stock market is the biggest in the world, but investors who ignore other global markets may miss out on a wealth of opportunity.

- Stocks of the roughly 18,200 companies trading outside the US represent 35% of the world's \$94 trillion equity market.
- When determining where to invest, a country's size may not be a primary consideration. Japan, for instance, is relatively small but accounts for 5% of the world's equity market value.
- Global diversification captures returns from companies around the world and can potentially offset a weak market with stronger returns elsewhere.

Investing globally can deliver more reliable outcomes over time.

#### GLOBAL DIVERSIFICATION CAN MAKE A WORLD OF DIFFERENCE

#### Past performance is not a guarantee of future results. Diversification neither assures a profit nor guarantees against loss in a declining market.

In USD. Market cap data is free-float adjusted and meets minimum liquidity and listing requirements. Dimensional makes case-by-case determinations about the suitability of investing in each emerging market, making considerations that include local market accessibility, government stability, and property rights before making investments. China A-shares that are available for foreign investors through the Hong Kong Stock Connect program are included in China. 30% foreign ownership limit and 25% inclusion factor are applied to China A-shares. Many nations not displayed. Totals may not equal 100% due to rounding. For educational purposes; should not be used as investment advice. Bloomberg data provided by Bloomberg.

The US stock market is the biggest in the world based on the free-float adjusted market capitalization.

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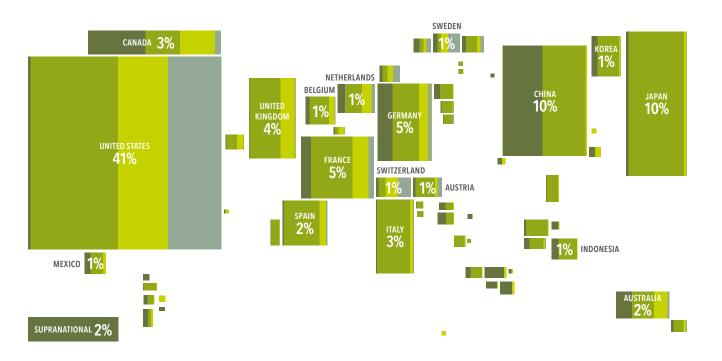


### A World of Opportunity in Global Bonds

#### PERCENT OF WORLD INVESTMENT-GRADE BOND MARKET

As of December 31, 2024

Government-Related Bonds Treasury Bonds Corporate Bonds Securitized Bonds



United States
- \$28 trillion

- 41% of global bond market

ited States Developed ex US

- \$28 trillion

- 43% of global bond market

Emerging

- \$10 trillion

- 15% of global bond market

Other

- \$487 billion

-0.7% global bond market

The global bond market is large, with a vast universe of government and corporate issuers. That presents potential benefits for investors who diversify across countries and different types of bonds.

- The investment-grade bonds in the Bloomberg Global Aggregate Bond Index are valued at almost \$67 trillion, with most of this debt issued outside the US and in currencies other than USD.
- Interest rates can vary across the globe and often do not move in lockstep. Bonds issued in different countries and currencies can offer a range of yields and expected returns.

Investing in bond markets globally can provide the opportunity to pursue broader diversification and higher expected returns while managing risks.

#### A WORLD OF OPPORTUNITY IN GLOBAL BONDS

#### Past performance is not a quarantee of future results. Diversification neither assures a profit nor quarantees against loss in a declining market.

In USD. Data is from Bloomberg Global Aggregate Bond Index. The index excludes noninvestment-grade securities, bonds with less than one year to maturity, tax-exempt municipal securities, linked bonds, and floating-rate issues. The treasury sector includes both nominal and inflation-linked native currency debt issued by central governments, which are backed by the full faith and credit of a central government. Government-related sector groups are issuers with government affiliations, including agencies, sovereigns, supranationals, and local authorities. The corporate sector categorizes issuers based on primary lines of business, revenue streams, and operations used to service debt and includes industrials, financial institutions, and utilities. The securitized sector is designed to capture fixed income instruments whose payments are backed or directly derived from a pool of assets protected or ring-fenced from the credit of a particular issuer (either by a bankruptcy remote special purpose vehicle or bond covenant). Underlying collateral for securitized bonds can include residential mortgages, commercial mortgages, public-sector loans, auto loans, or credit card payments. Many nations are not displayed. Totals may not equal 100% due to rounding. For educational purposes; should not be used as investment advice. Bloomberg data provided by Bloomberg.

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# Here's Why You Should Invest in All the Sectors, Not Just One

### ANNUAL RANKINGS OF EQUITY SECTOR RETURNS 2015–2024

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Best Return	Health Care	Energy	Information Technology	Health Care	Information Technology	Consumer Discretionary	Energy	Energy	Information Technology	Communication Services
	Consumer Discretionary	Communication Services	Materials	Utilities	Communication Services	Information Technology	REITs	Utilities	Communication Services	Information Technology
	Information Technology	Financials	Health Care	Information Technology	Financials	Communication Services	Financials	Consumer Staples	Consumer Discretionary	Financials
	Consumer Staples	Materials	Consumer Discretionary	Consumer Discretionary	Industrials	Materials	Information Technology	Health Care	Industrials	Consumer Discretionary
	Communication Services	Industrials	Industrials	REITs	REITs	Health Care	Materials	Industrials	Financials	Utilities
	REITs	Utilities	Financials	Consumer Staples	Consumer Discretionary	Industrials	Consumer Discretionary	Financials	Materials	Industrials
	Financials	Information Technology	Consumer Staples	Financials	Consumer Staples	Consumer Staples	Industrials	Materials	REITs	Consumer Staples
	Industrials	REITs	Utilities	Communication Services	Utilities	Utilities	Health Care	REITs	Health Care	Energy
	Utilities	Consumer Discretionary	REITs	Industrials	Materials	Financials	Communication Services	Information Technology	Consumer Staples	REITs
	Materials	Consumer Staples	Communication Services	Materials	Health Care	REITs	Consumer Staples	Consumer Discretionary	Energy	Health Care
▼ Worst Return	Energy	Health Care	Energy	Energy	Energy	Energy	Utilities	Communication Services	Utilities	Materials

Sectors represent groups of companies that make similar products or offer comparable services. Recent history shows the challenge of trying to pick "hot" sectors in advance.

- From 2015 to 2024, no sector was a consistent outperformer.
- Energy, the best performer in 2016, 2021, and 2022, delivered the worst annual returns five times. Tech, the leader in 2023, finished ninth out of 11 in 2022. Health care finished first in 2015, last in 2016, and first again in 2018.
- The absence of a reliable pattern in sector performance supports an "own them all" approach.

Holding stocks across all sectors puts investors in a position to capture higher returns where and when they appear.

#### HERE'S WHY YOU SHOULD INVEST IN ALL THE SECTORS, NOT JUST ONE

Past performance is not a guarantee of future results. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

In USD. The annual returns are Russell 3000 Index Global Industry Classification Standard (GICS) sector returns. Real estate investment trusts (REITs) are shown as a separate category to illustrate their exclusion from certain funds. REITs are classified according to the GICS. Real Estate is excluded from the chart because it did not exist as a GICS sector category prior to September 2016.

S&P/MSCI changed the GICS methodology after market close in September 2018 to rename "Telecommunication Services" to "Communication Services" and to reclassify a number of companies to that sector. Dimensional reports these changes in company membership to Communication Services starting in October 2018, but changes the name historically to Communication Services to maintain consistency.

