

# Equity & Fixed Income Investing

## It's Your Money Fall 2023

Apella Capital, LLC, DBA Apella Wealth is an investment advisory firm registered with the Securities and Exchange Commission. The firm only transacts business in states where it is properly registered or excluded or exempted from registration requirements. The information here is provided for general information purposes only and should not be considered a recommendation or personalized investment advice. The investment strategies mentioned here may not be suitable for everyone. Each investor needs to review an investment strategy for his or her own particular situation before making any investment decision. All data is from sources believed to be reliable but cannot be guaranteed or warranted. Investing involves risk, including loss of principal.

# Meet Your Presenter



Evelyn Zohlen MS, MBA, CFP®

# Ask First

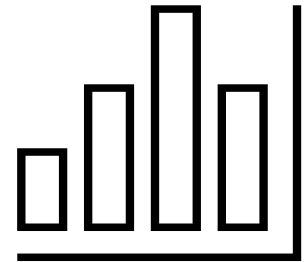
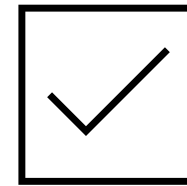


---

# Today's Agenda

---

- Basics of stocks (equities) and bonds (fixed income)
- Investment considerations for each of these asset types
- Thoughts on building your portfolio (asset allocation)



A thin orange horizontal line that ends in a small arrow pointing to the right.

# Basics on stocks

# What is a stock?

- A share of ownership in a business
  - ▶ *Publicly traded equities are available for purchase on various stock exchanges (around 4,000 US businesses are “public,” over 20 million are privately owned)*
- Shareholders share in the profits of these businesses – often through current or future dividends
- There are two types of stocks
  - ▶ *Common Stock*
  - ▶ *Preferred Stock*



# Different Ways to Invest in the Stock Market

- Individual stocks
- Mutual funds
- Exchange-traded funds (ETFs)
- Brokerage firms
- Investment Advisors

## Equity Types

- Large-cap US stocks (\$10 billion +)  
Examples: *Tesla, J&J, Amazon*
- Small-cap US stocks (under \$2 billion)  
Examples: *Avis, Tenet Healthcare, Macy's*
- Developed international stocks  
Country examples: *Japan, UK, Switzerland*
- Emerging market stocks  
Country examples: *China, India, South Korea*



# Equity Styles

- Growth stocks (in-favor companies expected to grow faster than the stock markets)  
Examples: *Apple, Microsoft, Amazon, Tesla, Google*
- Value stocks (out-of-favor companies with attractive pricing)  
Examples: *JP Morgan Chase, Berkshire Hathaway, J&J, Exxon Mobil*

# The Investment “Style Box”

Morningstar Style Box™

			Large
			Medium
			Small
Value	Blend	Growth	



# Fixed Income Basics

# What is Fixed Income?

- The term “fixed income” is often used interchangeably with “bonds”
- Loan to an institution that is obligated to pay you back (your “principal”) with interest at a prespecified future date
  - *Typically, interest is paid every six months*
- Owner of a bond is a creditor (lender); issuer of a bond is a debtor (borrower)

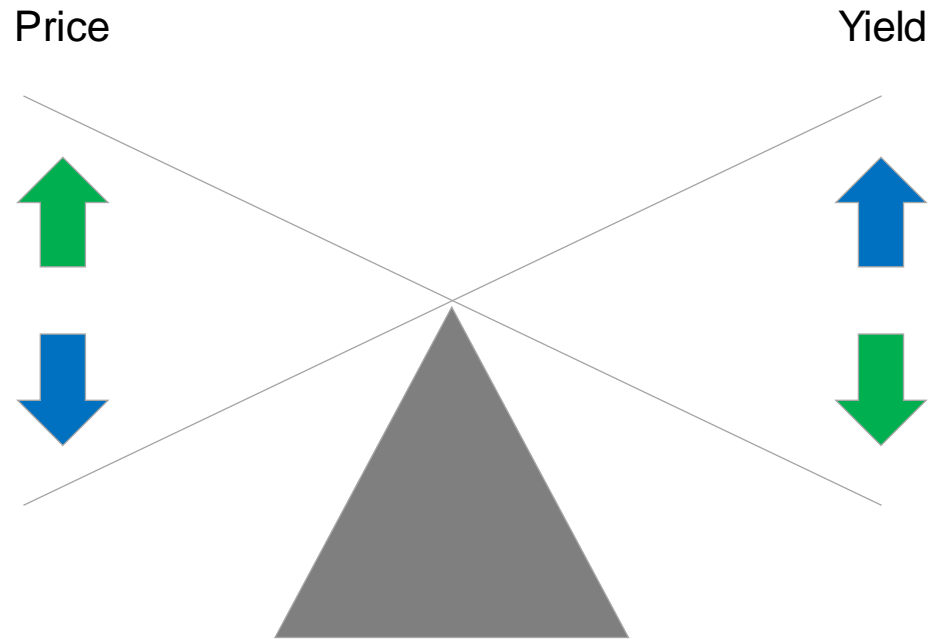




# Key Components

- Issuer (credit rating)
- Coupon (rate, frequency)
- Price
- Maturity Date (duration)
- Optionality or Call Features
- Yield to Maturity

# Prices and Yields

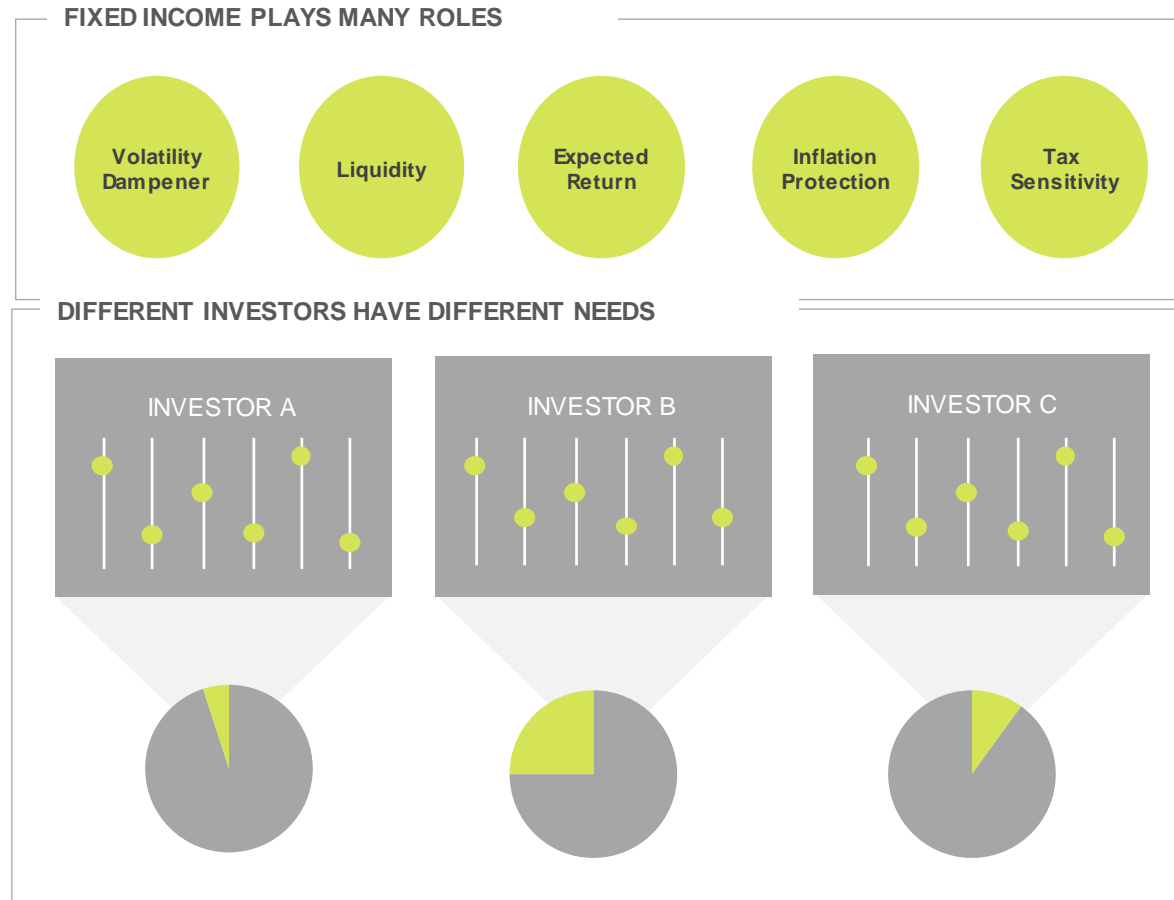


- There is an inverse relationship between the price of a bond and the yield of a bond.
- As the yield of a bond increases, its price will decrease. And as the yield of a bond decreases, its price will increase.

