Dimensional launched its first bond strategy nearly 40 years ago, pioneering a systematic approach to value-added fixed income investing. Over the decades, we have implemented fixed income strategies in markets around the world, developing deep expertise into what drives expected returns across bonds. Through an incremental process, we have developed new investment applications and enhancements, resulting in a broad set of systematic solutions designed to meet the diverse needs of investors.

From the beginning, Dimensional has based its fixed income approach on a singular investment philosophy and a deep understanding of the drivers of bond return. Whether investing in fixed income or equities, we believe market prices reflect the aggregate expectations of market participants and provide real-time information about differences in expected returns. We do not invest based on predictions of future changes in interest rates, as decades of empirical research have shown forecasts to be unreliable. We believe combining market principles with a systematic investment approach differentiates Dimensional from peers.

Starting with a single strategy in 1983, we expanded our offering to help clients tailor their exposure across the duration and credit spectrums and choose between a domestic or global opportunity set. We also implemented meaningful enhancements to our approach over time, leading to improvements in risk management and trading strategies.

Ongoing work by academics and Dimensional researchers, advancements in market mechanisms, and shifts in how clients view the role of fixed income contributed to this evolution. These intertwining developments have provided many opportunities for innovation and informed new investment solutions.

Let’s take a walk through the decades.
In 1983, Dimensional got its start in fixed income with the launch of a US ultra-short duration strategy, implementing findings from Professor Eugene Fama’s research on the relation between forward interest rates and subsequent returns.1

What we knew then—and what remains true today—is that a bond’s return has three primary components: the yield, the expected capital appreciation or depreciation over the holding period based on the current yield curve, and the return due to future interest rate changes. The first two components are known and observable today and combine to form the forward rate. Fama’s work found that observed forward rates contain reliable information about future differences in expected bond returns. This research led to the development of Dimensional’s variable maturity approach, which remains integral to our strategies today. Dimensional uses the information available in forward rates to identify bonds with the highest expected returns, within a strategy’s guidelines, and varies duration by targeting those securities. Generally, this approach implies that, within pre-defined ranges or relative to a benchmark, our strategies will pursue longer duration bonds where yield curves are upward-sloping and shorter duration bonds where yield curves are flat or inverted.

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Dimensional expanded its offering in the 1990s to include global bonds with the launch of a global short duration strategy. The approach was guided by Fama’s 1980s research on forward and spot exchange rates and additional work in the 1990s between Fama and Dimensional on currency-hedged global investing.

Eugene Fama’s pioneering research into the forward rate structure provides reliable information about expected returns across the duration spectrum. Fama’s work found that observed forward rates contain reliable information about future differences in expected bond returns. Investing in global bonds on a currency-hedged basis offered investors several potential benefits, including a broader opportunity set for identifying bonds with higher expected returns and diversification of duration exposures. Using information in forward rates, we can identify bonds issued in different currencies that offer higher expected returns and increase a portfolio’s allocation to those securities. Because global yield curves do not move in tandem, a global portfolio can also manage the risk of unexpected changes in rates across individual yield curves.

Dimensional’s first intermediate duration strategy was also introduced in the 1990s, designed to meet the needs of investors seeking a marketlike portfolio duration while pursuing greater-than-market returns. The strategy pursued a targeted duration similar to a market benchmark while allocating to a subset of bonds offering higher expected returns. This approach—rather than investing across all maturities—is the crucial insight underpinning the strategy. The design of this portfolio established a value-added approach for duration-constrained investing and formed the basis for future benchmark-relative strategies.2

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1980s

Major Research and Market Improvements

Strategy Applications and Enhancements

Global Bonds: Expanding the Opportunity Set

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Prior to this development in the bond market, Dimensional’s fixed income strategies focused on the highest-quality investment grade issues. After TRACElaunched, Dimensional spent several years studying bond trade data, which provided a higher-resolution view of the corporate bond market. The research confirmed that differences in forward rates contain reliable information about differences in expected returns not only across the duration spectrum but also across the credit spectrum and ultimately informed our variable credit approach.

Variable credit was first introduced in Dimensional’s credit and core fixed income strategies, which extended the eligible credit range down to BB rated bonds. This approach uses information in forward rates (as captured, for example, by credit spreads) to identify bonds with higher expected returns across eligible yield curves of varying credit quality and dynamically allocates to those securities. In practice, the approach increases exposure to eligible bonds with lower credit quality when credit spreads are wider and those securities offer higher expected returns. Conversely, variable credit reduces exposure to eligible bonds with lower credit quality when credit spreads are narrower and expected returns for those securities are lower.