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The GICS was developed by and is the exclusive property of MSCI and S&P Dow Jones Indices LLC, a division of S&P Global.

Sector Definitions:

Communication Services: Companies that provide telecommunication services, such as wire line, wireless, and internet access.

Consumer Discretionary: Companies that produce nonessential goods and services, such as automobiles, apparel, and leisure activities.

Consumer Staples: Companies that produce basic necessities like food, beverages, and household goods.

Energy: Companies involved in the exploration, production, refining, transportation, and marketing of oil, natural gas, and other energy sources.

Financials: Companies that provide financial services, including banks, insurance companies, and investment firms.

Health Care: Companies that provide health-care products and services, including pharmaceuticals, biotechnology, medical devices, hospitals, and health insurance.

Industrials: Companies that manufacture industrial goods, such as machinery, aerospace, construction materials, and chemicals.

Information Technology: Companies that design, develop, and sell computer hardware, software, and services.

Materials: Companies that produce basic materials, such as metals, chemicals, and forest products.

REITs: Companies known as real estate investment trusts, which own, operate, or finance income-producing properties.

Utilities: Companies that provide essential utilities, such as electricity, water, and natural gas.

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# Trying to Time Markets

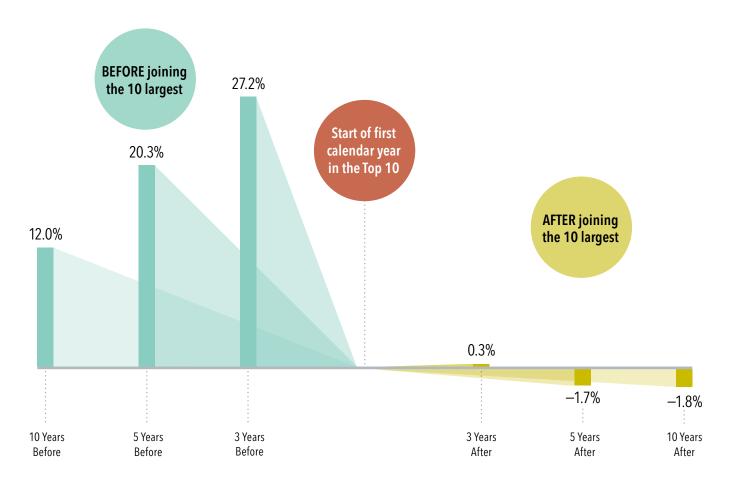
Does market timing work?
The data suggests otherwise.





# Think Twice About Chasing the Biggest Stocks

AVERAGE ANNUALIZED OUTPERFORMANCE OF COMPANIES BEFORE AND AFTER THE FIRST YEAR THEY BECAME ONE OF THE 10 LARGEST IN THE US Compared to S&P 500 Index, 1927–2024



As companies grow to become some of the largest on the US stock market, their returns can be impressive. But not long after joining the Top 10 largest by market cap, these stocks, on average, have lagged behind the market.

- From 1927 to 2024, the average annualized return for these stocks over the three years prior to joining the Top 10 was more than 25% higher than the market.
- Five years after joining the Top 10, these stocks were, on average, underperforming the market—a stark turnaround from before.

Expectations about a firm's prospects are reflected in its current stock price. Positive news might push prices higher, but those changes are not predictable.

#### THINK TWICE ABOUT CHASING THE BIGGEST STOCKS

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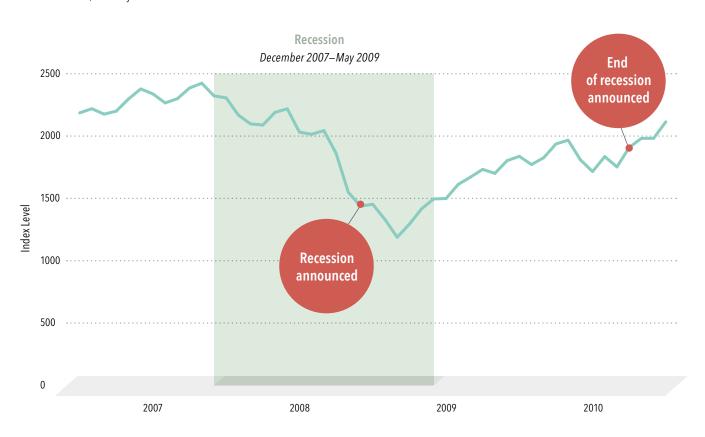
In USD. Source: Dimensional, using data from CRSP. Includes all US common stocks excluding REITs. Largest stocks identified at the end of each calendar year by sorting eligible US stocks on market capitalization. Ten largest companies by market capitalization. Returns after joining the 10 largest are measured as of the start of the first calendar year after a stock joins the Top 10. Annualized excess return is the difference in annualized compound returns between the stock and the S&P 500 Index over the three-, five-, and 10-year periods, before and after each stock's initial year-end classification in the Top 10. Three-, five-, and 10-year annualized returns are computed for companies with return data available for the entire three-, five-, and 10-year periods, respectively. The number of firms included in measuring excess returns prior (subsequent) to becoming a Top 10 stock consists of 44 (58) for the three-year period, 43 (55) for the five-year period, and 34 (49) for the 10-year period. S&P data © 2025, S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

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### Markets Don't Wait for Official Announcements

US RECESSION AND STOCK PERFORMANCE DURING THE GLOBAL FINANCIAL CRISIS S&P 500 Index, January 2007—December 2010



Some investors may worry about the stock market sinking after a recession is officially announced. But history shows that markets incorporate expectations ahead of the news.

- The global financial crisis offers a lesson in the forward-looking nature of the stock market. The US recession spanned from December 2007 to May 2009 (shaded area).
- But the official "in recession" announcement came in December 2008—a year after the recession had started. By then, stock prices had already dropped more than 40%.
- Although the recession ended in May 2009, the announcement came 16 months later, by which time US stocks had rebounded.

Investors who look beyond after-thefact headlines about markets and the economy and stick to a plan may be better positioned for long-term success.

#### MARKETS DON'T WAIT FOR OFFICIAL ANNOUNCEMENTS

Past performance is no guarantee of future results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful. Indices are not available for direct investment. Index returns are not representative of actual portfolios and do not reflect costs and fees associated with an actual investment.

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Start and end dates of US recessions, along with announcement dates, are from the National Bureau of Economic Research (NBER): <a href="https://nber.org/research/data/us-business-cycle-expansions-and-contractions">nber.org/research/data/us-business-cycle-expansions-and-contractions</a> and <a href="https://nber.org/research/data/us-business-cycle-dating/business-cycle-dat

Stock price decline of more than 40% from December 2007 to December 2008 is based on the S&P 500 Index's price difference between the actual start of the recession in December 2007 and the official "in recession" annuancement 12 months later..

