

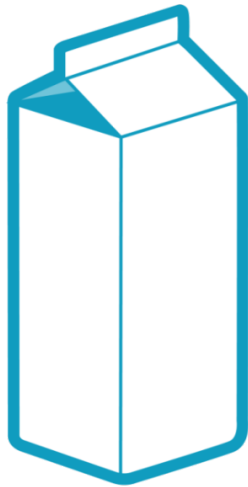
A Different Way to Invest



Why Invest?

# Your Money Today Will Likely Buy Less Tomorrow

**1920**



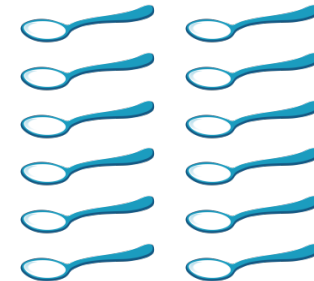
\$0.17 = Quart of milk

**1970**



\$0.17 = 2 Cups of milk

**2020**



\$0.17 = 12 Tablespoons of milk

In US dollars.

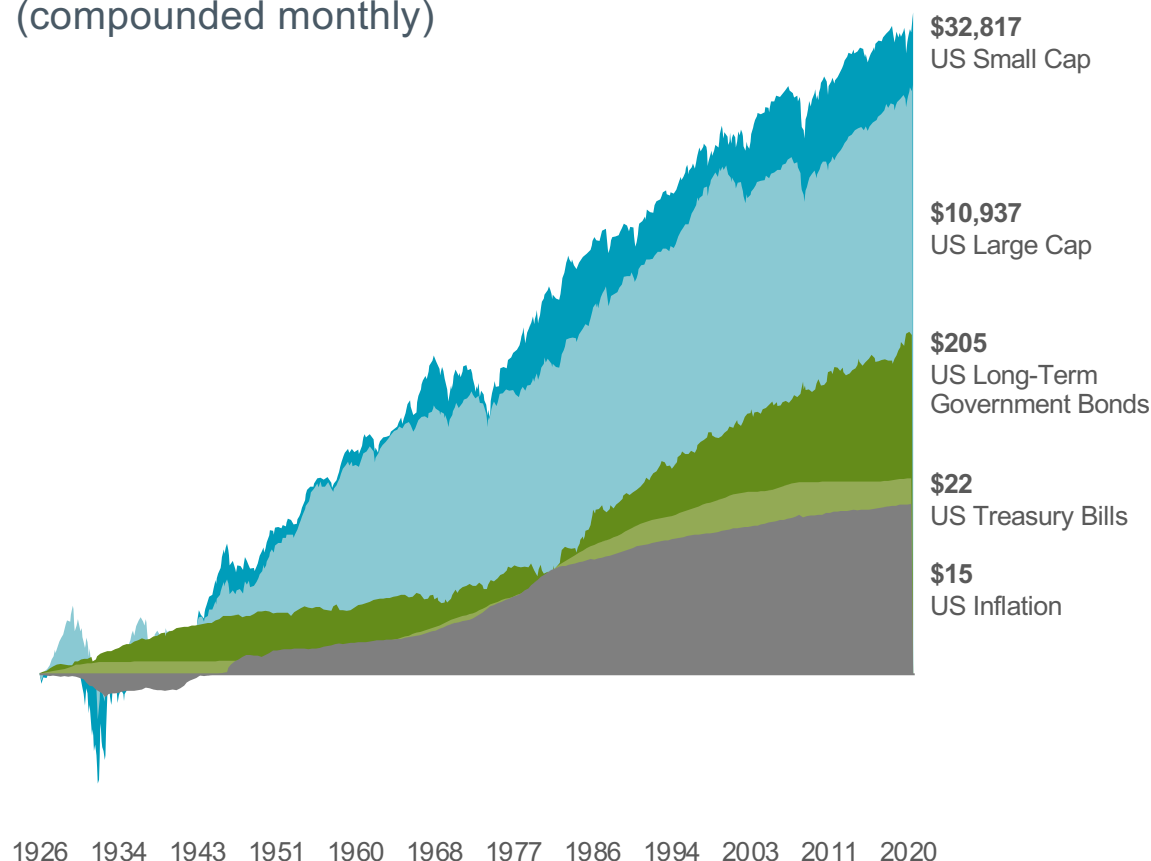
Source for 1920 and 1970: Historical Statistics of the United States, Colonial Times to 1970/US Department of Commerce. Source for 2020: US Department of Labor, Bureau of Labor Statistics, Economic Statistics, Consumer Price Index—US City Average Price Data.

Investing means taking risks.

Not  
investing means taking risks,  
too.

# Let Markets Work for You

Growth of a dollar, 1926–2020  
(compounded monthly)