# Increasing Yield

- There are only two ways to increase yield...
  - Extend Maturity - Increases duration and interest rate risk
  - Lower Credit - Quality Increases credit risk

# Fixed Income's Role in Portfolios



- Fixed income can play many different roles in a portfolio.
- Fixed income portfolios can be customized to meet the needs of investors.
- A financial planner can help determine what type of and how much fixed income is right for your investment goals.

Fixed income portfolios are subject to increased loss of principal during periods of rising interest rates. Fixed income investments are subject to various other risks, including changes in credit quality, liquidity, prepayments, call risk, and other factors. Inflation-protected securities may react differently from other fixed income securities to changes in interest rates. Municipal securities are subject to the risks of adverse economic and regulatory changes in their issuing states. There is no assurance that any investment objective will be met. Investing involves risks, including possible loss of principal.

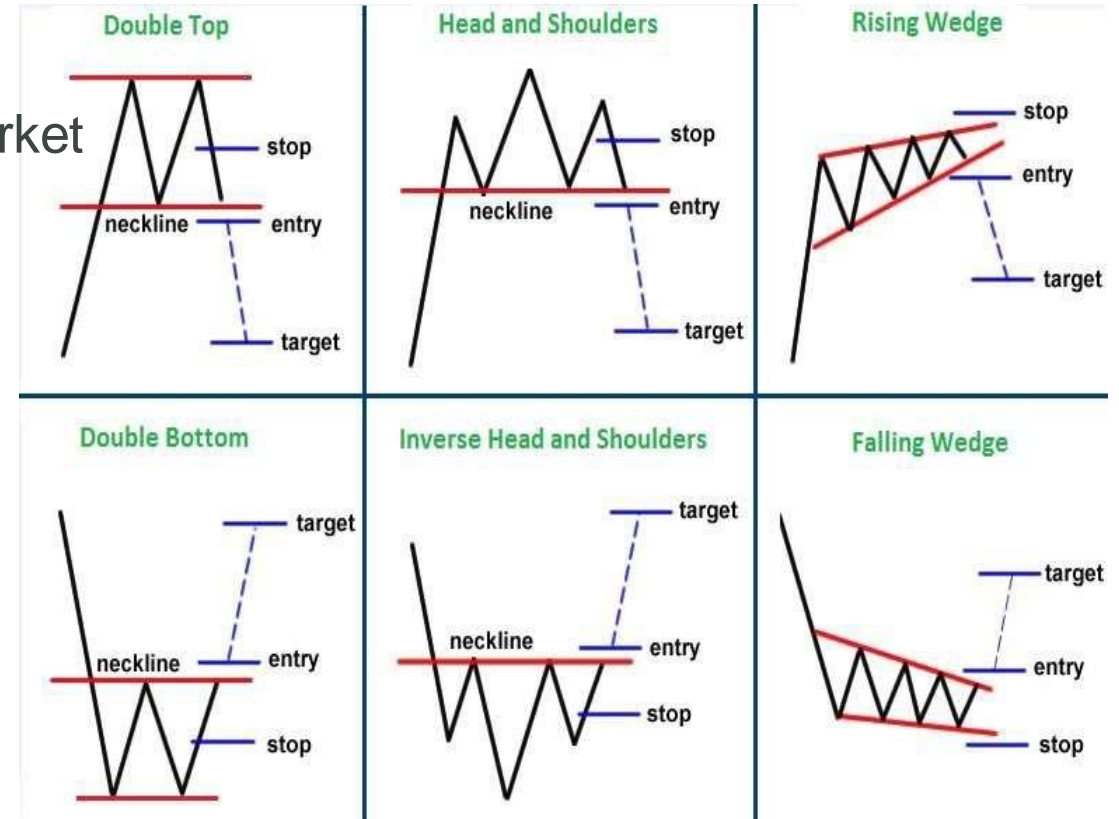


A short horizontal orange line with a small arrowhead pointing to the right.

# Stock and Bond Investment Considerations

# Investing on Market “Technicals”

- Looking for predictive patterns in the market
- Using price and volume and trendlines
- Ignores “Fundamentals”
- Relies on charts





# Investing on Company Fundamentals

Buying....

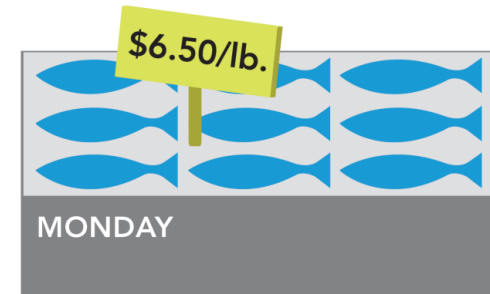
1. Below “intrinsic value” (i.e. for less than the company is worth)
2. Companies who can grow their revenue, earnings & cash flows
3. Stocks with a low “valuation”
  - price to earnings (P/E)
  - price to book (P/B)
  - price to sales (P/S)
  - price to cash flow (P/CF)

# People Trust Market Pricing Every Day

The daily price of fish may vary based on buyer and seller expectations of market forces.

We accept the price as an accurate estimate of current value and make decisions accordingly.

The same is true of a stock price, which reflects all known information about a company.





# There Are Differing Approaches

## INDEXING

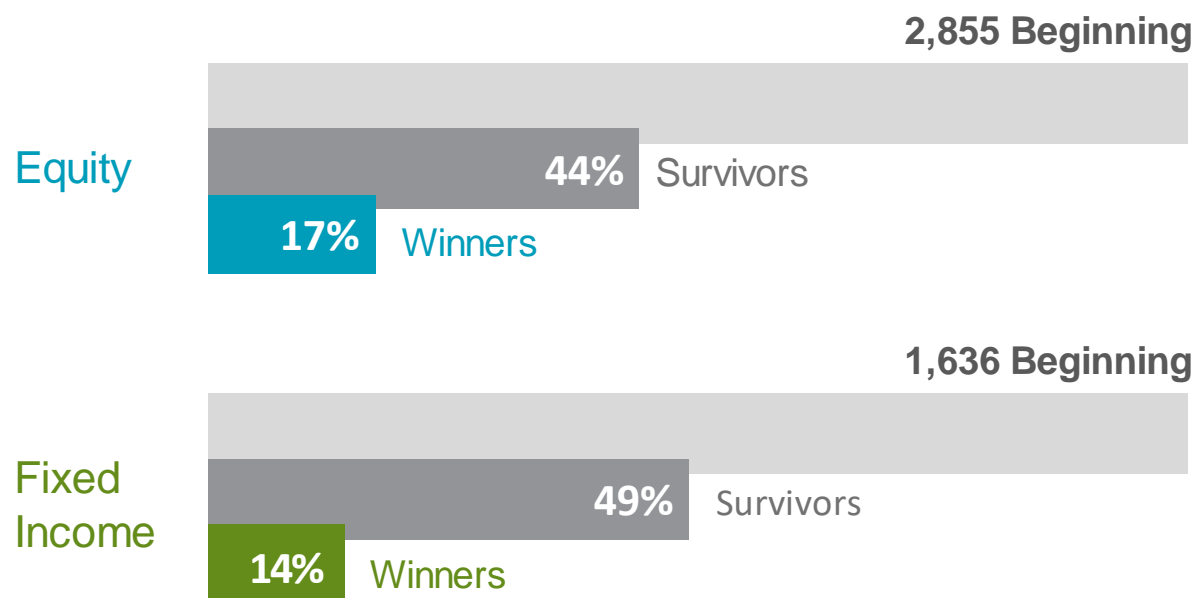
Allows commercial index to determine strategy