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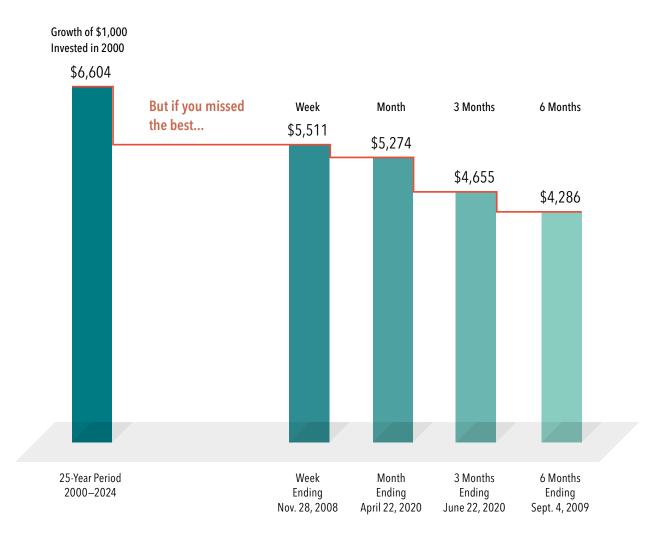
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# The Cost of Trying to Time the Market

#### MISSING THE BEST CONSECUTIVE DAYS

Russell 3000 Index total return, 2000-2024



The impact of being out of the market for a short time can be profound, as shown by this hypothetical investment in the Russell 3000 Index, a broad US stock market benchmark.

- A hypothetical \$1,000 investment made at the beginning of 2000 turns into \$6,604 for the 25-year period ending December 31, 2024.
- Miss the Russell 3000's best week, and the value shrinks to \$5,511. Miss the best three months, and the total return falls to \$4,655.
- There's no proven way to time the market targeting the best days or moving to the sidelines to avoid the worst.

Staying invested and focused on the long term helps to ensure that you're in position to capture what the market has to offer.

#### THE COST OF TRYING TO TIME THE MARKET

Past performance is no guarantee of future results. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

In USD. For illustrative purposes only. Best performance dates represent end of period (November 28, 2008, for best week; April 22, 2020, for best month; June 22, 2020, for best three months; and September 4, 2009, for best six months). The missed best consecutive days examples assume that the hypothetical portfolio fully divested its holdings at the end of the day before the missed best consecutive days, held cash for the missed best consecutive days, and reinvested the entire portfolio in the Russell 3000 Index at the end of the missed best consecutive days. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

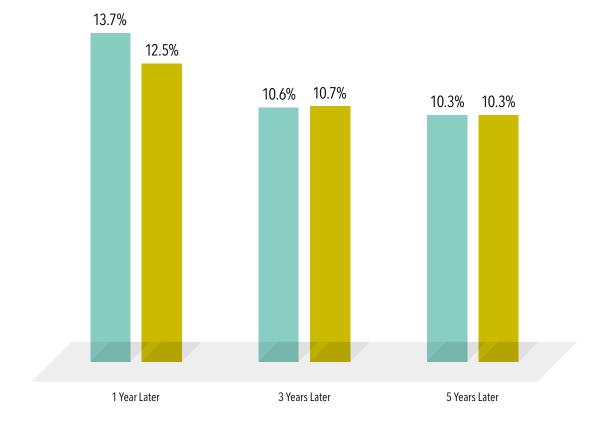
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# Why a Stock Peak Isn't a Cliff

S&P 500 INDEX, AVERAGE ANNUALIZED COMPOUND RETURNS 1926–2024





Many investors may think a market high is a signal stocks are overvalued. However, they may be surprised to find that the average returns one, three, and five years after a new month-end market high are similar to those after months that ended at any level.

- In looking at all monthly closing levels between 1926 and 2024 for the S&P 500 Index, 31% of them were new highs.
- After those highs, the annualized returns ranged from almost 14% one year later to more than 10% over the next five years, which were close to average returns over any period of the same length.

Stocks are priced to deliver a positive expected return for investors, so reaching record highs regularly is the outcome one would expect.

#### WHY A STOCK PEAK ISN'T A CLIFF

Past performance is no guarantee of future results. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

In USD. For illustrative purposes only. New market highs are defined as months ending with the market above all previous levels for the sample period. Annualized compound returns are computed for the relevant time periods subsequent to new market highs and averaged across all new market highs observations. There were 1,187 observation months in the sample. January 1926—December 1989: S&P 500 Index, Stocks, Bonds, Bills and Inflation Yearbook™, Ibbotson Associates, Chicago. January 1990—present: S&P 500 Index (total return), S&P data © 2025 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

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# Market Volatility

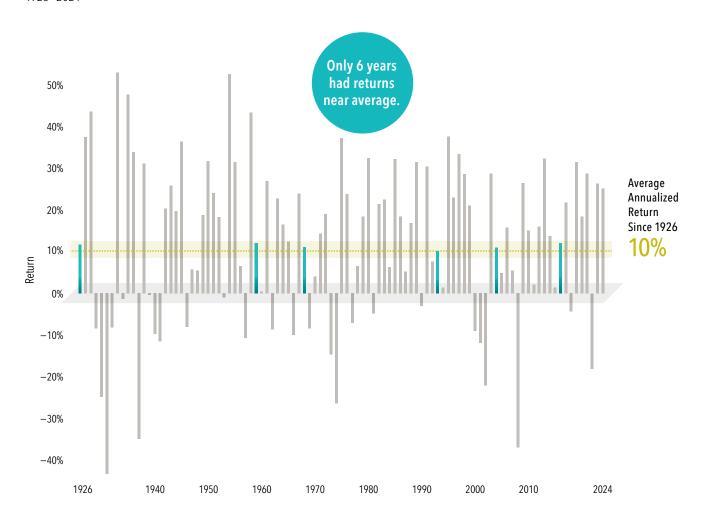
Do volatile markets stir anxiety?

Take the long view.



# The Bumpy Road to the Market's Long-Term Average

### ANNUAL RETURNS FOR S&P 500 INDEX 1926–2024



Since 1926, the US stock market has rewarded investors with an annualized return of about 10%. But returns in any given year may be sky-high, extremely poor, or somewhere in between.

- Annual returns came within two percentage points of the market's long-term average in just six of the past 99 years.
- Yearly returns have ranged as high as up 54% and as low as down 43%.
- Since 1926, annual returns have been positive 73 times and negative 26 times.

Understanding the range of potential outcomes can help you stick with a plan and ride out the inevitable ups and downs.

#### THE BUMPY ROAD TO THE MARKET'S LONG-TERM AVERAGE

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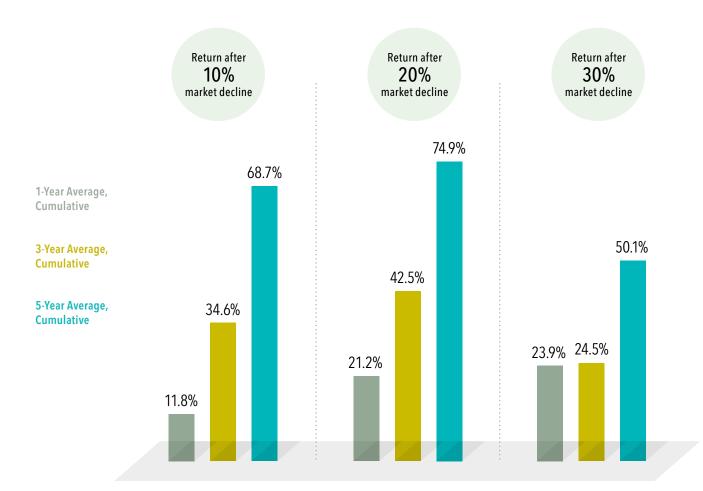
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# Stock Gains Can Add Up After Big Declines

#### FAMA/FRENCH TOTAL US MARKET RESEARCH INDEX RETURNS July 1926—December 2024



Sudden market downturns can be unsettling. But historically, US equity returns following sharp downturns have, on average, been positive.