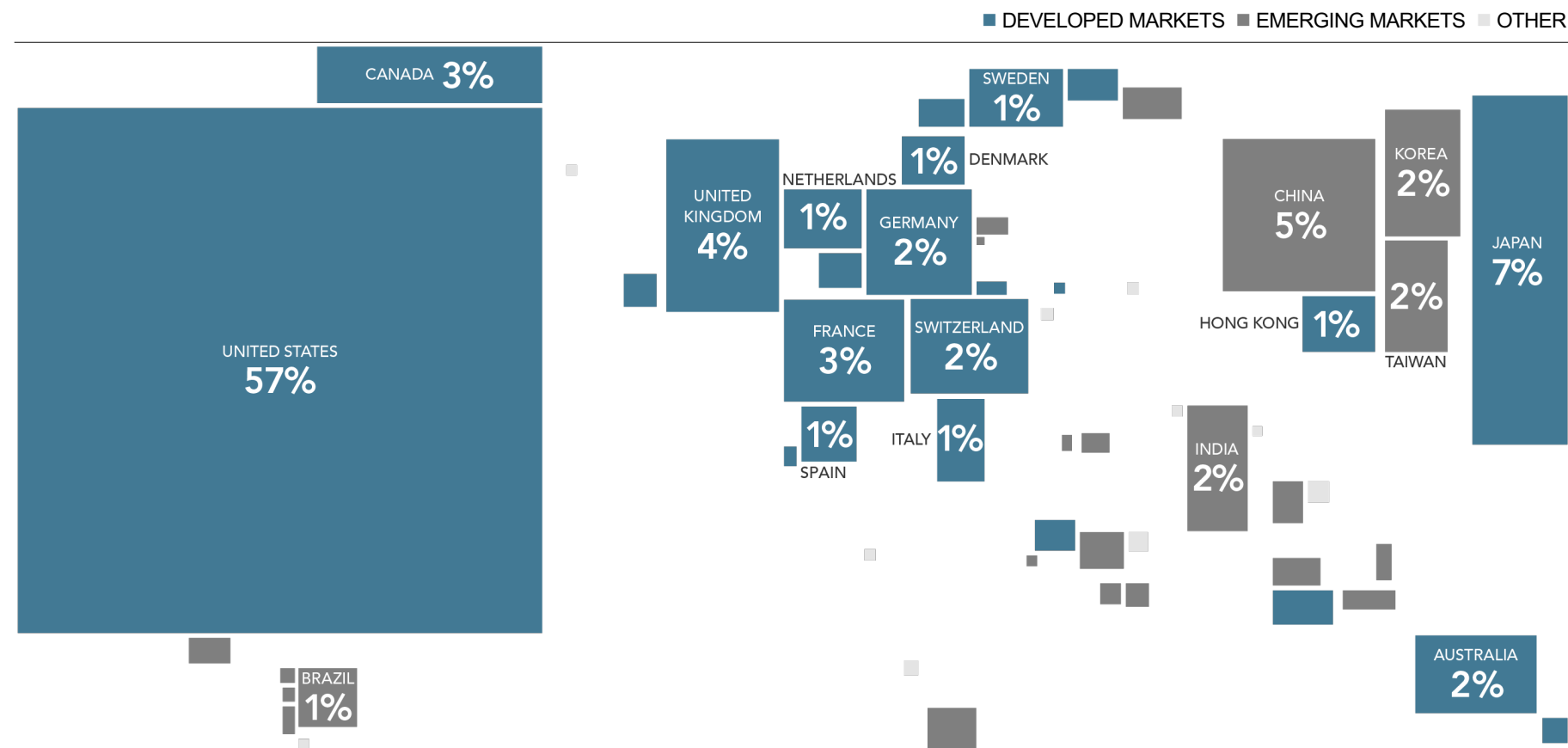


The financial markets have rewarded long-term investors. People expect a positive return on the capital they supply, and historically, the equity and bond markets have provided growth of wealth that has more than offset inflation.

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 IA SBBI US LT Govt TR USD. 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 © 2021 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. US Long-term government bonds and 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. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results.

# There's a World of Opportunity in Equities

Percent of world market capitalization as of December 31, 2020

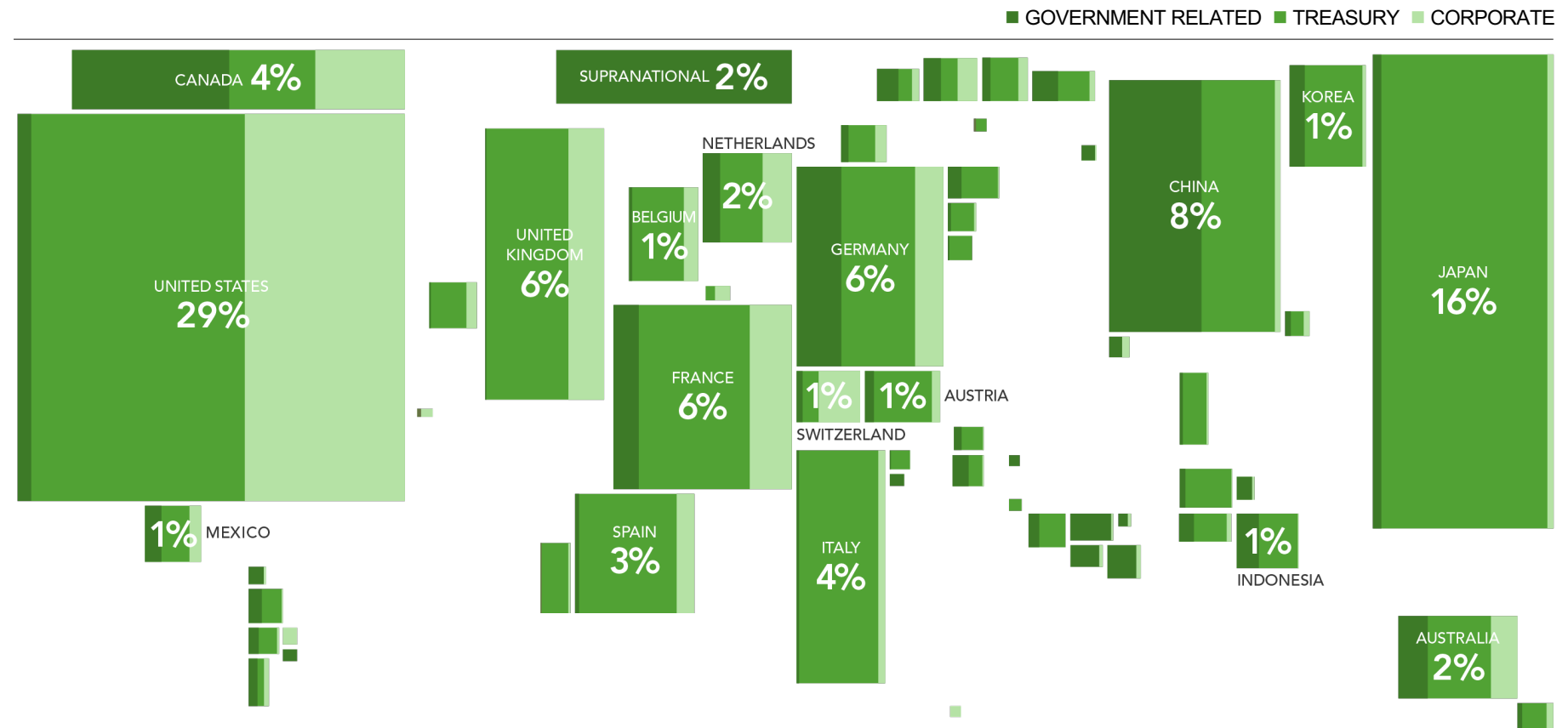


Information provided by Dimensional Fund Advisors LP.

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. Data provided by Bloomberg.

# There's a World of Opportunity in Fixed Income

Percent of global investment grade bond market as of December 31, 2020



Data is from Bloomberg Global Aggregate Ex-Securitized Bond Index. Index excludes non-investment grade securities, bonds with less than one year to maturity, tax-exempt municipal securities, inflation-linked bonds, floating rate issues, and securitized bonds. Government Related is a combination of agency, local government, and non-corporate credit bonds. Many nations not displayed. Totals may not equal 100% due to rounding. For educational purposes; should not be used as investment advice. Data provided by Bloomberg.



How Do  
Many People Invest?

## They Try to Predict the Future



“I have a proven system for picking winning stocks.”

“That sector will continue advancing through next year.”

“The market is primed for a retreat.”

## They Act on Impulse

“I can’t take this bear market—  
I’m getting out!”



“Everyone’s making money—  
I want a piece of the action.”

## They Bet their Savings on Tips and Hunches

A faint, light gray illustration of a human head in profile, facing right. Three curved lines emanate from the ear area, suggesting sound or a signal. The text is overlaid on this illustration.

“I heard it on the news.  
I’d better sell!”

“I got a hot tip from my neighbor.  
It’s a slam dunk.”

“My friend works in the industry—  
he’s got the inside scoop.”