TRACE also provided us with additional opportunities for enhancing Dimensional’s risk management processes. We began systematically incorporating TRACE data on traded prices and quantities into our market-informed credit ratings, alongside a host of other considerations, such as information in prices of credit default swaps. Specifically, we began to continually monitor market yields of corporate and agency bonds and assign a lower credit rating to those bonds whose yields suggest a higher level of credit risk than indicated by their stated credit ratings. Additionally, because most global borrowed issues bonds denominated in USD, we could infer internal credit ratings for the vast majority of non-US issuers and apply our internal credit monitoring process to non-US and global strategies. This allowed us to improve our credit monitoring process, as our research shows that bonds trading at substantially higher yields than peers with the same rating generally perform more like lower-quality bonds and also experience a higher frequency of downgrades.

TRACE has also informed the development of our inventory modeling and enhanced our trade cost analysis. Dimensional has always employed a flexible trading approach to reduce implementation costs in our portfolios. Having visibility into daily bond trade data, including whether a trade was involved in the transaction, allowed us to begin modeling dealer inventory. Gaining an understanding of dealer inventory and holding periods enables us to have a better view of available market liquidity across different bonds, which, paired with our flexible trading approach, generally allows us to trade at favorable prices. Further, TRACE has enabled extensive trade cost analysis that helps measure and monitor outcomes of our flexible trading approach relative to others in the marketplace. Our ongoing analysis and monitoring efforts have consistently validated the benefits of our approach and informed improvements over time.

Throughout the decades, the one constant in our fixed income evolution has been our reliance on market prices. This has set us apart from other investment managers.”

Dave Plecha
Global Head of Fixed Income
The most recent decade saw the advent of direct trading between bond buyers and sellers. Dimensional executed its first peer-to-peer bond trade in 2014. By eliminating the bond dealer’s role in a transaction, trading parties could obtain lower bid-ask spreads, leading to cost savings. Today, peer-to-peer trading is an essential component of our daily implementation.

In the 2010s, Dimensional also continued expanding its fixed income offerings into new solutions, including our first strategies to offer exposure to high-yield bonds, sustainability and social fixed income strategies, and an innovative inflation-linked municipal bond strategy. TRACE also added Dimensional’s entry into high-yield. Leveraging daily corporate bond trade data, we performed extensive analysis into high-yield debt (bonds with credit ratings of BB or lower), concluding that the highest credit-quality portion of the high-yield market (BB-rated bonds) can be appropriate for certain strategies designed to target credit exposure, resulting in improved diversification and increased return potential. Our work in high-yield bonds culminated in making BB-rated bonds eligible in our targeted credit strategy, which emphasizes occurrence risk rather than spread.

Near the close of the decade, Dimensional introduced a new strategy that combines multiple innovations developed over decades of fixed income investing. Our global core plus strategy was designed for investors seeking a value-added core solution with a duration similar to that of the aggregate global bond market. In this strategy, we apply expertise in investing within duration constraints and use information in forward rates to systematically vary the allocation across bonds of different durations, credit qualities (down to BB), and maturities of issuance. These potential sources of value are integrated into a single investment solution representing decades of progress in systematic fixed income investing.

Looking Ahead
At Dimensional, we are on a continual search for new research and ideas that may lead to advancements in fixed income investing. However, we do not lose sight of the foundational understanding of fixed income returns that has benefitted investors over time.

We have seen trends come and go, and we expect to see more in the future. A current example is the rise of “smart beta” approaches to fixed income. Some investment managers propose that additional variables, such as company size, leverage, or bond momentum, are linked to expected bond returns. A recent study by Dimensional, conducted as part of our ongoing research into fixed income markets, found that most of the information these variables provide is already reflected in forward rates, originally examined by Fama in the 1970s.

“The paper, “The Cross-Section of Corporate Bond Returns,” offered strong empirical support for the ability of forward rates to explain differences in expected returns across corporate bonds. In addition, the research found that, if a company’s stock underperforms the equity market in a given month, its bond tends to underperform the bond market in the next month. While we have for many years evaluated a bond issuer’s recent stock price as part of our credit investing approach, this finding contributed to our understanding of the relation between short-term equity returns and expected bond returns.