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

Prioritizes low tracking error over higher expected returns

# Can You Outguess the Market?

US-Domiciled Fund Performance, 2003–2022

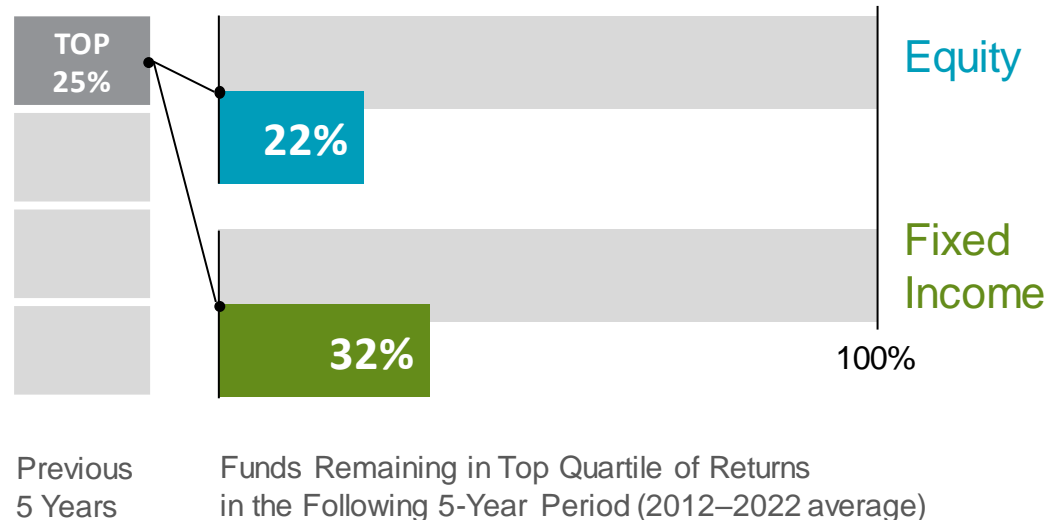


The market's pricing power works against fund managers who try to outperform through stock picking or market timing. As evidence, only 17% of US-domiciled equity funds and 14% of fixed income funds have survived and outperformed their benchmarks over the past 20 years.

The sample includes funds at the beginning of the 20-year period ending December 31, 2022. Each fund is evaluated relative to its primary prospectus benchmark. Survivors are funds that had returns for every month in the sample period. Winners are funds that survived and outperformed their benchmark over the period. Where the full series of primary prospectus benchmark returns is unavailable, non-Dimensional funds are instead evaluated relative to their Morningstar category index. **Data Sample:** The sample includes US-domiciled, USD-denominated open-end and exchange-traded funds (ETFs) in the following Morningstar categories. Non-Dimensional fund data provided by Morningstar. Dimensional fund data is provided by the fund accountant. Dimensional funds or subadvised funds whose access is or previously was limited to certain investors are excluded. Index funds, loadwaived funds, and funds of funds are excluded from the industry sample. **Morningstar Categories (Equity):** Equity fund sample includes the following Morningstar historical categories: Diversified Emerging Markets, Europe Stock, Foreign Large Blend, Foreign Large Growth, Foreign Large Value, Foreign Small/Mid Blend, Foreign Small/Mid Growth, Foreign Small/Mid Value, Global Real Estate, Japan Stock, Large Blend, Large Growth, Large Value, Mid-Cap Blend, Mid-Cap Growth, Mid-Cap Value, Miscellaneous Region, Pacific/Asia ex-Japan Stock, Real Estate, Small Blend, Small Growth, Small Value, Global Large-Stock Blend, Global Large-Stock Growth, Global Large-Stock Value, and Global Small/Mid Stock. **Morningstar Categories (Fixed Income):** Fixed income fund sample includes the following Morningstar historical categories: Corporate Bond, High Yield Bond, Inflation-Protected Bond, Intermediate Core Bond, Intermediate Core-Plus Bond, Long-Term Bond, Intermediate Government, Long Government, Muni California Intermediate, Muni California Long, Muni Massachusetts, Muni Minnesota, Muni National Intermediate, Muni National Long, Muni National Short, Muni New Jersey, Muni New York Intermediate, Muni New York Long, Muni Ohio, Muni Pennsylvania, Muni Single State Intermediate, Muni Single State Long, Muni Single State Short, Muni Target Maturity, Short Government, Short-Term Bond, Ultrashort Bond, Global Bond, and Global Bond-USD Hedged. **Index Data Sources:** Index data provided by Bloomberg, MSCI, Russell, FTSE Fixed Income LLC, and S&P Dow Jones Indices LLC. Bloomberg data provided by Bloomberg. MSCI data © MSCI 2023, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copy rights related to the Russell Indexes. FTSE fixed income indices © 2023 FTSE Fixed Income LLC. All rights reserved. S&P data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Indices are not available for direct investment. Their performance does not reflect the expenses associated with management of an actual portfolio. US-domiciled mutual funds and US-domiciled ETFs are not generally available for distribution outside the US. There is no guarantee investment strategies will be successful. Past performance is no guarantee of future results.

# Can You Pick the “Best” Fund Manager?

## Percentage of Top-Ranked Funds That Stayed on Top



Some investors select funds based on their past returns. Yet, past performance offers little insight into a fund’s future returns. For example, most funds in the top quartile of previous five-year returns did not maintain a top-quartile ranking in the following five years.

This study evaluated fund performance over rolling periods from 2003 through 2022. Each year, funds are sorted within their category based on their previous five-year total return. Those ranked in the top quartile of returns are evaluated over the following five-year period. The chart shows the average percentage of top-ranked equity and fixed income funds that kept their top ranking in the subsequent period. **Data Sample:** The sample includes US-domiciled, USD-denominated open-end and exchange-traded funds (ETFs) in the following Morningstar categories. Non-Dimensional fund data provided by Morningstar. Dimensional fund data is provided by the fund accountant. Dimensional funds or subadvised funds whose access is or previously was limited to certain investors are excluded. Index funds, load-waived funds, and funds of funds are excluded from the industry sample. **Morningstar Categories (Equity):** Equity fund sample includes the following Morningstar historical categories: Diversified Emerging Markets, Europe Stock, Foreign Large Blend, Foreign Large Growth, Foreign Large Value, Foreign Small/Mid Blend, Foreign Small/Mid Growth, Foreign Small/Mid Value, Global Real Estate, Japan Stock, Large Blend, Large Growth, Large Value, Mid-Cap Blend, Mid-Cap Growth, Mid-Cap Value, Miscellaneous Region, Pacific/Asia ex-Japan Stock, Real Estate, Small Blend, Small Growth, Small Value, Global Large-Stock Blend, Global Large-Stock Growth, Global Large-Stock Value, and Global Small/Mid Stock. **Morningstar Categories (Fixed Income):** Fixed income fund sample includes the following Morningstar historical categories: Corporate Bond, High Yield Bond, Inflation-Protected Bond, Intermediate Core Bond, Intermediate Core-Plus Bond, Long-Term Bond, Intermediate Government, Long Government, Muni California Intermediate, Muni California Long, Muni Massachusetts, Muni Minnesota, Muni National Intermediate, Muni National Long, Muni National Short, Muni New Jersey, Muni New York Intermediate, Muni New York Long, Muni Ohio, Muni Pennsylvania, Muni Single State Intermediate, Muni Single State Long, Muni Single State Short, Muni Target Maturity, Short Government, Short-Term Bond, Ultrashort Bond, Global Bond, and Global Bond-USD Hedged. **Index Data Sources:** Index data provided by Bloomberg, MSCI, Russell, FTSE Fixed Income LLC, and S&P Dow Jones Indices LLC. Bloomberg data provided by Bloomberg. MSCI data © MSCI 2023, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. FTSE fixed income indices © 2023 FTSE Fixed Income LLC. All rights reserved. S&P data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Indices are not available for direct investment. Their performance does not reflect the expenses associated with management of an actual portfolio. US-domiciled mutual funds and US-domiciled ETFs are not generally available for distribution outside the US. There is no guarantee investment strategies will be successful. Past performance is no guarantee of future results.