## They Are Swayed by the Media

### “The Death of Equities”

*Business Week*, 08/13/1979

### “The Crash of '98 Can the US Economy Hold Up?”

*FORTUNE*, 09/28/1998

### “Retire Rich – A Simple Plan to Have it All”

*FORTUNE*, 08/16/1999

### “How to Reach \$1 Million”

*Money*, 08/2012

What Have We Learned?

## Together, We Know More Than We Do Alone



Participants were asked to estimate the number of jelly beans in a jar.

Range: 409-5,365

Average: 1,653

Actual: 1,670

## Embrace Market Pricing



The market is an effective information-processing machine. Each day, the world equity markets process billions of dollars in trades between buyers and sellers—and the real-time information they bring helps set prices.



What Is the Best Way  
to Invest?

## There Are Differing Approaches

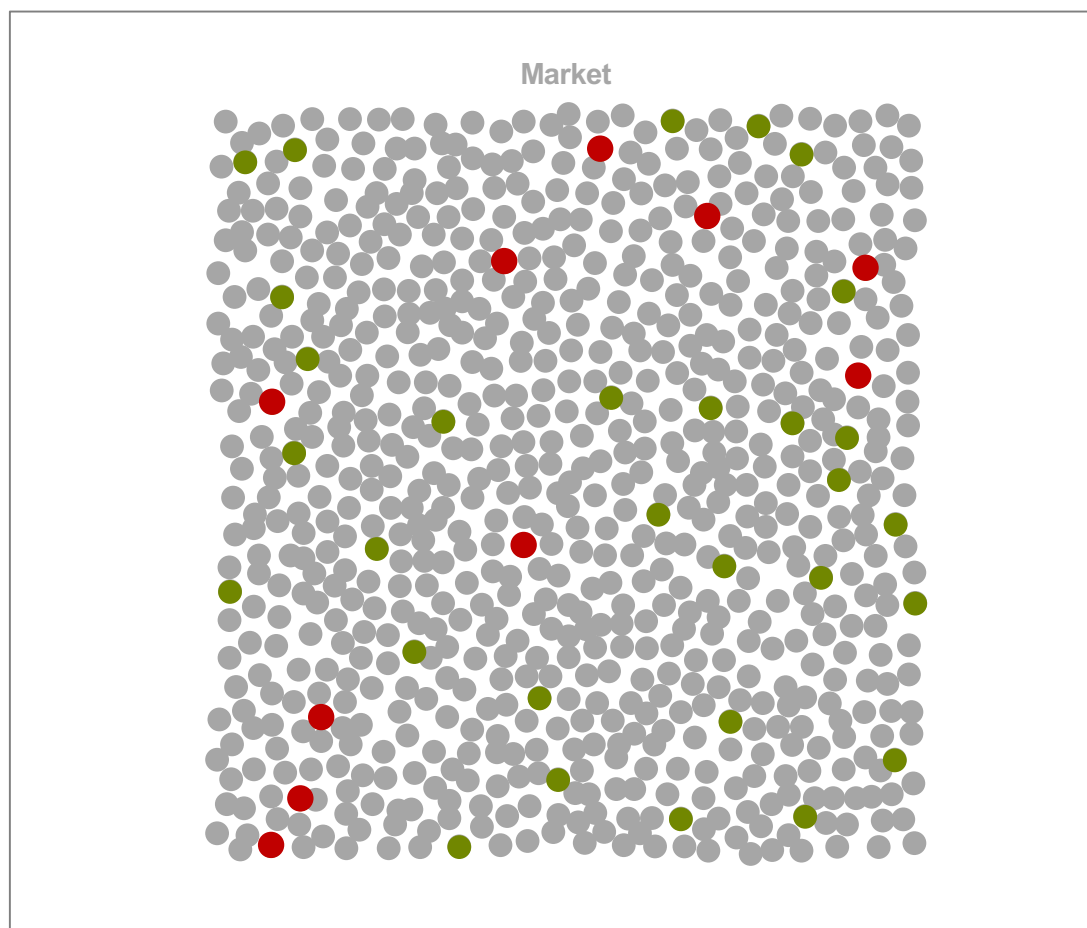
### CONVENTIONAL MANAGEMENT

Attempts to identify mispricing in securities

Relies on forecasting to select “undervalued” securities or time markets

Generates higher expenses, trading costs, and risks

## The Conventional Approach Attempts to Outguess the Market



**Buys** a selection of individual securities manager thinks will outperform.

**Sells** securities when deemed overvalued.

Can lead to high turnover and excess costs.

## There Are Differing Approaches

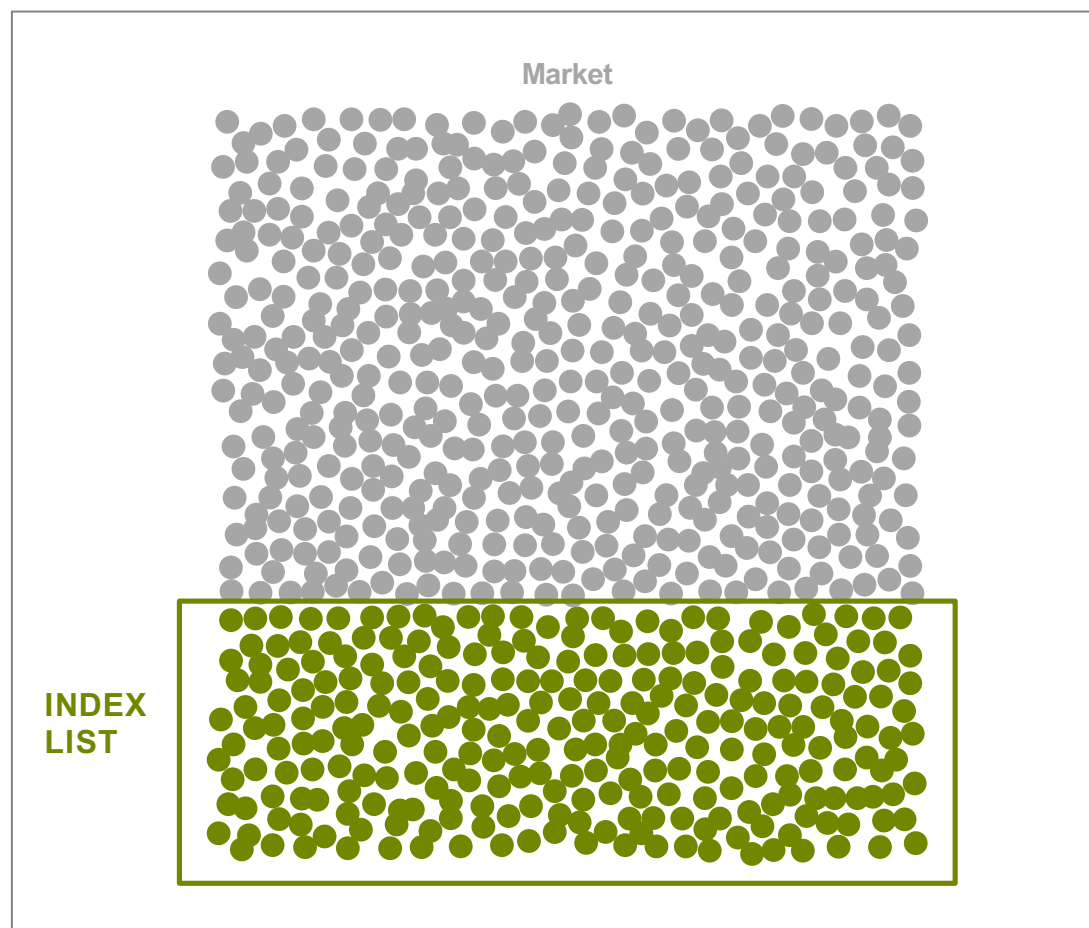
### INDEXING

Allows commercial index to determine strategy

Attempts to match index performance, restricting which securities to hold and when to trade