- A broad market index shows that US stocks have tended to deliver positive returns over one-, three-, and five-year periods following steep declines.
- Cumulative returns show this to striking effect.
   Five years after market declines of 10%, 20%, and 30%, the cumulative returns all top 50%.
- Stocks posted especially notable rebounds after declines of at least 20%, the threshold for a bear market. After three years, stocks gained more than 40%, and nearly 75% within five years.

Sticking with your plan helps put you in the best position to capture the recovery.

#### STOCK GAINS CAN ADD UP AFTER BIG DECLINES

Past performance is no guarantee of future results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful. Short-term performance results should be considered in connection with longer-term performance results.

In USD. Market declines or downturns are defined as periods in which the cumulative return from a peak is -10%, -20%, or -30%, or lower. Returns are calculated for the one-, three-, and five-year look-ahead periods beginning the day after the respective downturn thresholds of -10%, -20%, or -30% are exceeded. The bar chart shows the average returns for the one-, three-, and five-year periods following the 10%, 20%, and 30% thresholds. For the 10% threshold, there are 30 observations for one-year look-ahead, 29 observations for three-year look-ahead, and 28 observations for five-year look-ahead. For the 20% threshold, there are 20% observations for one-year look-ahead, and 20% threshold, there are seven observations for one-year look-ahead, and 20% threshold, there are seven observations for one-year look-ahead, and 20% threshold, there are seven observations for one-year look-ahead, and 20% threshold, there are seven observations for five-year look-ahead. Peak is a new all-time high prior to a downturn. Data provided by Fama/French and available at 20% materials are incompletely look-ahead. Peak is a new all-time high prior to a downturn. Data provided by Fama/French and available at 20% materials are incompletely look-ahead. Peak is a new all-time high prior to a downturn. Data provided by Fama/French and available at 20% materials are incompletely look-ahead. Peak is a new all-time high prior to a downturn. Data provided by Fama/French and available at 20% materials are incompletely look-ahead. Peak is a new all-time high prior to a downturn. Data provided by Fama/French and available at 20% materials are incompletely look-ahead. Peak is a new all-time high prior to a downturn.

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.

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.

Results shown during periods prior to each index's 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.

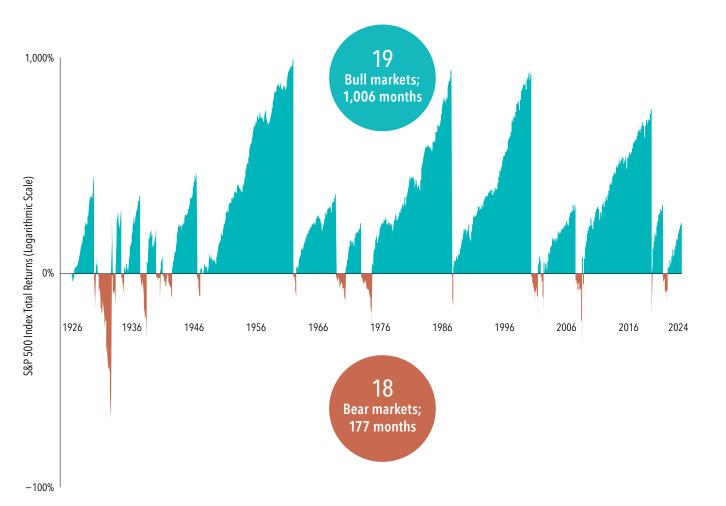
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# Bulls, Bears, and Long-Term Benefits of Stock Investing

#### S&P 500 INDEX TOTAL RETURNS 1926–2024



Stock returns are volatile, but nearly a century of bull and bear markets shows that the good times have outshone the bad.

- From 1926 through 2024, the S&P 500 Index experienced 18 bear markets, or a fall of at least 20% from a previous peak, ranging from –21% to –80% across an average length of 10 months.
- On the upside, there were 19 bull markets, or gains of at least 20% from a previous trough. They averaged 53 months in length, and advances ranged from 21% to 936%.
- When bull and bear markets are viewed together, it's clear equities have rewarded disciplined investors.

The stock market's ups and downs are unpredictable, but history supports an expectation of positive returns over the long term.

#### BULLS, BEARS, AND LONG-TERM BENEFITS OF STOCK INVESTING

Past performance is no guarantee of future results. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

In USD. Chart end date is December 31, 2024; the last trough-to-end-of-period return of 70% represents the return through December 2024. Due to availability of data, monthly returns are used from January 1926 through December 1989; daily returns are used from January 1990 through the present. Periods in which the cumulative return from peak is –20% or lower, and a recovery of 20% from trough has not yet occurred, are considered bear markets. Bull markets are subsequent rises following the bear market trough through the next recovery of at least 20%. The chart shows bear markets and bull markets, the number of months they lasted, and the associated cumulative performance for each market period. Results for different time periods could differ from the results shown. A logarithmic scale is a nonlinear scale in which the numbers shown are a set distance along the axis and the increments are a power, or logarithm, of a base number. This allows data over a wide range of values to be displayed in a condensed way.

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### Do Downturns Lead to Down Years?

### YEAR-BY-YEAR RETURNS, WITH STEEPEST DECLINE WITHIN EACH YEAR Russell 3000 Index, 2005–2024



Stock market declines over a few days or months may lead investors to anticipate a down year. But the US stock market has had positive annual returns in many years despite some notable dips.

- Intrayear declines for the index ranged from 3% to 49%.
- Many years with large intrayear declines saw positive annual returns.
- In 17 of the last 20 years, US stocks ended up with gains for the year.

Tumbles may be scary, but they shouldn't be surprising. And a short-term slump needn't mean a full-year fall.

### DO DOWNTURNS LEAD TO DOWN YEARS?

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In USD. Data is calculated off rounded daily returns. US market is represented by the Russell 3000 Index. Largest intrayear decline refers to the largest market decrease from peak to trough during the year. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

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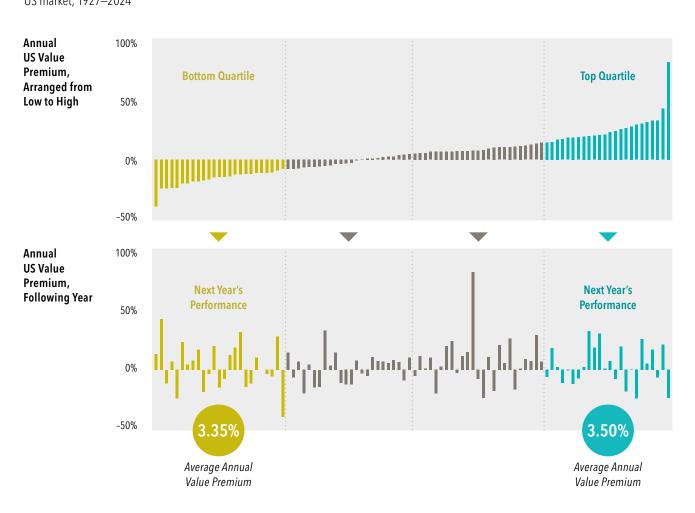
## Performance of Premiums

Can you identify assets that may outperform? History is a guide.