# 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





# 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

# 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

# Dimensions Point to Differences in Expected Returns

Academic research has identified these dimensions, which are well documented in markets around the world and across different time periods.

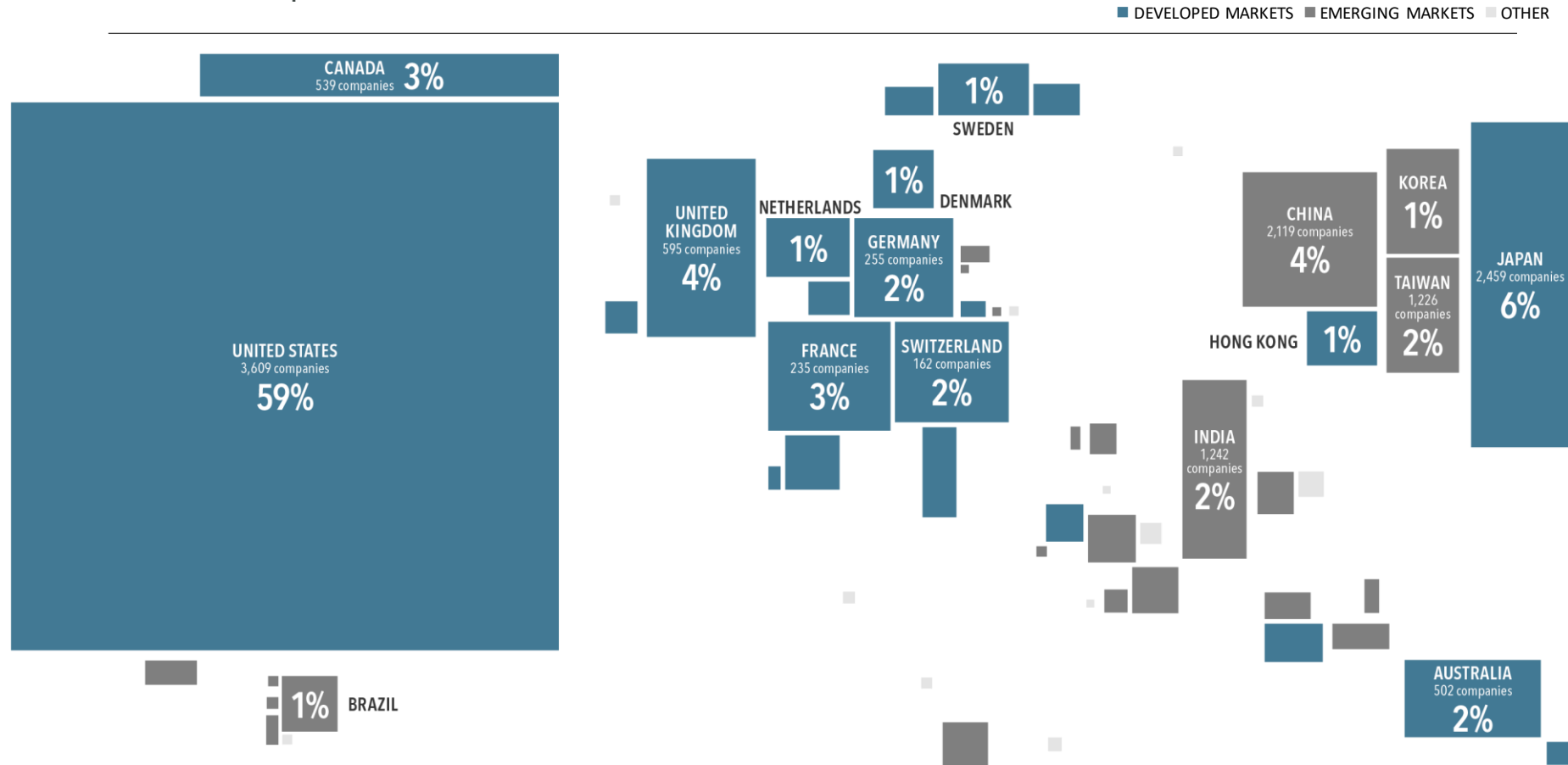


1. Relative price as measured by the price-to-book ratio; value stocks are those with lower price-to-book ratios.

2. Profitability is a measure of current profitability, based on information from individual companies' income statements.

# There's a World of Opportunity in Equities

Percent of world market capitalization as of December 31, 2022



Information provided by Dimensional Fund Advisors LP.

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

# Why We Diversify

## Asset Classes-In-Review: 2008 - 2022

Source: Morningstar Direct and www.hedgefundresearch.com. Diversification seeks to mitigate risk by combining a wide range of investments within a portfolio. Diversified portfolios contain various asset classes in an effort to limit the risk associated with investment concentration in one single asset. Using this methodology, however does not guarantee a profit or protection from loss in a declining market. Past performance does not guarantee future results. Investors cannot invest directly in an index. Actual performance for client accounts will differ.

\*Annualized 15 year returns to last quarter end. Annualized return: is calculated as a geometric average to show what an investment would earn over a period of time if the annual return was compounded.