Prioritizes low tracking error over higher expected returns

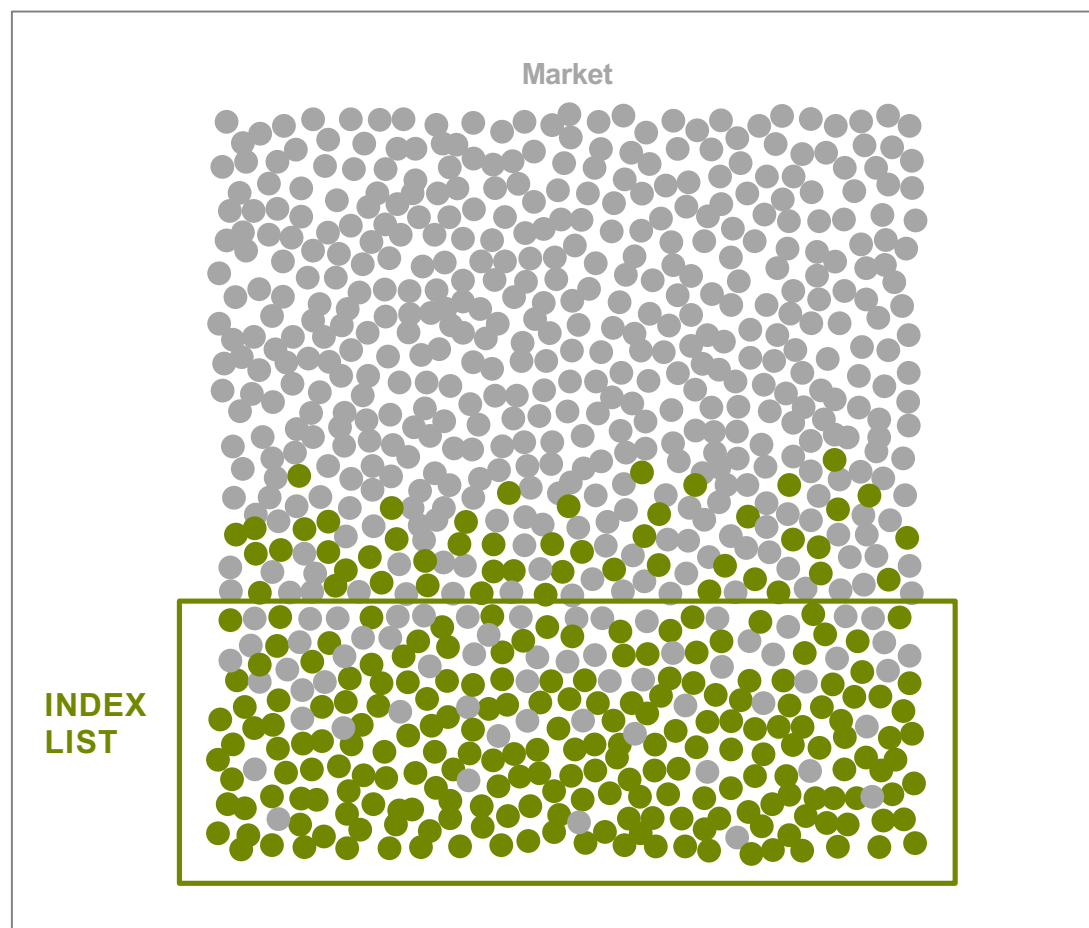
## The Indexing Approach Attempts to Match the Returns of a Commercial Benchmark



**Holds** a basket of securities represented in the index.

Buys and sells the same securities at the same time as all other funds tracking the index.

## The Indexing Approach Attempts to Match the Returns of a Commercial Benchmark



### Six months later:

Securities have moved in and out of the index's targeted range

As a result, your investment may have drifted from what you intended.