## Staying the Course with Value Stocks

### ANNUAL VALUE PREMIUM AND FOLLOWING-YEAR VALUE PREMIUM US market, 1927–2024



Investors often wonder about what a strong or a weak year for value stocks might suggest about value's performance versus growth the next year.

- Value stocks are expected to perform better than growth stocks every day, because a lower relative price is associated with a higher expected return.
- To evaluate value's performance from one year to the next, we arranged years based on the annual value premium, then looked at the next year's performance.
- The bottom-quartile years—those with the weakest value performance—were followed by an average annual value premium of 3.35%. The top-quartile years were followed by an average annual value premium of 3.50%.

Value's average relative performance has been positive after the strongest and weakest years for the premium. Having consistent exposure can help capture long-term returns.

#### STAYING THE COURSE WITH VALUE STOCKS

Past performance is not a guarantee of future results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful.

In USD. Annual value premium is the return difference between the Fama/French US Value Research Index and the Fama/French US Growth Research Index. Source: CRSP and Compustat data calculated by Dimensional. Fama/French data provided by Fama/French.

Yearly premiums in top chart are arranged from low to high rather than chronologically, covering 1927–2024. Premiums in bottom chart are arranged in the order of the top chart, but one year later in each instance, to show next-year performance.

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 Nasdag 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).

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Results shown during periods prior to each index's 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.

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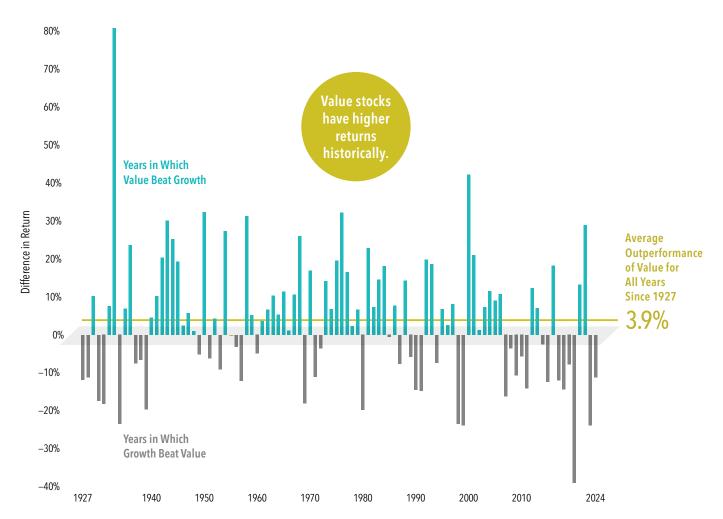
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## When It's Value vs. Growth, History Is on Value's Side

### YEARLY OBSERVATIONS OF THE PREMIUMS

Difference in return for value stocks minus growth stocks in US markets, 1927–2024



Historically, value stocks have outperformed growth stocks in the US, often by a striking amount.

- Data covering nearly a century backs up the notion that value stocks—those with lower relative prices—have higher expected returns.
- Value premiums have often shown up quickly and in large magnitudes. For example, in years when value outperformed growth, the average premium was nearly 15%.
- A consistent focus on value stocks is essential to capturing these outsize value premiums when they appear.

Logic and history support a commitment to value stocks so investors can be positioned to take part when those shares outperform in the future.

#### WHEN IT'S VALUE VS. GROWTH, HISTORY IS ON VALUE'S SIDE

Past performance is no guarantee of future results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful..

In USD. Yearly premiums are calculated as the difference in one-year returns between the two indices described. Value minus growth: Fama/French US Value Research Index minus the Fama/French US Growth Research Index.

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).

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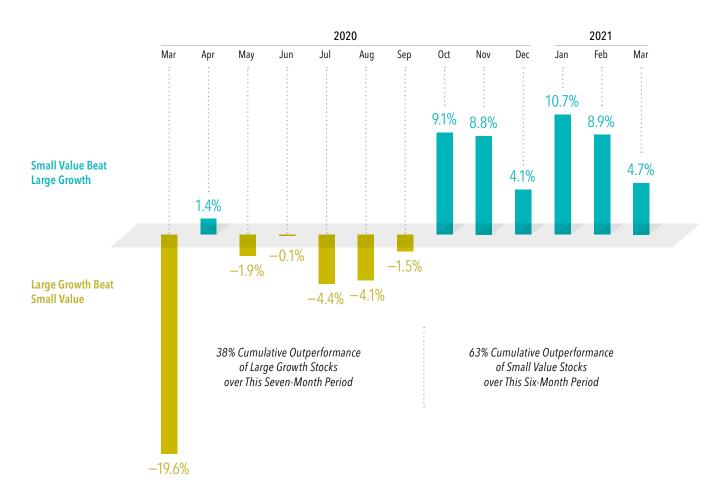
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## Swing in Small Value Stocks Shows Benefits of Sticking with a Plan

MONTHLY RETURN DIFFERENCES: US SMALL VALUE STOCKS VS. US LARGE GROWTH STOCKS March 2020—March 2021



Value stocks, or those with low relative prices, have outperformed higher-priced growth stocks in the US over the long term. Similarly, small cap stocks have fared better than large caps in the US. But the performance of these stocks has varied at different points in history.

- As the global pandemic rocked markets in March 2020, large growth stocks outdid small value stocks by 19.6%. From March through September, the large growth index beat small value by a cumulative 38%.
- But history has shown that a disappointing period for a premium can be followed by a quick turnaround. From October 2020 through March 2021, the small value index outperformed large growth by 63%.

Swings in small value stocks can be swift—staying invested is the best way to capture expected gains over time.

#### SWING IN SMALL VALUE STOCKS SHOWS BENEFITS OF STICKING WITH A PLAN

### Past performance is not a guarantee of future results.

In USD. Small value vs. large growth is the monthly return difference of the Fama/French US Small Value Research Index minus the Fama/French US Large Growth Research Index.

**Note:** From July 1, 1926, through March 31, 2021, the Fama/French US Value Research Index outperformed the Fama/French US Growth Research Index by 2.84 percentage points on an annualized basis. The Fama/French US Small Cap Research Index outperformed the Fama/French US Large Cap Research Index by 1.83 percentage points on an annualized basis over that period.

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 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 Nasdag equivalents since 1973) that have larger market capitalization than the median NYSE company.

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.

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.

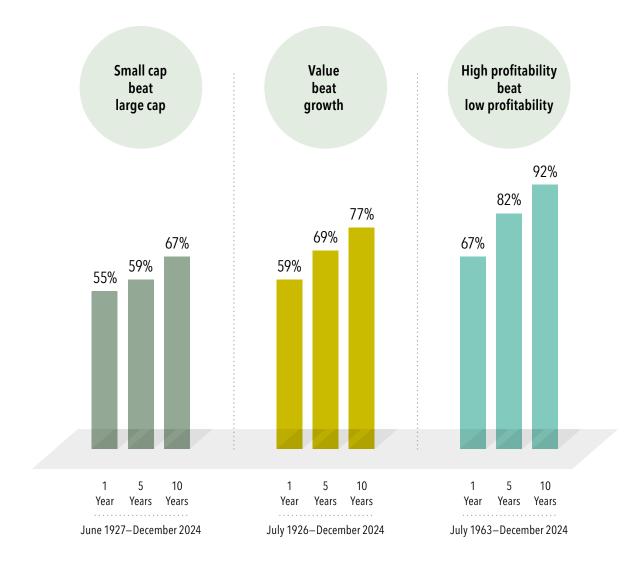
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## How Often Do Small Cap, Value, and High Profitability Outperform?