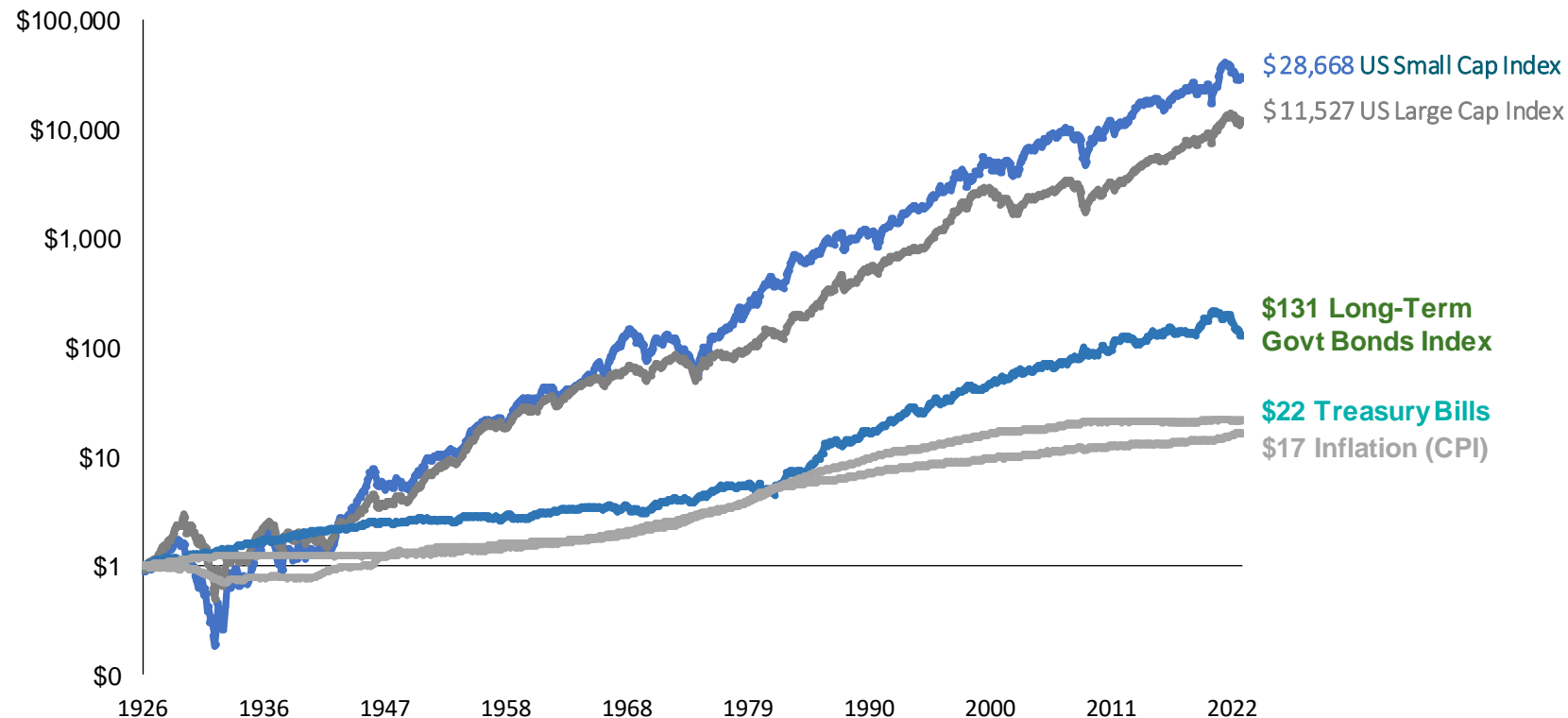
Please see disclosure at the end of this presentation for a description of the 60/40 Blend and additional information.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	15 Years Annualized
60/40 Blend	8.41	79.02	28.07	9.37	18.22	39.09	32.00	4.48	20.41	37.28	2.06	36.61	42.14	45.91	16.09	9.88
US Aggregate Bond	5.55	37.08	27.82	7.84	18.20	34.83	13.69	3.38	18.75	27.90	1.86	31.49	19.18	28.71	1.50	8.80
3-Month T-Bill	5.24	36.15	18.88	3.11	17.19	32.39	13.45	1.38	11.96	24.21	1.53	25.86	18.69	27.20	0.15	8.35
US Credit Bond	1.80	34.39	18.65	2.94	17.12	32.09	11.93	1.15	11.77	21.83	1.04	25.66	18.40	27.11	-2.81	7.34
US Gov't Bond	-1.13	28.46	16.83	2.11	16.41	21.02	6.09	0.89	11.19	15.58	0.37	23.16	11.98	24.55	-5.46	5.52
World Bond	-19.87	26.46	15.64	1.59	16.00	14.28	5.97	0.71	6.72	15.16	0.01	23.10	8.09	21.08	-5.56	4.11
US REIT	-22.74	22.41	15.06	1.43	15.60	7.70	3.14	0.55	6.68	14.86	-2.72	19.10	7.51	13.17	-5.63	2.74
Emerging Markets	-35.58	20.58	9.57	0.63	10.03	1.47	2.56	0.37	6.59	4.12	-4.22	18.90	6.15	10.38	-13.01	2.66
US Growth	-35.65	18.91	8.95	0.08	5.90	1.22	1.92	0.03	2.75	3.76	-4.38	8.72	5.48	7.68	-13.82	2.36
US Value	-36.20	13.52	6.54	-2.75	4.22	0.76	1.14	-1.47	2.73	3.54	-5.34	7.69	4.31	0.05	-15.53	1.90
US Small Cap	-37.00	9.65	5.35	-3.55	4.21	0.05	0.96	-2.19	2.65	2.36	-7.95	6.70	2.34	-0.37	-17.82	1.58
Int'l Markets	-38.42	5.93	5.07	-4.11	1.36	-0.07	0.03	-3.04	1.89	1.70	-10.99	5.91	1.07	-0.55	-18.11	1.37
S&P 500	-39.20	2.06	3.63	-12.21	1.03	-2.02	-2.19	-4.06	1.18	0.92	-11.25	4.20	0.58	-1.18	-19.74	1.00
Commodities	-43.23	0.98	1.35	-13.32	0.07	-2.60	-4.32	-14.92	1.02	0.84	-14.09	3.28	-3.12	-1.54	-25.96	0.64
Alternatives	-53.18	0.16	0.13	-18.42	-1.06	-9.52	-17.01	-24.66	0.27	0.72	-14.58	2.25	-11.20	-2.22	-32.17	-2.60

In US dollars. US Large Cap is the S&P 500 Index, data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. US Large Cap Value is the Russell 1000 Value Index. US Small Cap is the Russell 2000 Index. US Small Cap Value is the Russell 2000 Value Index. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. US Real Estate is the Dow Jones US Select REIT Index, data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. International Large Cap Value is the MSCI World ex USA Large Cap Value Index (gross dividends). International Small Cap is the MSCI World ex USA Small Cap Index (gross dividends). International Small Cap Value is the MSCI World ex USA Small Cap Value Index (gross dividends). Emerging Markets is the MSCI Emerging Markets Index (gross dividends). MSCI data © MSCI 2023, all rights reserved. One-Year US Fixed is the ICE BofA One-Year US Treasury Note Index, ICE BofA index data © 2023 ICE Data Indices, LLC. Five-Year US Government Fixed is the Bloomberg Treasury Bond Index 1-5 Years, Bloomberg data provided by Bloomberg. Five-Year Global Fixed is FTSE World Government Bond Index 1-5 Years (hedged to USD). FTSE fixed income indices © 2023 FTSE Fixed Income LLC. All rights reserved. **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 not a guarantee of future results. Indexes are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results.**

# The Capital Markets Have Rewarded Long-Term Investors

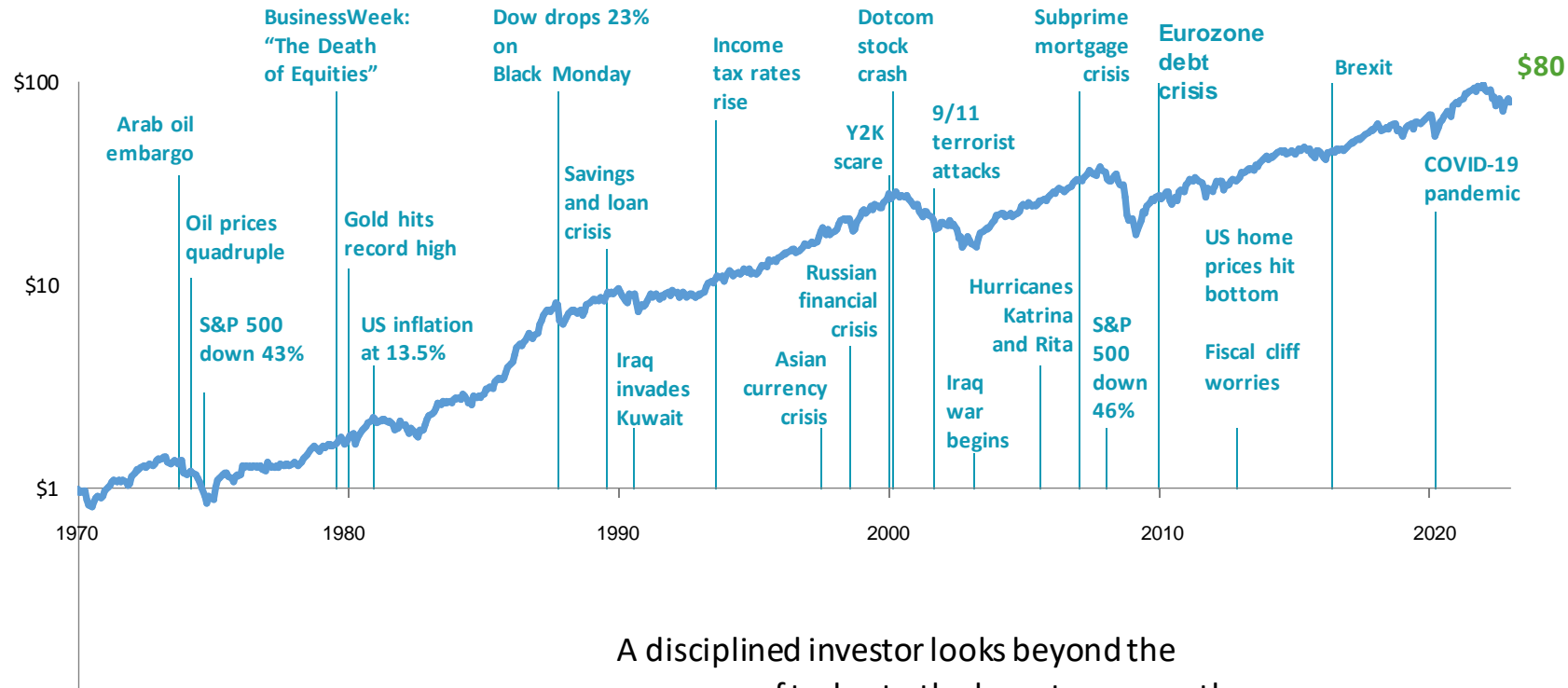
Monthly growth of wealth (\$1), 1926–2022 – **HYPOTHETICAL ILLUSTRATION**



In US dollars. 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 Gov't 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 © 2023 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. 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. All data is from sources believed to be reliable but cannot be guaranteed or warranted.