## There Are Differing Approaches

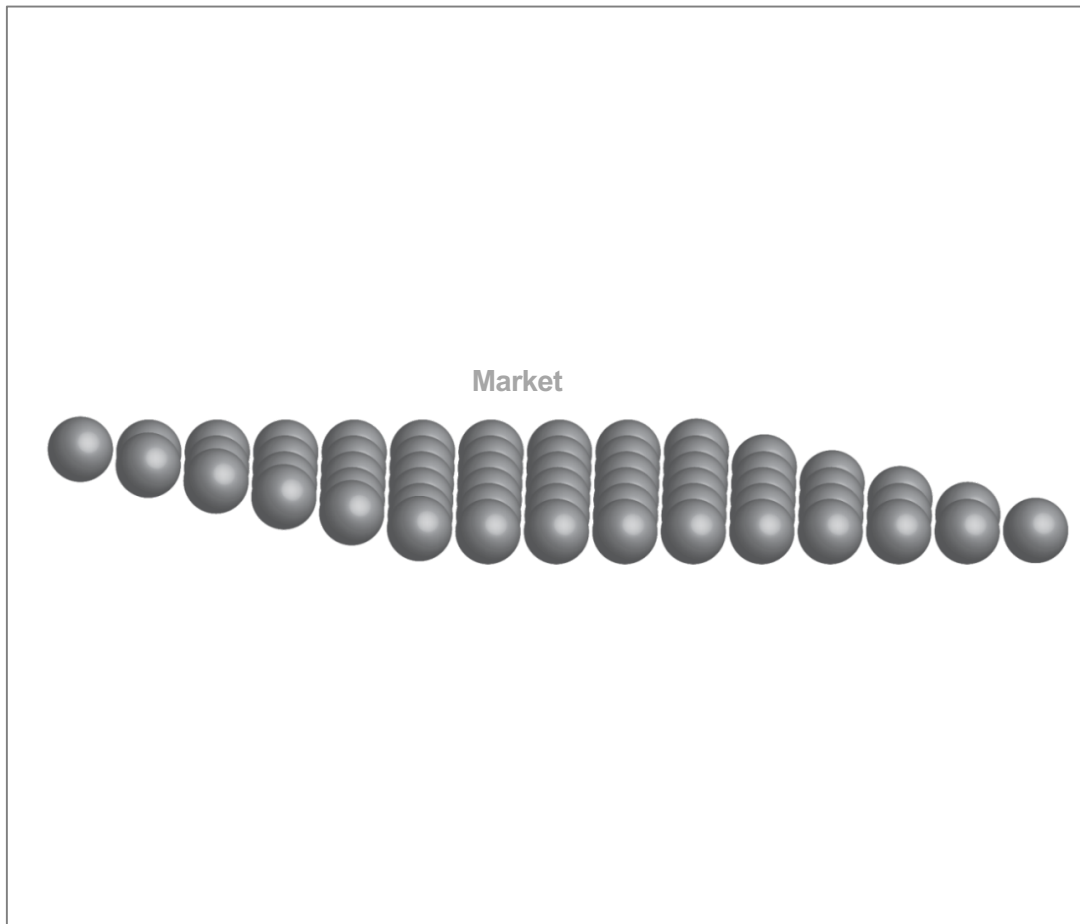
### AN ALTERNATE APPROACH

Gains insights about markets and returns from academic research

Structures portfolios along the dimensions of expected returns

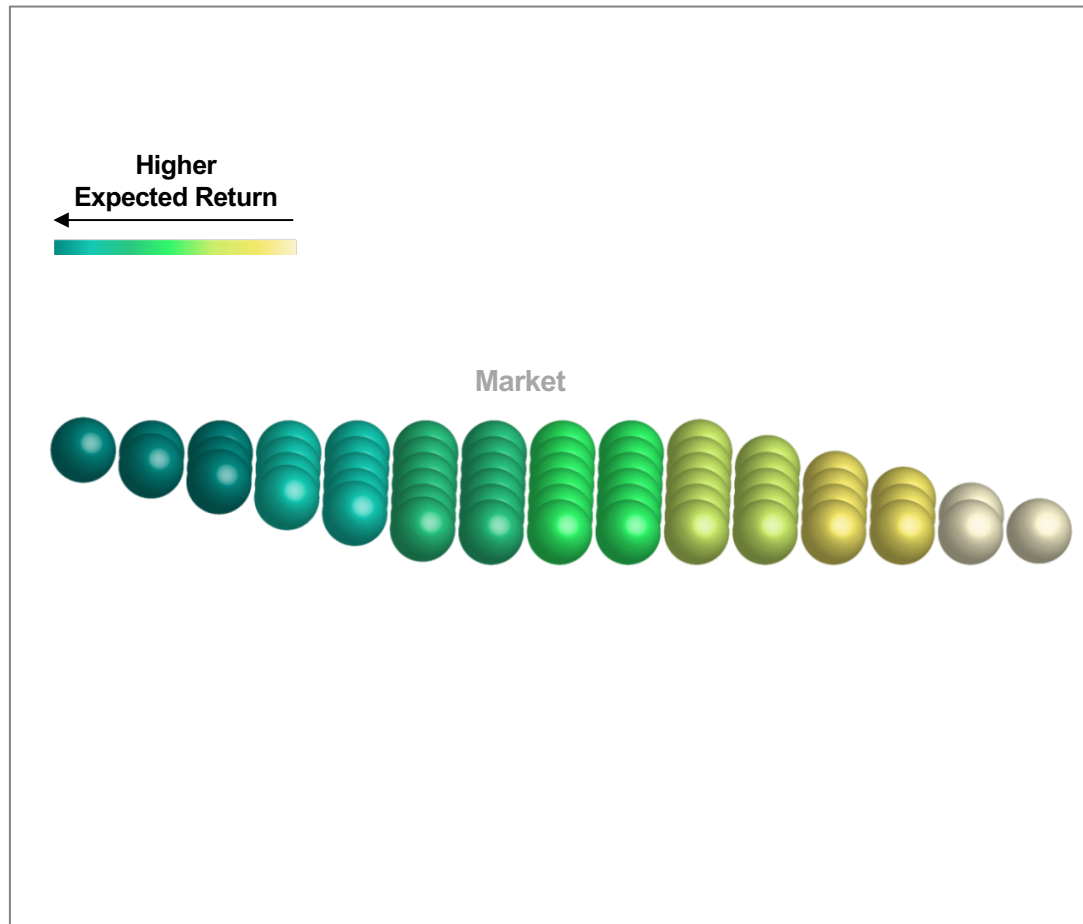
Adds value by integrating research, portfolio management, and trading

# Viewing the Market in a Different Dimension





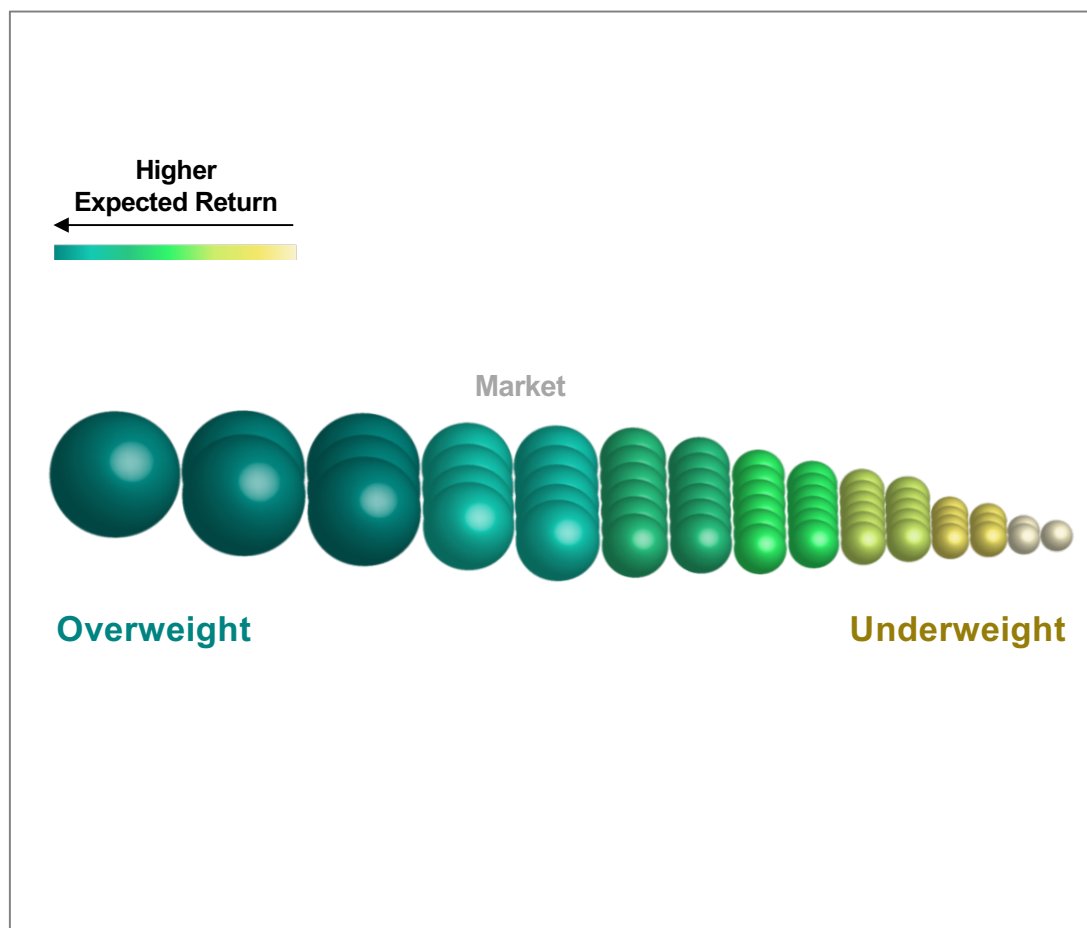
## Viewing the Market in a Different Dimension



Decades of academic research have identified relevant dimensions that point to differences in expected returns.