### FREQUENCY OF PREMIUM OUTPERFORMANCE



Looking at average annualized returns going back decades, small cap stocks have beaten large caps, value has outperformed growth, and high profitability stocks have outgained low profitability stocks. How should investors think about these premiums over shorter time periods?

- We can evaluate the reliability of the premiums by examining performance during rolling, overlapping periods formed each month (e.g., January to December, February to January, etc.).
- The premiums were positive over most oneand five-year periods, and their reliability increased over longer stretches. Value, for instance, beat growth in 77% of 1,063 measurable 10-year periods.

When investors target the size, value, and profitability premiums, a long-term focus increases the odds of achieving positive outcomes.

#### HOW OFTEN DO SMALL CAP, VALUE, AND HIGH PROFITABILITY OUTPERFORM?

Past performance is no guarantee of future results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

In USD. Chart based on monthly rolling returns, computed as follows: Dimensional US Small Cap Index minus S&P 500 Index, June 1927—December 2024; Fama/French US Value Research Index minus Fama/French US Growth Research Index, July 1926—December 2024; and Fama/French US High Profitability Index minus Fama/French US Low Profitability Index, July 1963—December 2024. S&P data © 2025 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

Small vs. Large: 1,160 periods of one year; 1,112 periods of five years; 1,052 periods of 10 years. Value vs. Growth: 1,171 periods of one year; 1,123 periods of five years; 1,063 periods of 10 years; High Profitability vs. Low Profitability: 727 periods of one year; 679 periods of five years; 619 periods of 10 years.

Size premium: The return difference between small market capitalization stocks and large market capitalization stocks. Value premium: The return difference between stocks with low relative prices (value) and stocks with high relative prices (growth). Profitability premium: The return difference between stocks of companies with high profitability over those with low profitability.

Dimensional US Small Cap Index: Created by Dimensional in March 2007 and compiled by Dimensional. It represents a market-capitalization-weighted index of securities of the smallest US companies whose market capitalization falls in the lowest 8% of the total market capitalization of the eligible market. The eligible market is composed of securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market. Exclusions: non-US companies, REITs, UITs, and investment companies. From January 1975 to the present, the index excludes companies with the lowest profitability and highest relative price within the small cap universe. The index also excludes those companies with the highest asset growth within the small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Asset growth is defined as change in total assets from the prior fiscal year to current fiscal year. Source: CRSP and Compustat. The index monthly returns are computed as the simple average of the monthly returns of 12 subindices, each one reconstituted once a year at the end of a different month of the year. The calculation methodology for the Dimensional US Small Cap Index was amended on January 1, 2014, to include profitability as a factor in selecting securities for inclusion in the index.

Fama/French US Value Research Index: July 1926—present: 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: July 1926—present: 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 High Profitability Index: July 1963—present: 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: 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.

The Dimensional and 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.

Results shown during periods prior to each index's 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.

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# Economy and Inflation

Worried about the economy and inflation?
Markets are one step ahead.



## Will Inflation Hurt Stock Returns? Not Necessarily.

STOCKS VS. INFLATION 1995–2024

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Investors may wonder whether stock returns will suffer if inflation keeps rising. But a look at equity performance in the past three decades does not show any reliable connection between periods of high (or low) inflation and US stock returns.

- Stock returns can be strong, or weak, or in between when inflation is high. For example, returns were relatively strong in 2021 but poor in 2022.
- Twenty-three of the past 30 years saw positive stock returns even after adjusting for the impact of inflation.
- Over the period charted, the S&P 500 posted an annualized return of 8.2% after adjusting for inflation.

History shows that stocks tend to outpace inflation over time—a valuable reminder for investors concerned about rising prices.

### WILL INFLATION HURT STOCK RETURNS? NOT NECESSARILY.

Past performance is no guarantee of future results. Short-term performance results should be considered in connection with longer-term performance results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

In USD. Real returns illustrate the effect of inflation on an investment return and are calculated using the following method:

[(1 + nominal return of index over time period) / (1 + inflation rate)] - 1.

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Inflation is based on the nonseasonally adjusted 12-month percentage change in the consumer price index for all urban consumers (CPI-U). Source: US Bureau of Labor Statistics.

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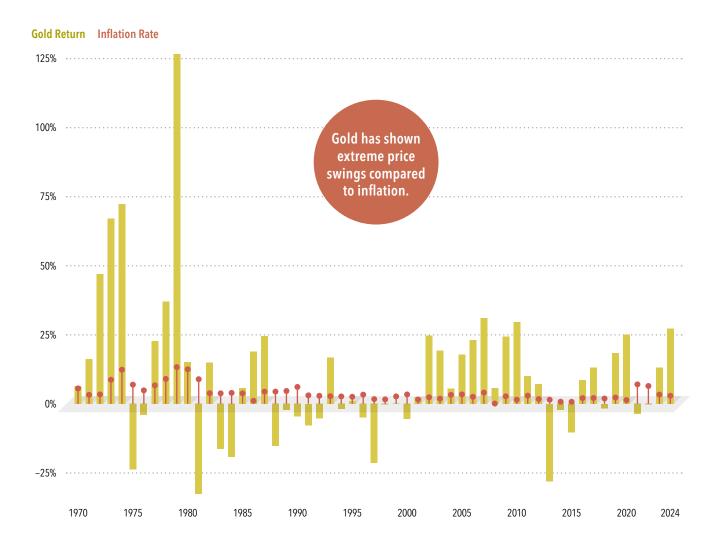
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# Gold Hasn't Been Effective at Tracking Inflation

ANNUAL US INFLATION RATE VS. CHANGE IN GOLD PRICE 1970–2024



Gold is sometimes touted as an effective tool for protecting wealth from rising prices. But history shows the challenges of using gold to offset the impact of inflation.

- Since 1970, gold has experienced extreme price swings when compared with changes in the rate of inflation.
- An effective inflation-hedging tool should have return volatility that is more on par with changes in consumer prices.
- If your goal is to hedge against inflation, using Treasury Inflation-Protected Securities (TIPS), whose values adjust with inflation, may be a more reliable approach.

It's reasonable to be concerned about rising prices, but investors who want to hedge against inflation may find gold to be the wrong tool for the job.

### GOLD HASN'T BEEN EFFECTIVE AT TRACKING INFLATION

### Past performance is not a guarantee of future results. Indices are not available for direct investment.

In USD. US inflation is the annual rate of change in the consumer price index for all urban consumers (CPI-U, not seasonally adjusted) from the Bureau of Labor Statistics. Gold spot price returns are provided by Bloomberg. Bloomberg data provided by Bloomberg.