As the 2020s begin, we have entered new areas, such as mortgage-backed securities, where TRACE reporting requirements make the market more transparent. We are also preparing to meet the challenges of conducting peer-to-peer trading in Europe. Change is a constant, and we expect the evolution of research, market microstructures, and client needs to create new opportunities for investment innovation.

At Dimensional, we look forward to continuing this tradition of innovation—in fixed income and elsewhere. It is key to our mission of delivering the best solutions we can to investors.  


In science, what you want is the minimum number of factors that will explain something, not the maximum number.”

Percival Lowell Farn, Rabbi Isaac, Jesuit, and Christian
GLOSSARY

Forward interest rate
The yield and expected capital appreciation of a bond based on current market prices.

Duration
A measurement of a bond’s price sensitivity to interest rate changes. Generally, higher duration bonds are more interest rate sensitive than lower duration bonds.

Yield curve
A graph that plots yield at a specific point in time of bonds with similar credit quality but different maturity dates. A curve’s shape can vary through time based on changes in the shape of the curve and the level of yields. Generally, curves can be upward sloping, downward sloping, or flat.

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Spot exchange rate
The current settlement price to exchange one currency for another in the market.

Currency hedging
Investing in financial instruments intended to offset the impact of exchange rate fluctuations on bonds traded in a foreign currency.

Term exposure
A portfolio’s general level of interest rate risk as reflected in its average duration.

Duration constraint
The average duration range allowed in a portfolio, which is usually specified relative to a market benchmark.

Over-the-counter
The secondary market where buyers and sellers tradable bonds directly or through a dealer that maintains an inventory of bond issues.

Investment grade
Bonds with a relatively low risk of default, as indicated by their credit rating. Bonds rated AAA, AA, A, and BBB are considered investment grade.

Credit spread
The yield difference between bonds of similar maturity but different credit quality. A narrow spread indicates a smaller difference between yields of higher and lower credit quality bonds. A wide spread indicates a larger yield difference between higher and lower credit qualities.

Inventory modeling
The evaluation of specific bond issues and quantities held by a bond dealer.

Trade cost analysis
Describes various methods for assessing an investment manager’s trading efficiency.

Liquidity
An asset’s ability to be bought or sold quickly without a significant change in its price. The US Treasury bond market tends to offer the highest level of liquidity to bond investors.

Bid-ask spread
The difference between the highest price a buyer is willing to pay for a bond (bid) and the lowest price for which a seller is willing to sell (ask).

High-yield debt
Bonds with credit ratings below those of investment grade (BB and lower).
How to Use This Book

In this example, the Dimensional US Large Cap Value Index had a compound rate of return of 1.7% per year for the nine-year period.

### Annualized Rates of Returns (%)

<table>
<thead>
<tr>
<th>Years</th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>10 Years</th>
<th>15 Years</th>
<th>20 Years</th>
<th>50 Years</th>
<th>80 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000–2019</td>
<td>11.1 %</td>
<td>8.0 %</td>
<td>7.6 %</td>
<td>6.5 %</td>
<td>5.7 %</td>
<td>5.1 %</td>
<td>4.5 %</td>
<td>4.1 %</td>
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<tr>
<td>2005–2019</td>
<td>11.5 %</td>
<td>8.1 %</td>
<td>7.4 %</td>
<td>6.4 %</td>
<td>5.6 %</td>
<td>5.1 %</td>
<td>4.5 %</td>
<td>4.0 %</td>
</tr>
<tr>
<td>2010–2019</td>
<td>11.6 %</td>
<td>7.6 %</td>
<td>7.0 %</td>
<td>6.0 %</td>
<td>5.2 %</td>
<td>4.7 %</td>
<td>4.1 %</td>
<td>3.7 %</td>
</tr>
<tr>
<td>2015–2019</td>
<td>11.3 %</td>
<td>7.3 %</td>
<td>6.8 %</td>
<td>5.7 %</td>
<td>4.9 %</td>
<td>4.3 %</td>
<td>3.7 %</td>
<td>3.3 %</td>
</tr>
</tbody>
</table>

**How to Use This Book**

1. Locate the column for the first year of the interval (2000). Years are labeled at the top and bottom of each column.
2. Locate the row for the last year of the interval (2008). Years are labeled at the beginning of each row.
3. The return can be found where the first year’s column meets the last year’s row.