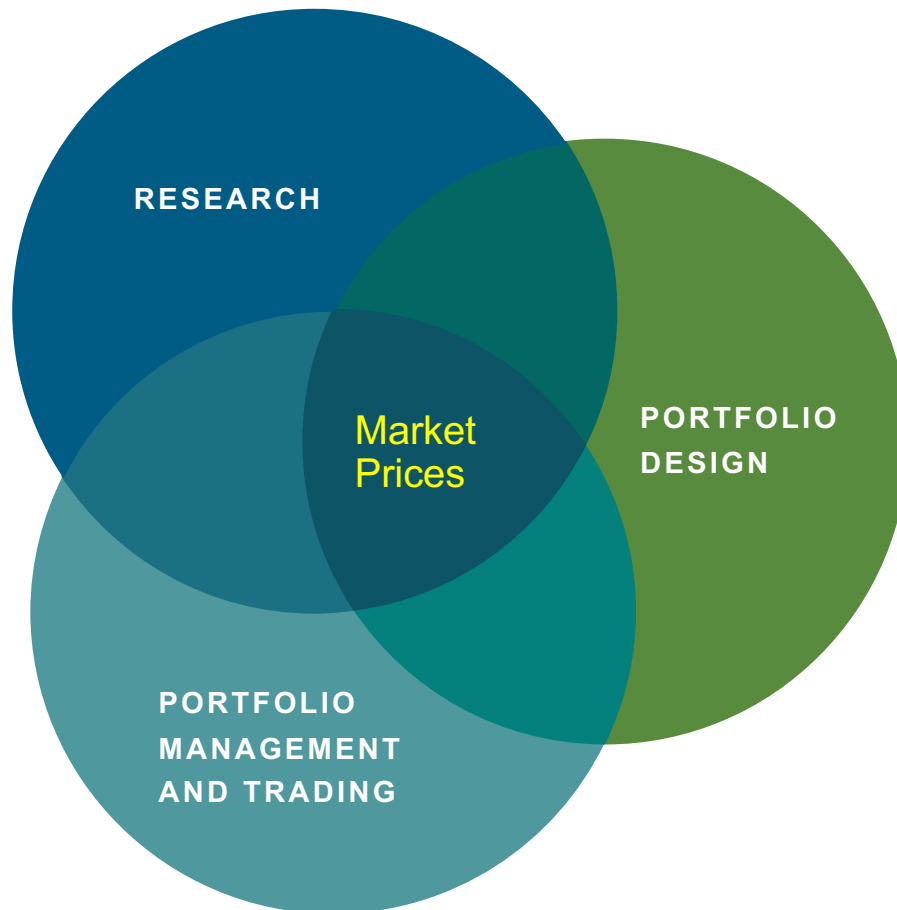
## Portfolios Can Be Structured along Dimensions of Expected Returns

A well-diversified portfolio can emphasize market areas offering higher expected return potential.



# Applied to Practical Investing

# From Insights to Implementation



- **Research**  
Use information in current market prices and fundamental data to identify systematic differences in expected returns among securities.
- **Portfolio Design**  
Target dimensions of expected returns while considering the interactions among premiums, diversification, and costs.
- **Portfolio Management and Trading**  
Use current market prices to maintain a daily focus on premiums and balance tradeoffs. Create flexibility in trading to pursue favorable execution prices.

# Balancing Investment Tradeoffs

## INVESTMENT OPPORTUNITY



## CONDITIONS

Broad diversification and patient, flexible trading lead to **lower turnover and costs**.

Concentrated holdings and urgent, inflexible trading result in **higher turnover and costs**.

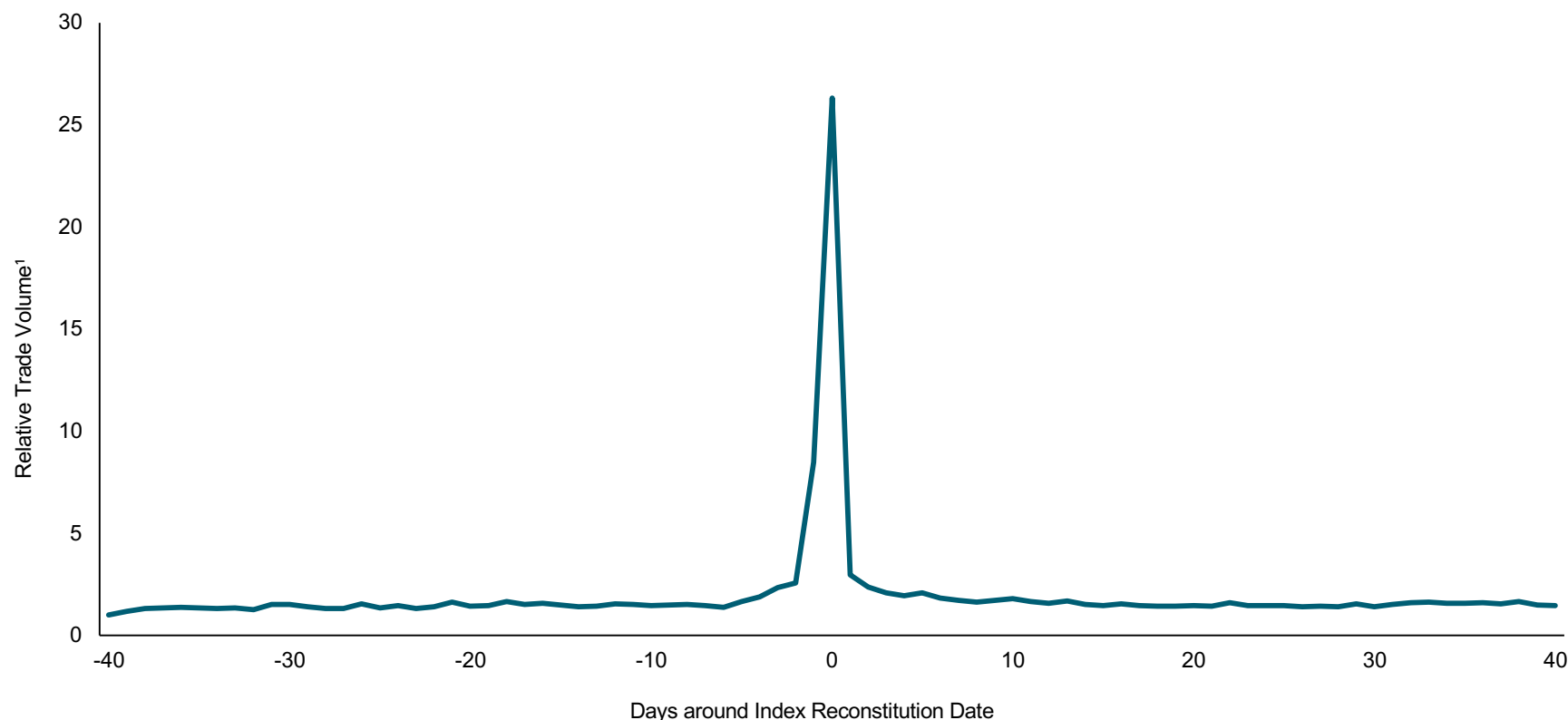
Two investment opportunities can have the same expected return but invite very different conditions.