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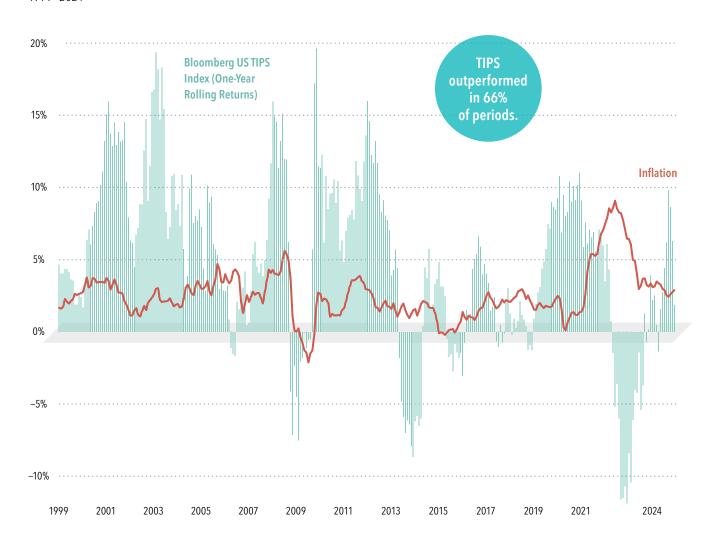
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# TIPS Can Help Investors Hedge Inflation

### TREASURY INFLATION-PROTECTED SECURITIES VS. INFLATION 1999–2024



Some investors may want to hedge against unexpected spikes in inflation. Treasury Inflation-Protected Securities (TIPS) can be a useful tool for achieving this goal.

- In simple terms, the principal value of a TIPS bond goes up when inflation rises (and vice versa). However, like all bonds, TIPS can be affected by changes in interest rates.
- When rates rise, the prices of existing bonds fall as new bonds issued with higher rates become more attractive. That means the total return of a TIPS bond can be higher or lower than the annual inflation adjustment.
- Still, the chart shows that TIPS outperformed inflation in 66% of the rolling 12-month periods from 1999 to 2024.

For investors seeking to protect their purchasing power as inflation rises, TIPS can be an effective option.

#### TIPS CAN HELP INVESTORS HEDGE INFLATION

Past performance is no guarantee of future results. Investing risks include loss of principal and fluctuating value. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

In USD. The principal of a TIPS increases with inflation and decreases with deflation, as measured by the consumer price index. When a TIPS matures, you are paid the adjusted principal or original principal, whichever is greater. TIPS pay interest twice a year, at a fixed rate. The rate is applied to the adjusted principal; that means interest payments, like the principal, rise with inflation and fall with deflation.

Rolling returns measure the return for each 12-month period (January to January, February to February, March to March, etc.) between the start and end dates.

Bloomberg US TIPS Index, January 1999 through December 2024. Bloomberg data provided by Bloomberg.

Inflation based on nonseasonally adjusted percentage change in the consumer price index for all urban consumers (CPI-U). Source: US Bureau of Labor Statistics.

Fixed income securities are subject to increased loss of principal during periods of rising interest rates, and they are subject to various other risks, including changes in credit quality, liquidity, prepayments, and other factors. Inflation-protected securities may react differently from other debt securities to changes in interest rates.

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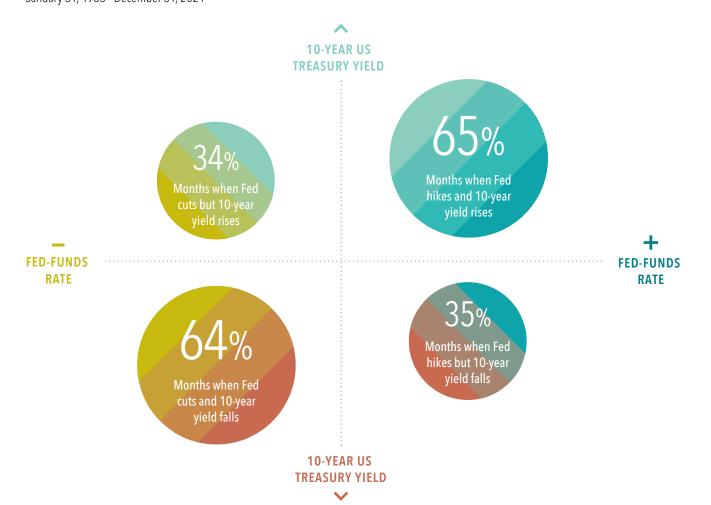
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### How Do the Fed's Moves Affect Market Interest Rates?

FEDERAL-FUNDS RATE AND 10-YEAR TREASURY YIELD: HOW OFTEN THEY MOVE IN SAME OR OPPOSITE DIRECTION January 31, 1983—December 31, 2024



Investors may worry about the impact of interest rate changes by the Federal Reserve. But it's important to understand that the market and the Fed don't necessarily move in lockstep.

- Consider changes in the closely watched federal-funds rate, controlled by the Fed, and the yield on the 10-year Treasury note, a widely followed benchmark in the fixed income market.
- From January 31, 1983, to December 31, 2024, the Treasury yield moved in the same direction as the fed-funds rate nearly two-thirds of the time (bottom left, top right). But in roughly one-third of months when the Fed cut or raised rates, the yield on the 10-year moved in the opposite direction (top left, bottom right).
- The market is constantly pricing new information into bond yields, including anticipated changes by the Fed.

The federal-funds rate isn't a reliable predictor of how market interest rates will move in the future.

#### HOW DO THE FED'S MOVES AFFECT MARKET INTEREST RATES?

Past performance is no guarantee of future results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful.

Increases (+) and decreases (–) in the federal-funds rate and 10-year Treasury yield refer to monthly changes.

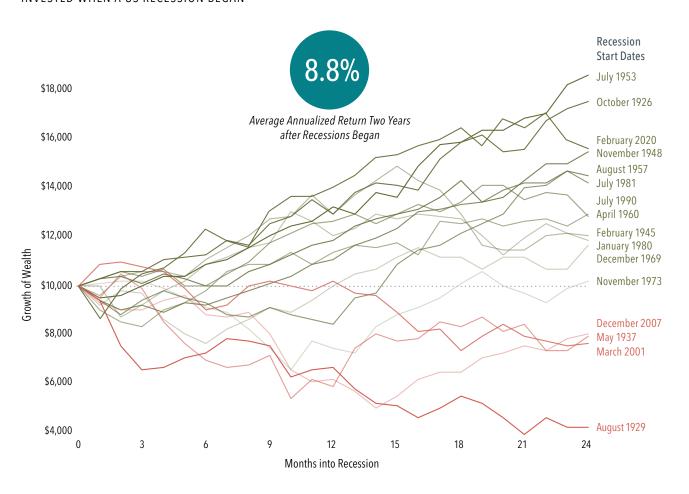
Source: Federal Reserve Economic Data (FRED) from the Federal Reserve Bank of St. Louis. Data series used: Market Yield on US Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis, Percent, Daily, Not Seasonally Adjusted (DGS10); Federal Funds Target Rate (DISCONTINUED), Percent, Daily, Not Seasonally Adjusted (DFEDTARV); and Federal Funds Target Range - Upper Limit, Percent, Daily, Not Seasonally Adjusted (DFEDTARU). Circles corresponding to a rate cut do not sum to 100% due to monthly periods of no yield change for the 10-Year US Treasury note.

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## Long-Term Investors, Don't Let a Recession Faze You

### PERFORMANCE OF A HYPOTHETICAL \$10,000 INVESTED WHEN A US RECESSION BEGAN



Investors may be tempted to abandon equities when there is a heightened risk of a recession. But research has shown that stock prices incorporate these expectations and generally fall in value before a recession even begins.

- In 12 of the 16 recessions in the US over the past century, stock returns were positive two years after the recession began.
- The average annualized return two years after the onset of these 16 recessions was 8.8%.
- A \$10,000 investment at the peak of the business cycle would have grown to \$12,145 after two years on average.

A history of positive average performance following a recession can be a comfort for investors concerned about sticking with stocks.