* Hedged to USD

**Bloomberg Barclays US TIPS Index (Inflation Adjusted)**

**Bloomberg Commodity Total Return Index**

**S&P Global ex US REIT Index**

**FTSE World Government Bond Index 1–3 Years**

**Dimensional US Adjusted Investment Grade Index**

**Dimensional Emerging Markets Growth Index**

**Dimensional Emerging Markets Value Index**

**Dimensional Emerging Markets Adjusted Market Index**

**MSCI Emerging Markets Index**

**MSCI Emerging Markets Cap Index**

**MSCI Emerging Markets Adjusted Market Index**

**MSCI Emerging Markets Value Index**

**Dimensional International Small Cap Value Index**

**Dimensional International Small Cap Index**

**MSCI World ex USA Small Cap Index**

**MSCI Emerging Markets Growth Index**

**MSCI Emerging Markets Small Index**

**FTSE US Government Bond Index 1–3 Years**

**FTSE US Government Bond Index 3–7 Years**

**Bloomberg US Treasury 5 Yr Index**

**Long-Term Government Bonds**

**Long-Term Corporate Bonds**

**Bloomberg Barclays US Aggregate Bond Index**

**Bloomberg Barclays US Government/Credit Bond Index Intermediate**

**Dimensional US Adjusted Investment Grade Index**

**FTSE World Government Bond Index 1–3 Years**

**FTSE World Government Bond Index 3–7 Years**

**Bloomberg Barclays Global Aggregate Bond Index**

**Dimensional Global Short-Term Government Variable Maturity Index**

**Dimensional Global International Short-Term Government Variable Maturity Index**

**Dimensional Global Adjusted Fixed Income Market Index**

**Show Joes US Small CEF Index**

**S&P Global’s US REIT Index**

**Bloomberg Barclays US Municipal Bond Index**

**Bloomberg Barclays US Aggregate Bond Index**

**Bloomberg Barclays US TIPS Index**

**Risk-Adjusted US TIPS Index**

**Inflation:** US Consumer Price Index

**S&P Global’s US REIT Index (Inflation Adjusted)**

**Bloomberg Barclays US Municipal Bond Index**

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**Risk-Adjusted US TIPS Index**

**Inflation:** US Consumer Price Index
Dimensional US Adjusted Market 1 Index
1928–2019: Total Returns (%)

See Sources and Descriptions of Data.
Dimensional International Adjusted Market Index
1975–2019: Total Returns (%)
See Sources and Descriptions of Data.

Bloomberg Commodity Total Return Index
1993–2019: Total Returns (%)

Bloomberg Barclays US TIPS Index
1998–2019: Total Returns (%)
### Dimensional Core Wealth Index Models

**SUMMARY STATISTICS**  
As of December 31, 2019

**EQUITY**

<table>
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<th>0%</th>
<th>20%</th>
<th>40%</th>
<th>60%</th>
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**FIXED INCOME**

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<th>60%</th>
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#### Weights

The Core Wealth Index Models represent Dimensional’s most advanced thinking on global portfolio construction. These models replace the balanced strategies from past Matrix Books and embody the natural evolution in Dimensional’s research, thought leadership, and collaboration with financial professionals. Constructed using mostly Dimensional indices, the models may inform expectations about the performance of different asset allocations over time and about return deviations vs. the market.

- **EQUITY**
  - Dimensional US Adjusted Market 1 Index
  - Dimensional US Adjusted Market 2 Index
  - Dimensional International Adjusted Market Index
  - Dimensional Emerging Markets Adjusted Market Index
  - S&P Global REIT Index

- **FIXED INCOME**
  - Dimensional Short-Duration Real Return Index (Hedged to USD)
  - Dimensional Global Short-Term Government Index
  - Dimensional Short-Term Extended Quality Index
  - Dimensional Global Short-Term Government Variable Maturity Index (Hedged to USD)
  - Dimensional US Adjusted Investment Grade Index
  - Dimensional Global Adjusted Fixed-Income Market Index (Hedged to USD)

#### As of December 31, 2019

- **One-Year Total Return (%)**
  - Annualized Return (%)
    - 1985–2019
  - Annualized Standard Deviation (%)
    - 1985–2019
  - Lowest One-Year Return (%)
    - (12/07–11/08)
  - Lowest Annualized Three-Year Return (%)
    - (03/96–02/99)
  - Highest One-Year Return (%)
    - (04/85–03/86)
  - Highest Annualized Three-Year Return (%)
    - (03/96–02/99)