These conditions result in different costs, which impact net returns.

# Forced Trading Can Raise Costs

Higher than normal trading activity around the reconstitution date can drive up costs

AVERAGE RELATIVE TRADE VOLUME OF SECURITIES ADDED TO OR DELETED FROM THE S&P 500 INDEX: 2016–2020



1. Relative Trade Volume = Trade volume on day X / Trade volume 40 days prior to the day the security was added to or deleted from the index.

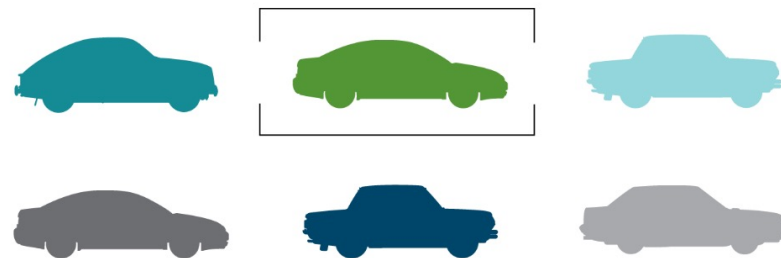
For all securities added to or deleted from the S&P 500 Index between 2016 and 2020, Dimensional calculated the relative trade volume of each security 40 days prior to, through 40 days after, the day such security was added to or deleted from the index. '0' is the date on which the security was added to or deleted from the index, or the index reconstitution date. Relative trade volume is calculated by dividing the trade volume for the day by the trade volume 40 days prior to the index reconstitution date. The chart shows the average of the relative trade volumes of all securities added to or deleted from the index and illustrates the spike in relative trade volume around the day that securities were added to or deleted from the index. Indices are not available for direct investment.

Index additions and deletions sourced from S&P data © 2021 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

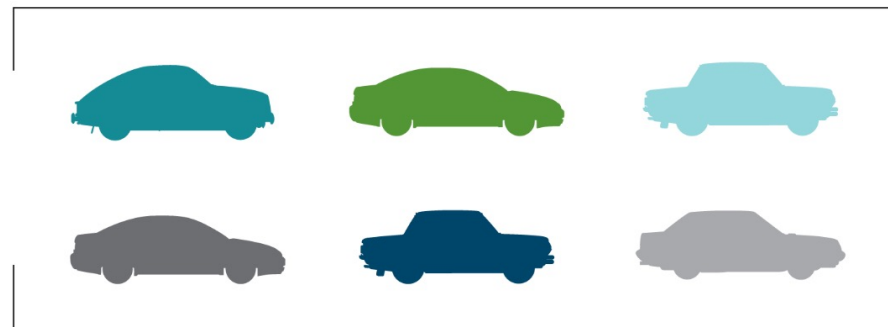
Source of trade volume: Bloomberg L.P.

## Adding Value through Flexible, Patient Trading

“I want this one—today!”



“I’m flexible.”



## Focus on What You Can Control

- Create an investment plan to fit your needs and risk tolerance.
- Structure a portfolio along the dimensions of expected returns.
- Diversify globally.
- Manage expenses, turnover, and taxes.
- Stay disciplined through market dips and swings.

A financial advisor can offer expertise and guidance to help you focus on actions that add value. This can lead to a better investment experience.



# Appendix

# Important Disclosures



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# Descriptions of Dimensional Indices

**Dimensional US Large Cap Value Index** is compiled by Dimensional from CRSP and Compustat data. Targets securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market with market capitalizations above the 1,000th-largest company whose relative price is in the bottom 30% of the Dimensional US Large Cap Index after the exclusion of utilities, companies lacking financial data, and companies with negative relative price. The index emphasizes securities with higher profitability, lower relative price, and lower market capitalization. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Exclusions: non-US companies, REITs, UITs, and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to March 2007. The calculation methodology for the Dimensional US Large Cap Value Index was amended in January 2014 to include direct profitability as a factor in selecting securities for inclusion in the index. Prior to January 1975: Targets securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market with market capitalizations above the 1,000th-largest company whose relative price is in the bottom 20% of the Dimensional US Large Cap Index after the exclusion of utilities, companies lacking financial data, and companies with negative relative price.

**Dimensional US Small Cap Index** was created by Dimensional in March 2007 and is 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. 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.

**Dimensional US Small Cap Value Index** is compiled by Dimensional from CRSP and Compustat data. Targets securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market whose relative price is in the bottom 35% of the Dimensional US Small Cap Index after the exclusion of utilities, companies lacking financial data, and companies with negative relative price. The index emphasizes securities with higher profitability, lower relative price, and lower market capitalization. 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. Exclusions: non-US companies, REITs, UITs, and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to March 2007. The calculation methodology for the Dimensional US Small Cap Value Index was amended in January 2014 to include direct profitability as a factor in selecting securities for inclusion in the index. Prior to January 1975: Targets securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market whose relative price is in the bottom 25% of the Dimensional US Small Cap Index after the exclusion of utilities, companies lacking financial data, and companies with negative relative price.

**Dimensional International Marketwide Value Index** is compiled by Dimensional from Bloomberg securities data. The index consists of companies whose relative price is in the bottom 33% of their country's companies after the exclusion of utilities and companies with either negative or missing relative price data. The index emphasizes companies with smaller capitalization, lower relative price, and higher profitability. The index excludes those companies with the lowest profitability and highest relative price within their country's value universe. The index also excludes those companies with the highest asset growth within their country's small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Exclusions: REITs and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to April 2008. The calculation methodology for the Dimensional International Marketwide Value Index was amended in January 2014 to include direct profitability as a factor in selecting securities for inclusion in the index.