#### LONG-TERM INVESTORS, DON'T LET A RECESSION FAZE YOU

Past performance is no guarantee of future results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful.

In USD. Performance includes reinvestment of dividends and capital gains.

Growth of wealth shows the growth of a hypothetical investment of \$10,000 in the securities in the Fama/French Total US Market Research Index over the 24 months starting the month after the relevant recession start date. Index data presented in the growth of wealth chart is hypothetical and assumes reinvestment of income and no transaction costs or taxes. Sample includes 16 US recessions as identified by the National Bureau of Economic Research (NBER) from October 1926 to February 2020. NBER defines recessions as starting at the peak of a business cycle. A business cycle is a description of the various stages of economic output.

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.

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.

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.

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## Politics and Markets

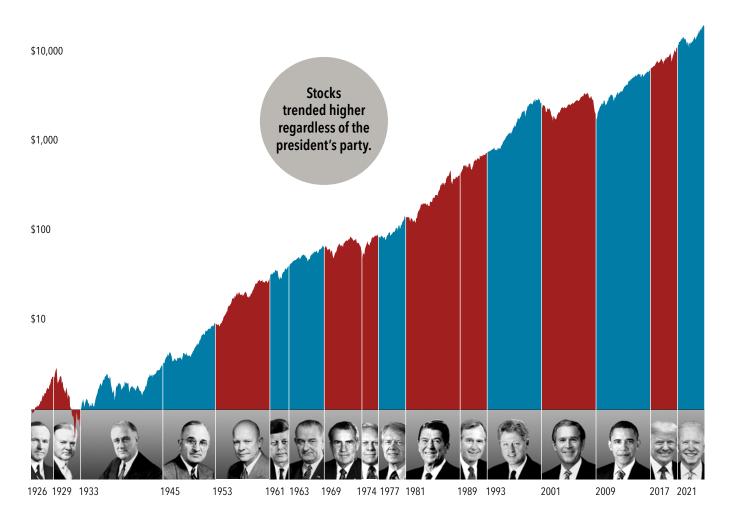
Should politics affect your investing strategy?
See what the data tells us.





### The Market and US Presidential Elections

HYPOTHETICAL GROWTH OF \$1 INVESTED IN THE S&P 500 INDEX 1926–2024



It's natural for investors to look for a connection between who wins the White House and which way stocks will go. But regardless of who wins, nearly a century of returns shows that stocks have trended upward.

- Shareholders are investing in companies, which focus on serving their customers and growing their businesses, regardless of who is in the White House.
- US presidents may have an impact on market returns, but so do many other factors—the actions of foreign leaders, interest rate changes, changing oil prices, and technological advances, just to name a few.

Stocks have rewarded disciplined investors for decades, through both Democratic and Republican presidencies.

### THE MARKET AND US PRESIDENTIAL ELECTIONS

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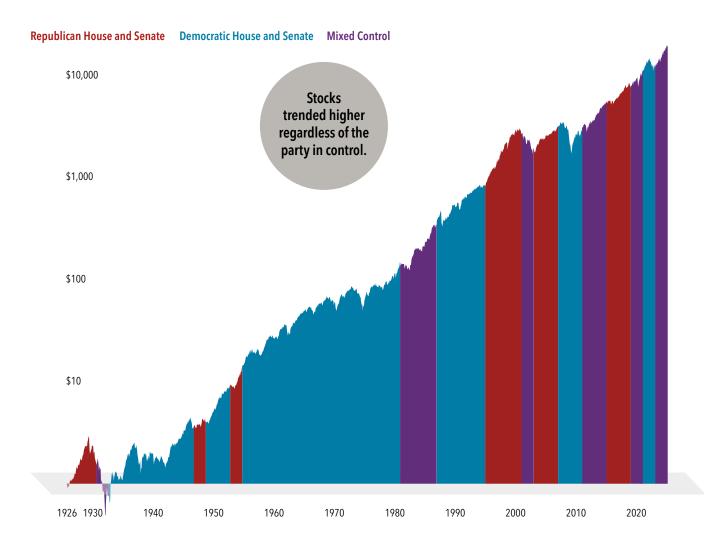
In USD. Growth of wealth shows the growth of a hypothetical investment of \$1 in the securities in the S&P 500 Index. S&P data © 2025 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Data presented in the growth of wealth chart is hypothetical and assumes reinvestment of income and no transaction costs or taxes. The chart is for illustrative purposes only and is not indicative of any investment.

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## The Market and Control of US Congress

HYPOTHETICAL GROWTH OF \$1 INVESTED IN THE S&P 500 INDEX 1926–2024



Nearly a century of US stock market returns suggests that making investment decisions based on control of the chambers of Congress is unlikely to lead to better financial outcomes.

- From 1926 to 2024, stocks trended higher regardless of whether Democrats or Republicans controlled the House and the Senate, or whether control was mixed.
- Actions by Congress may impact returns, but other factors like geopolitical events, interest rate changes, and technological advances do too.
- Shareholders invest in companies, which focus on serving their customers and growing their businesses, regardless of what happens in Washington.

Stocks tend to reward disciplined investors no matter who has the upper hand in the House and Senate.

### THE MARKET AND CONTROL OF US CONGRESS

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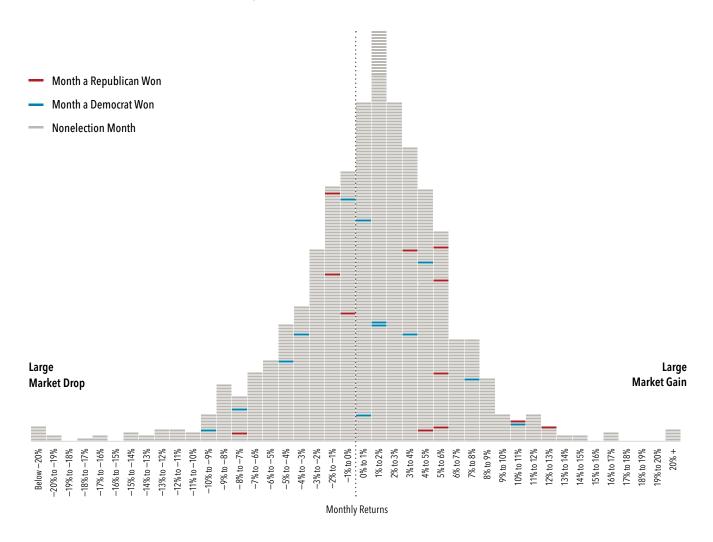
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### How US Stocks Have Behaved in an Election Month

### US PRESIDENTIAL ELECTIONS AND MONTHLY RETURNS

Distribution of returns for S&P 500 Index, January 1926-December 2024



The history of the stock market going back to 1926 shows that returns in months when presidential elections took place don't reflect any consistent patterns.

- This chart shows the S&P 500 Index, with each horizontal dash representing a month, arranged from left to right by market return in 1% increments.
- Most election months haven't produced extreme returns in one direction or the other.
- The winning party hasn't been a reliable driver for the direction or magnitude of market movements in election months either.

The history of market behavior during election months makes a strong case for sticking with a plan to achieve long-term goals.

### HOW US STOCKS HAVE BEHAVED IN AN ELECTION MONTH

Past performance is not a guarantee of future results. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

In USD. Dashes representing returns for a given month are stacked in ascending order of return within each column, with highest return within that range on top. S&P data © 2025 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

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