#### Summary

- All performance results of the Wealth Index Models are based on performance of indices with model/backtested asset allocations; the performance was achieved with the benefit of hindsight; it does not represent actual investment strategies. The model’s performance does not reflect advisory fees or other expenses associated with the management of an actual portfolio. There are limitations inherent in model allocations. In particular, model 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. Past performance is no guarantee of future results.
### Dimensional Core Plus Wealth Index Models

**SUMMARY STATISTICS**

As of December 31, 2019

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<td>60%</td>
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</table>

#### Weights

The Core Plus Wealth Index Models combine Dimensional's Core Wealth Index Model allocations with additional index components that increase the systematic emphasis on the reliable drivers of higher expected returns within equities and fixed income.

#### Summary

- **Equity Indices**: Dimensional US Adjusted Market 2 Index, Dimensional US Large Cap High Profitability Index, Dimensional US Adjusted Market Value Index, Dimensional International Adjusted Market Index, Dimensional International Large Cap High Profitability Index, Dimensional International Vector Index, Dimensional Emerging Markets Adjusted Market Index, Dimensional Emerging Markets Value Index, S&P Global REIT Index.

- **Fixed Income Indices**: Dimensional Short-Duration Real Return Index, Dimensional US Adjusted Investment Grade Index, Dimensional Global Short-Term Government Index (Hedged to USD), Dimensional Global Short-Term Government Variable Maturity Index (Hedged to USD), Dimensional Global Government/Credit 1–3 Year Unhedged Index, Dimensional Global Adjusted Fixed Income Market Index (Hedged to USD), Dimensional Targeted Credit Index (Hedged to USD), Dimensional Core Plus Wealth Index Models.

- **Weight As of December 31, 2019**: Rebalanced monthly. For illustrative purposes only. The index models are unmanaged and are not subject to fees and expenses typically associated with managed accounts or investment funds. Indices are not available for direct investment.

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### Dimensional Core Plus Wealth Index Models

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#### Summary

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- **Fixed Income Indices**: Dimensional Short-Duration Real Return Index, Dimensional US Adjusted Investment Grade Index, Dimensional Global Short-Term Government Index (Hedged to USD), Dimensional Global Short-Term Government Variable Maturity Index (Hedged to USD), Dimensional Global Government/Credit 1–3 Year Unhedged Index, Dimensional Global Adjusted Fixed Income Market Index (Hedged to USD), Dimensional Targeted Credit Index (Hedged to USD), Dimensional Core Plus Wealth Index Models.

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**Returns of all strategies have been rebalanced monthly. Highest and lowest one-year and three-year returns are calculated from periods overlapping monthly. Annualized standard deviation is calculated from monthly data. All performance results of the Wealth Index Models are based on performance of indices with model/allocated asset allocations, the performance was achieved with the benefit of hindsight; it does not represent actual investment strategies. The model’s performance does not reflect advisory fees or other expenses associated with the management of an actual portfolio. There are limitations inherent in model allocations. In particular, model 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. Past performance is no guarantee of future results.**
World Equity Market Capitalization
As of December 31, 2019

WHERE DIMENSIONAL INVESTS: ■ DEVELOPED MARKETS ■ EMERGING MARKETS ■ OTHER

BY ASSET CLASS

<table>
<thead>
<tr>
<th>United States</th>
<th>Developed ex US</th>
<th>Emerging</th>
<th>Other</th>
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BY COUNTRY

<table>
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<th>Country</th>
<th>Market Cap</th>
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<tr>
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<tr>
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<tr>
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How do we measure the world? Thinking only in terms of landmass can distort investment decisions. Directly comparing the markets of nations produces some surprising results. Measures such as population, gross domestic product, or exports do not directly indicate the size or suitability of investments in a market. This cartogram illustrates the balance of equity investment opportunities around the world. The size of each country has been adjusted to reflect its total relative capitalization. Of course, the world is in motion—there is no fixed relationship between markets, and their proportion can change over time. Viewing the world this way brings the scope of diversification into new light and helps clarify allocation decisions.