# Markets Have Rewarded Discipline

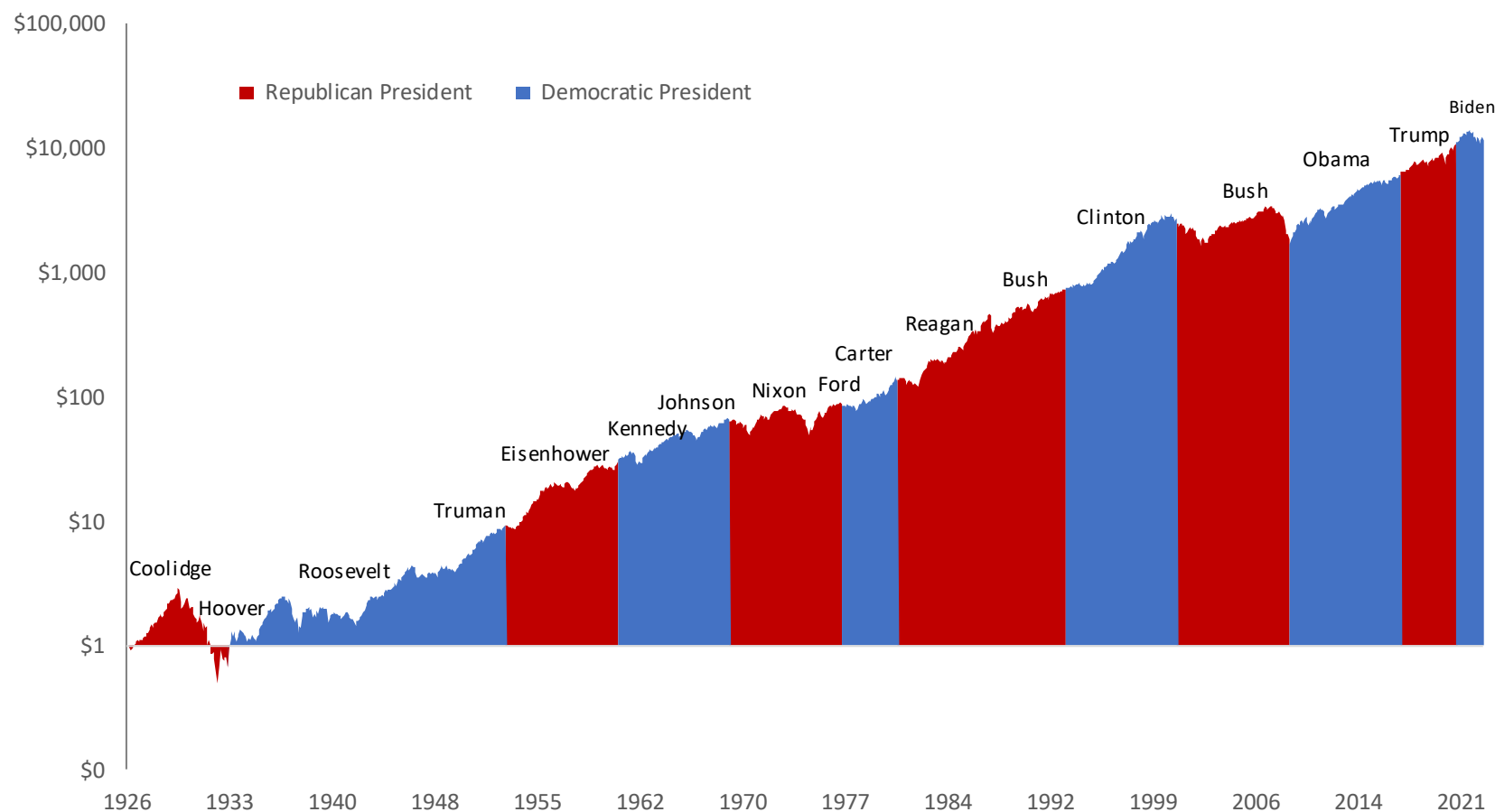
Growth of a dollar—MSCI World Index (net dividends), 1970–2022 – **HYPOTHETICAL ILLUSTRATION**



A disciplined investor looks beyond the concerns of today to the long-term growth potential of markets.

# Markets Have Rewarded Long-Term Investors Under a Variety of US Presidents

Growth of a dollar invested in the S&P 500: January 1926–December 2022 – **HYPOTHETICAL ILLUSTRATION**

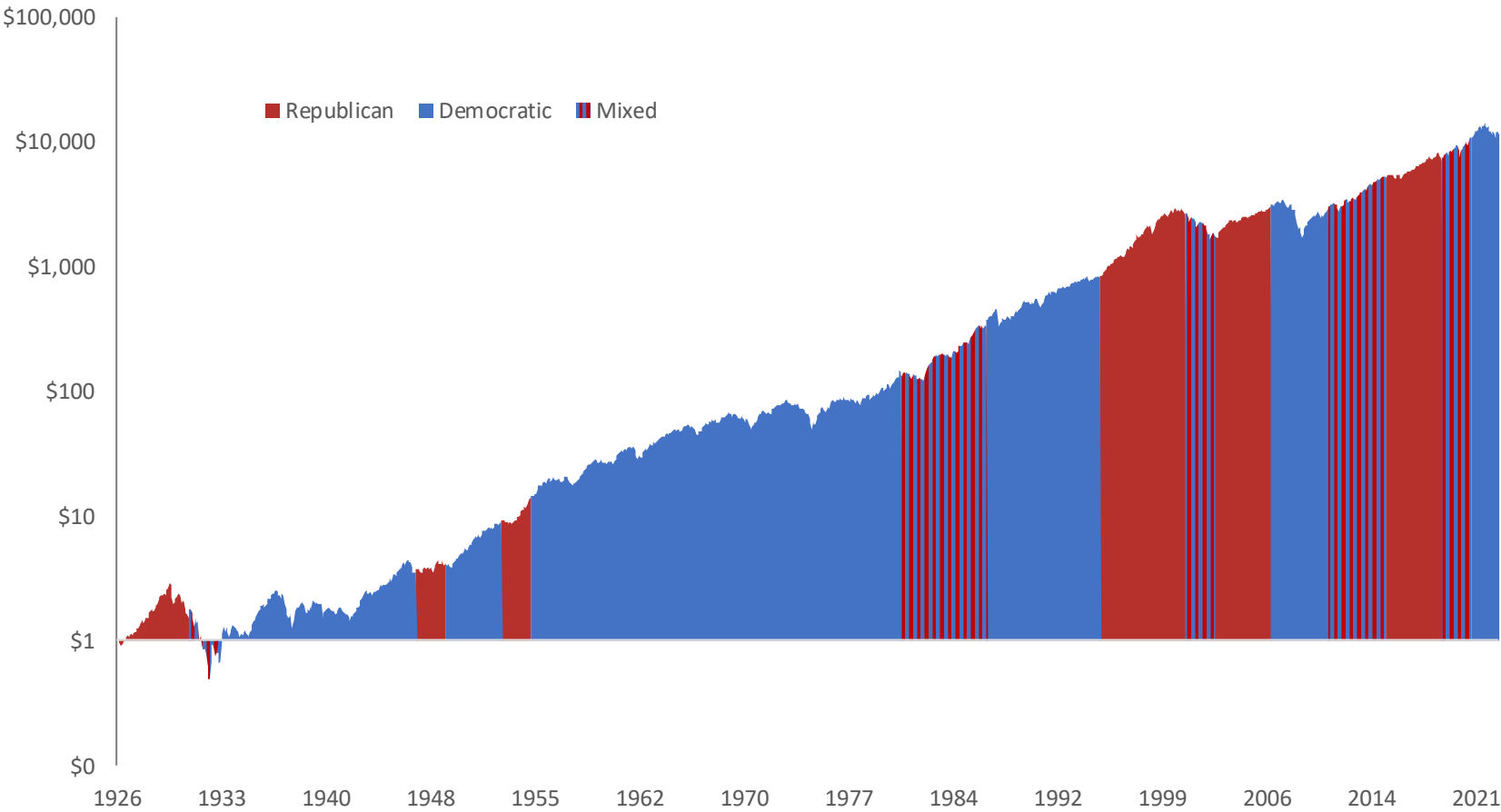


Past performance is not a guarantee of future results. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. Source: S&P data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.