# Descriptions of Dimensional Indices

**Dimensional International Small Cap Index** was created by Dimensional in April 2008 and is compiled by Dimensional. July 1981–December 1993: It Includes non-US developed securities in the bottom 10% of market capitalization in each eligible country. All securities are market capitalization weighted. Each country is capped at 50%. Rebalanced semiannually. January 1994–present: Market-capitalization-weighted index of small company securities in the eligible markets 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 their country's small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. The index monthly returns are computed as the simple average of the monthly returns of four subindices, each one reconstituted once a year at the end of a different quarter of the year. Prior to July 1981, the index is 50% UK and 50% Japan. The calculation methodology for the Dimensional International Small Cap Index was amended on January 1, 2014, to include profitability as a factor in selecting securities for inclusion in the index.

**Dimensional International Small Cap Value Index** is defined as companies whose relative price is in the bottom 35% of their country's respective constituents in the Dimensional International Small Cap Index after the exclusion of utilities and companies with either negative or missing relative price data. The index excludes those companies with the lowest profitability within their country's small value universe. The index also excludes those companies with the highest asset growth within their country's small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Exclusions: REITs and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to April 2008. The calculation methodology for the Dimensional International Small Cap Value Index was amended in January 2014 to include direct profitability as a factor in selecting securities for inclusion in the index. Prior to January 1994: Created by Dimensional; includes securities of MSCI EAFE countries in the top 30% of book-to-market by market capitalization conditional on the securities being in the bottom 10% of market capitalization, excluding the bottom 1%. All securities are market-capitalization weighted. Each country is capped at 50%; rebalanced semiannually.

**Dimensional Emerging Markets Index** is compiled by Dimensional from Bloomberg securities data. Market-capitalization-weighted index of all securities in the eligible markets. The index has been retroactively calculated by Dimensional and did not exist prior to April 2008.

**Dimensional Emerging Markets Value Index** is compiled by Dimensional from Bloomberg securities data. The index consists of companies whose relative price is in the bottom 33% of their country's companies after the exclusion of utilities and companies with either negative or missing relative price data. The index emphasizes companies with smaller capitalization, lower relative price, and higher profitability. The index excludes those companies with the lowest profitability and highest relative price within their country's value universe. The index also excludes those companies with the highest asset growth within their country's small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Exclusions: REITs and investment companies. The index has been retroactively calculated by Dimensional and did not exist prior to April 2008. The calculation methodology for the Dimensional Emerging Markets Value Index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index. Prior to January 1994: Fama/French Emerging Markets Value Index.

**Dimensional Emerging Markets Small Cap Index** was created by Dimensional in April 2008 and is compiled by Dimensional. January 1989–December 1993: Fama/French Emerging Markets Small Cap Index. January 1994–present: Dimensional Emerging Markets Small Index Composition: Market-capitalization-weighted index of small company securities in the eligible markets 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 their country's small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. The index monthly returns are computed as the simple average of the monthly returns of four subindices, each one reconstituted once a year at the end of a different quarter of the year. Source: Bloomberg. The calculation methodology for the Dimensional Emerging Markets Small Cap Index was amended on January 1, 2014, to include profitability as a factor in selecting securities for inclusion in the index.

# Index Descriptions

**Dimensional US Small Cap Index** was created by Dimensional in March 2007 and is 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.

**Dimensional International Market Index** is compiled by Dimensional from Bloomberg data. Market capitalization-weighted index of all securities in the eligible markets. The index monthly returns are computed as the simple average of the monthly returns of four sub-indices, each one reconstituted once a year at the end of each quarter of the year. Maximum index weight of any one company is capped at 5%. Countries currently included are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and United Kingdom. Exclusions: REITs and Investment Companies. The index has been retrospectively calculated by Dimensional Fund Advisors and did not exist prior to April 2008.

**Dimensional International Small Cap Index** was created by Dimensional in April 2008 and is compiled by Dimensional. July 1981–December 1993: It Includes non-US developed securities in the bottom 10% of market capitalization in each eligible country. All securities are market capitalization weighted. Each country is capped at 50%. Rebalanced semiannually. January 1994–present: Market-capitalization-weighted index of small company securities in the eligible markets, 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 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. The index monthly returns are computed as the simple average of the monthly returns of four subindices, each one reconstituted once a year at the end of a different quarter of the year. Prior to July 1981, the index is 50% UK and 50% Japan. The calculation methodology for the Dimensional International Small Cap Index was amended on January 1, 2014, to include profitability as a factor in selecting securities for inclusion in the index.

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Information provided by Dimensional Fund Advisors LP.

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 index 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.

# 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 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 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.

**Fama/French International Market Index:** January 1975–present: Fama/French International Market Index. Source: Ken French website. Simulated from MSCI and Bloomberg data.

**Fama/French International Value Index:** 2008–present: Provided by Fama/French from Bloomberg securities data. Simulated strategy of MSCI EAFE + Canada countries in the lower 30% price-to-book range. 1975–2007: Provided by Fama/French from MSCI securities data.

**Fama/French International Growth Index:** 2008–present: Provided by Fama/French from Bloomberg securities data. Simulated strategy of MSCI EAFE + Canada countries in the higher 30% price-to-book range. 1975–2007: Provided by Fama/French from MSCI securities data.

**Fama/French International High Profitability Index:** July 1990–present: Courtesy of Fama/French from Bloomberg securities data. Includes stocks in the upper 30% operating profitability range in each region; companies weighted by float-adjusted market cap; 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 International Low Profitability Index:** July 1990–present: Courtesy of Fama/French from Bloomberg securities data. Includes stocks in the lower 30% operating profitability range in each region; companies weighted by float-adjusted market cap; 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.

Information provided by Dimensional Fund Advisors LP.

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.



# Index Descriptions

**Fama/French Emerging Markets Index:** July 1989–present: Fama/French Emerging Markets Index. Courtesy of Fama/French from Bloomberg and IFC securities data. Companies weighted by float-adjusted market cap; rebalanced annually in June. Fama/French and multifactor data provided by Fama/French.

**Fama/French Emerging Markets Value Index:** 2009–present: Provided by Fama/French from Bloomberg securities data. Simulated strategy using IFC investable universe countries. Companies in the lower 30% price-to-book range; companies weighted by float-adjusted market cap; countries weighted by country float-adjusted market cap; rebalanced monthly. 1989–2008: Provided by Fama/French from IFC securities data. IFC data provided by International Finance Corporation.

**Fama/French Emerging Markets Growth Index:** 2009–present: Provided by Fama/French from Bloomberg securities data. Simulated strategy using IFC investable universe countries. Companies in the higher 30% price-to-book range; companies weighted by float-adjusted market cap; countries weighted by country float-adjusted market cap; rebalanced monthly. 1989–2008: Provided by Fama/French from IFC securities data. IFC data provided by International Finance Corporation.

**Fama/French Emerging Markets High Profitability Index:** July 1991–present: Courtesy of Fama/French from Bloomberg and IFC securities data. Includes stocks in the upper 30% operating profitability range in each country; companies weighted by float-adjusted market cap; 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 Emerging Markets Low Profitability Index:** July 1991–present: Courtesy of Fama/French from Bloomberg and IFC securities data. Includes stocks in the lower 30% operating profitability range in each country; companies weighted by float-adjusted market cap; 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.

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