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 as China. 30% foreign ownership limit is 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.
Global Bond Market
As of December 31, 2019

Viewing the world in terms of bond markets produces a very different perspective on countries and regions, as compared to their landmass, population, gross domestic product, or even stock markets. This cartogram shows the balance of the investment grade fixed income opportunities around the world, with the size of each country adjusted to reflect the relative size of its fixed income market. It may be surprising that the relative sizes of a country’s bond and equity markets are not necessarily the same. Different regulations and preferences regarding capital structures for companies—as well as differing requirements and methods for government funding—lead to different outcomes. These proportions can change over time, but viewing the fixed income world this way highlights opportunities for diversification in fixed income and helps clarify allocation decisions.

BY COUNTRY

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IN USD. Data is from Bloomberg Barclays 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. Diversification neither assures a profit nor guarantees against loss in a declining market.
### Emerging Markets Percentage of Annual Returns

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In CDE, MSCI country indices (or index subsets thereof) are benchmarks. Do not include fees, which MSCI classifies as an emerging market prior to May 2010. Do not include taxes, which MSCI classifies as a developed market prior to December 2011. Additional countries excluded due to data availability or data being too granular for MSCI. MSCI is a trademark of MSCI Inc., all rights reserved. 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.
Sources and Descriptions of Data

US Equities

S&P 500 Index

- Prior to January 1975
  - The S&P 500 Index is composed of 500 leading companies in the eligible markets with an emphasis on companies with smaller market 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 market capitalization, weighted by book equity, that are defined as those at the bottom 1% of the index's market capitalization. The index's market capitalization-weighted average is rebalanced annually and semi-annually based on market capitalization.

- January 1975–present
  - The index values are calculated daily on an equally weighted basis and are computed at the beginning of each calendar quarter. The index is calculated using a market-capitalization weighted approach and is rebalanced semi-annually. The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

US International Equities

S&P Global Market Indices

- Prior to January 1990
  - S&P Global Market Indices is a division of S&P Dow Jones Indices that develops, maintains and licenses indices. The indices are widely used to measure and monitor the performance of various equity markets. The indices are designed to measure the performance of a representative sample of the stocks in a given market and are used by investors, asset managers, and other market participants to create investment strategies, construct portfolios, and benchmark performance. The indices are also used by financial journalists and analysts to compare the performance of different equity markets and sectors. The indices are calculated using a market-capitalization weighted approach and are rebalanced annually and semi-annually based on market capitalization.

- January 1990–present
  - The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

US Small and Mid-Cap Equities

- Prior to January 1990
  - The S&P 500 Index is composed of 500 leading companies in the eligible markets with an emphasis on companies with smaller market 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 market capitalization, weighted by book equity, that are defined as those at the bottom 1% of the index's market capitalization. The index's market capitalization-weighted average is rebalanced semi-annually based on market capitalization.

- January 1990–present
  - The index values are calculated daily on an equally weighted basis and are computed at the beginning of each calendar quarter. The index is calculated using a market-capitalization weighted approach and is rebalanced semi-annually. The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

US Mid-Cap Equities

- January 1975–present
  - The index values are calculated daily on an equally weighted basis and are computed at the beginning of each calendar quarter. The index is calculated using a market-capitalization weighted approach and is rebalanced semi-annually. The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

US Small-Cap Equities

- January 1975–present
  - The index values are calculated daily on an equally weighted basis and are computed at the beginning of each calendar quarter. The index is calculated using a market-capitalization weighted approach and is rebalanced semi-annually. The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

US International Small-Cap Equities

- January 1990–present
  - The index values are calculated daily on an equally weighted basis and are computed at the beginning of each calendar quarter. The index is calculated using a market-capitalization weighted approach and is rebalanced semi-annually. The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

International Equities

- Prior to January 1990
  - The S&P Global Market Indices is a division of S&P Dow Jones Indices that develops, maintains and licenses indices. The indices are widely used to measure and monitor the performance of various equity markets. The indices are designed to measure the performance of a representative sample of the stocks in a given market and are used by investors, asset managers, and other market participants to create investment strategies, construct portfolios, and benchmark performance. The indices are also used by financial journalists and analysts to compare the performance of different equity markets and sectors. The indices are calculated using a market-capitalization weighted approach and are rebalanced annually and semi-annually based on market capitalization.

- January 1990–present
  - The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.