# Hypothetical Growth of \$1 Invested in the S&P 500 Index and Party Control of Congress

January 1926–December 2022



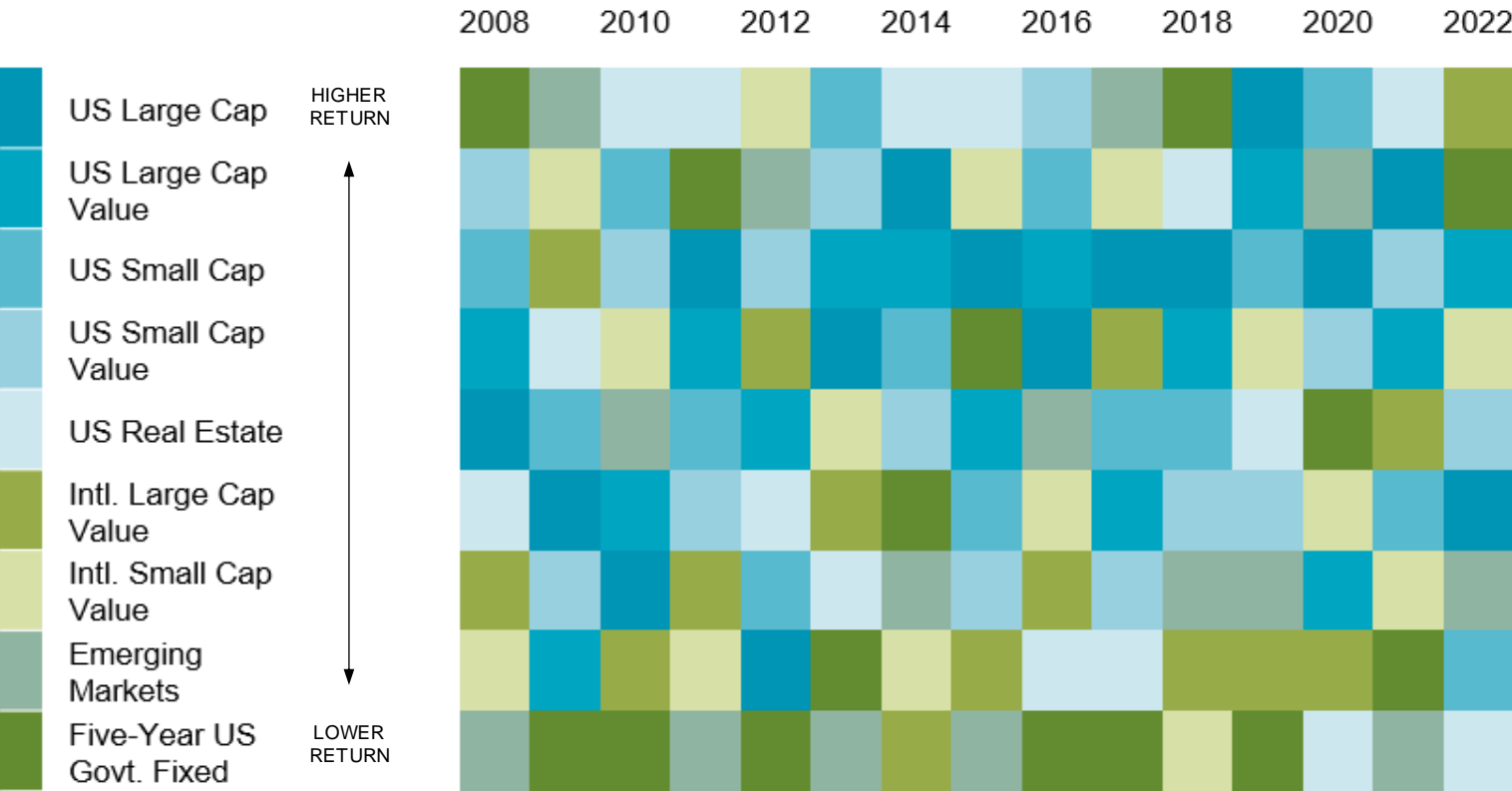
Past performance is not a guarantee of future results. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. Source: S&P data  
© 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.



# How to Build Your Portfolio

# Balancing Growth and Risk Management

Annual Returns by Market Index



You never know which market segments will outperform from year to year. By holding a globally diversified portfolio, investors are well positioned to seek returns wherever they occur.

In USD. US Large Cap is the S&P 500 Index. US Large Cap Value is the Russell 1000 Value Index. US Small Cap is the Russell 2000 Index. US Small Cap Value is the Russell 2000 Value Index. US Real Estate is the Dow Jones US Select REIT Index. International Large Cap Value is the MSCI World ex USA Value Index (gross dividends). International Small Cap Value is the MSCI World ex USA Small Cap Value Index (gross dividends). Emerging Markets is the MSCI Emerging Markets Index (gross dividends). Five-Year US Government Fixed is the Bloomberg US Treasury Bond Index 1-5 Years. S&P and Dow Jones data © 2023 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2023, all rights reserved. Bloomberg data provided by Bloomberg. Chart is for illustrative purposes only. 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 not a guarantee of future results. Diversification does not eliminate the risk of market loss.

# Putting Together the Pieces

What are your goals?



Regional Allocation



Higher Expected Returns

## Equities

- Size
- Value
- Profitability

## Fixed Income

- Credit
- Term
- Currency



# 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 may help lead to a better investment experience.

**Investing involves risks including possible loss of principal.** International investing involves special risks such as currency fluctuation and political instability. Investing in emerging markets may accentuate these risks. Diversification does not eliminate the risk of market loss. This is for informational purposes only and is not to be construed as investment or tax advice. Talk to your financial advisor prior to making an investment decision.

# Thank You!

# Important Information Apella Capital, LLC, DBA Apella Wealth

Apella Capital, LLC (“Apella”), DBA Apella Wealth is an investment advisory firm registered with the Securities and Exchange Commission. The firm only transacts business in states where it is properly registered or excluded or exempt from registration requirements. Registration of an investment adviser does not imply any specific level of skill or training and does not constitute an endorsement of the firm by the Commission. A copy of Apella’s current written disclosure brochure filed with the SEC which discusses among other things, Apella’s business practices, services and fees, is available through the SEC’s website at: [www.adviserinfo.sec.gov](http://www.adviserinfo.sec.gov). No current or prospective client should assume any discussion or information contained in this material serves as the receipt of, or as a substitute for, personalized investment advice.

Diversification seeks to reduce volatility by spreading your investment dollars into various asset classes to add balance to your portfolio. Using this methodology, however, does not guarantee a profit or protection from loss in a declining market. Rebalancing assets can have tax consequences. If you sell assets in a taxable account you may have to pay tax on any gain resulting from the sale. Please consult your tax advisor.

All indexes have certain limitations. Investors cannot invest directly in an index. Indexes have no fees. Historical performance results for investment indexes generally do not reflect the deduction of transaction and/or custodial charges or the deduction of an Investment management fee, the Incurrence of which would have the effect of decreasing historical performance results. Actual performance for client accounts may differ materially from index portfolios.

© Morningstar 2023. All rights reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied, adapted or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information, except where such damages or losses cannot be limited or excluded by law in your jurisdiction. Past financial performance is no guarantee of future results.

# Descriptions of Dimensional Indices

- **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. 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, and in December 2019 to include asset growth as a factor in selecting securities for inclusion in the index.
- **Dimensional US Small Cap Index** is compiled by Dimensional from CRSP and Compustat data. Targets 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 and 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. 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 Index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index, and in December 2019 to include asset growth as a factor in selecting securities for inclusion in the index.
- **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.

- **Dimensional International Market Index** is compiled by Dimensional from Bloomberg data. A 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.

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. The Index is unmanaged and is not subject to fees and expenses typically associated with managed accounts or investment funds. 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.



# Descriptions of Dimensional Indices

- **Dimensional International Small Cap Index** was created by Dimensional in April 2008 and is compiled by Dimensional using Bloomberg data. It is a 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. 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 calculation methodology for the Dimensional International Small Cap Index was amended in January 2014 to include profitability as a factor in selecting securities for inclusion in the index, and in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.
- **Dimensional Emerging Markets Index** is compiled by Dimensional from Bloomberg securities data. A market cap-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 Brazil, Chile, China, Colombia, Czech Republic, Hungary, India, Indonesia, Malaysia, Mexico, Peru, Philippines, Poland, South Africa, South Korea, Taiwan, Thailand, and Turkey. Exclusions: REITs and Investment Companies. 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, excluding those with the lowest profitability 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. 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 Brazil, Chile, China, Colombia, Czech Republic, Hungary, India, Indonesia, Malaysia, Mexico, Peru, Philippines, Poland, South Africa, South Korea, Taiwan, Thailand, and Turkey. 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, and in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

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. The Index is unmanaged and is not subject to fees and expenses typically associated with managed accounts or investment funds. 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.

# 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.

**Dimensional Emerging Markets Small 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 Cap 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 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. 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.

# THE POWER OF DIVERSIFICATION: ASSET CLASS RETURNS DISCLOSURE

Past performance is no guarantee of future results. Investors cannot invest directly in an index. Indexes have no fees. Historical performance results for investment indexes generally do not reflect the deduction of transaction and/or custodial charges or the deduction of an investment management fee, the incurrence of which would have the effect of decreasing historical performance results. The index performance includes the reinvestment of dividends of the underlying securities. Actual performance for client accounts may differ materially from the index portfolios. **As with any investment strategy, there is a potential for profit as well as the possibility of loss.** All Index information provided by Morningstar Direct. Data is from sources believed to be reliable but cannot be guaranteed or warranted.

■ 60/40 Blend - The 60/40 Blend consists of 60% MSCI ACWI IMI and 40% Bloomberg Barclays Global Aggregate Bond Index.

MSCI ACWI IMI NR (All Country World Investable Market Index) captures large and mid cap representation across 24 Developed Markets (DM) and 21 Emerging Markets (EM) countries. With 2,424 constituents, the index covers approximately 85% of the global investable equity opportunity set. Total return is calculated reinvesting gross dividends. This series approximates the maximum possible dividend reinvestment. The amount reinvested is the entire dividend distributed to individuals residing in the country of the company, but does not include tax credits.

Bloomberg Barclays Global Aggregate Bond USD Hedged Index is a flagship measure of global investment grade debt from twenty-four local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging issuers. This index is currency hedged to the US dollar.

■ US Aggregate Bond - Barclays US Agg Bond TR USD: The U.S. Aggregate Bond Index is a broad-based benchmark that measures the investment grade, U.S. dollar-denominated, fixed rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS, and CMBS. The U.S. Aggregate rolls up into other Barclays Capital flagship indices such as the multi-currency Global Aggregate Index and the U.S. Universal Index, which includes high yield and emerging markets debt. The U.S. Aggregate Index was created in 1986, with index history backfilled to January 1, 1976. Index provided by Morningstar Direct.

■ 3-Month T-Bill - FTSE Treasury Bill 3 Mon USD Index provided by Morningstar Direct.

■ US Credit Bond - FTSE USBIG Credit 1-5 Yr Index provided by Morningstar Direct.

■ US Gov't Bond - FTSE USBIG Treasury/Govt Spnsd 1-5 Yr Index provided by Morningstar Direct.

■ World Bond - FTSE WGBI 1-3 Yr Hdg USD Index provided by Morningstar Direct.

■ US REIT - DJ US Select REIT TR USD: Measures U.S. publicly traded Real Estate Investment Trusts. Index provided by Morningstar Direct.

■ Emerging Markets - MSCI EM NR USD: Gross dividends reinvested (in US dollars). A free float-adjusted market cap index that is designed to measure equity market performance in the global emerging markets. Index provided by Morningstar Direct.

■ US Growth - MSCI US IMI Growth GR USD: The MSCI Investable Market Growth Index captures large, mid and small cap securities exhibiting overall growth style characteristics in the US. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend.

■ US Value - MSCI US Investable Market Value GR USD: The MSCI US Investable Market Value Index represents the value companies of the MSCI US Investable Market 2500 Index. (The MSCI US Investable Market 2500 Index represents the investable universe of companies in the US equity market. This index targets for inclusion 2,500 companies and represents, as of February 28, 2003, approximately 98% of the capitalization of the US equity market. The MSCI US Investable Market 2500 Index is the aggregation of the MSCI US Large Cap 300, Mid Cap 450 and Small Cap 1750 Indices.) The MSCI US Investable Market Value Index is a subset of the MSCI US Investable Market 2500 Index. Index provided by Morningstar Direct.

■ US Small Cap - MSCI US Small Cap 1750 GR USD: The MSCI US Small Cap 1750 Index represents the universe of small capitalization companies in the US equity market. This index targets for inclusion 1,750 companies and represents, as of October 29, 2004, approximately 12% of the capitalization of the US equity market. Index provided by Morningstar Direct.

■ Int'l Markets - MSCI World ex US USD: The MSCI World ex USA Index captures large and mid cap representation across 22 of 23 Developed Markets (DM) countries\*-excluding the United States. **With 1,022 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.**

■ S&P 500 - S&P 500 TR USD: Index of 500 large-cap companies traded on major US exchanges, provided by Morningstar Direct.

■ Commodities - Bloomberg Commodity TR USD: The Bloomberg Commodity Total Return Index is composed of futures contracts and reflects the returns on a fully collateralized investment in the BCOM. This combines the returns of the BCOM with the returns on cash collateral invested in 13 week (3 Month) U.S. Treasury Bills.

■ Alternatives - HFRI FOF: Conservative Index: FOFs (Fund of Funds) classified as 'Conservative' exhibit one or more of the following characteristics: seeks consistent returns by primarily investing in funds that generally engage in more 'conservative' strategies such as Equity Market Neutral, Fixed Income Arbitrage, and Convertible Arbitrage; exhibits a lower historical annual standard deviation than the HFRI Fund of Funds Composite Index. A fund in the HFRI FOF Conservative Index shows generally consistent performance regardless of market conditions.

© Morningstar 2023. All rights reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied, adapted or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information, except where such damages or losses cannot be limited or excluded by law in your jurisdiction. **Past financial performance is no guarantee of future results.**

Symmetry Partners, LLC is an investment advisor firm registered with the Securities and Exchange Commission. The firm only transacts business in states where it is properly registered, or excluded or exempted from registration requirements. As with any investment strategy there is a potential for profit as well as the possibility of loss. Additional information about Symmetry can be found in their ADV Part 2A and 2B located on the Symmetry website at [www.symmetrypartners.com](http://www.symmetrypartners.com). The credit quality of the investment in the portfolio does not apply to the stability or safety of the fund. In an environment where interest rates may trend upward, rising rates will negatively impact most bond funds, and fixed income securities held by a fund are likely to decrease in value. Bond funds and individual bonds with a longer duration (a measure of the expected life of a security) tend to be more sensitive to changes in interest rates, usually making them more volatile than securities with shorter durations.