International Small-Cap Equities

- January 1990–present
  - The index values are calculated daily on an equally weighted basis and are computed at the beginning of each calendar quarter. The index is calculated using a market-capitalization weighted approach and is rebalanced semi-annually. The calculation methodology was amended in November 2019 to include asset growth as a factor in selecting securities for inclusion in the index.
government bonds may be held above 50%. When the difference in yields between
credit and government bonds is narrow, AAA+AA bonds may be held above market cap
weights. When the difference in yields between AAA and BBB is wide, AAA+AA bonds
are held above market cap weights. When the duration of the index is above 5 years, the
expected returns associated with allocation to bonds with different credit qualities.
Inflation
Data provided by Bloomberg.

TAP GLOBAL US EQUITI INDEX
Compiled by Dimensional using data provided by Morningstar. The TAP Global US EQUITI
Index is a market capitalization-weighted index of US equities. It includes securities
in the S&P 500 Index and is priced in USD. The index is rebalanced monthly.

DIMENSIONAL TARGETTED CREDIT INDEX (HEDGED TO USD)
Compiled by Dimensional using data provided by Bloomberg. Bloomberg, based on
market capitalization, splits the index into high yield, investment grade Aaa, Aa, A, Baa
and B credit quality bands for fixed income. The index offers four fixed reversion rates,
and the duration is one of those reversion rates chosen in order to align the index
with various embedded market options with different reversion rates. These
reversion rates are indexed to the 10-year US Treasury and gives an equal weight to both
credit and government bond sectors. The index is designed to reflect the
expected returns associated with allocation to bonds with different credit qualities.

DIMENSIONAL CORE PLUS 40/60 WEALTH INDEX MODEL
January 1995–present
The Dimensional Core Plus 40/60 Wealth Index Model returns are calculated monthly as a
weighted average of the returns of the underlying indices. The Dimensional Core
Plus 40/60 Wealth Index Model data is compiled by Dimensional from Bloomberg. The
Bloomberg Barclays US Aggregate Bond Index is represented by Bloomberg Barclays
US Aggregate Bond Index from January 1985 to December 2019 and the Bloomberg
Barclays Global Aggregate Bond Index is represented by Bloomberg Barclays Global
Aggregate Bond Index from January 1990 to December 2019. The returns of the
Dimensional Global Real Estate Income Index (Hedged to USD) from January 2007 to
January 2019 are represented by Bloomberg Barclays US Aggregate Bond Index
from January 1985 to December 2019. The Bloomberg Barclays US Government/Credit
1–5 Year Bond Index is represented by Bloomberg Barclays US Government/Credit 1–5
Year Bond Index from January 1985 to October 1992 and the Bloomberg Barclays US
Government/Credit 1–3 Year Bond Index from January 1985 to January 1999. The
Dimensional US Adjusted Investment Grade Index is represented by Bloomberg Barclays
US Government/Credit 1–3 Year Bond from January 1985 to January 2019. The
Dimensional Global Real Estate Income Index (Hedged to USD) is represented by
DIMENSIONAL CORE PLUS 60/40 WEALTH INDEX MODEL
January 1995–present
The Dimensional Core Plus 60/40 Wealth Index Model returns are calculated monthly as a
weighted average of the returns of the underlying indices. The Dimensional Core
Plus 60/40 Wealth Index Model data is compiled by Dimensional from Bloomberg. The
Bloomberg Barclays US Aggregate Bond Index is represented by Bloomberg Barclays
US Aggregate Bond Index from January 1985 to December 2019 and the Bloomberg
Barclays Global Aggregate Bond Index is represented by Bloomberg Barclays Global
Aggregate Bond Index from January 1990 to December 2019. The returns of the
Dimensional Global Real Estate Income Index (Hedged to USD) from January 2007 to
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from January 1985 to December 2019. The Bloomberg Barclays US Government/Credit
1–5 Year Bond Index is represented by Bloomberg Barclays US Government/Credit 1–5
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Bloomberg Barclays US Government/Credit 1–5 Year Bond Index is represented by
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October 1992 and the Bloomberg Barclays US Government/Credit 1–3 Year Bond Index
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January 1985 to January 2019. The Dimensional Global Real Estate Income Index
(Hedged to USD) is represented by Bloomberg Barclays US Aggregate Bond Index from
Year Bond Index is represented by Bloomberg Barclays US Government/Credit 1–5 Year
Bond Index from January 1985 to October 1992 and the Bloomberg Barclays US
Government/Credit 1–3 Year Bond Index from January 1985 to January 1999. The
Dimensional US Adjusted Investment Grade Index is represented by Bloomberg Barclays
US Government/Credit 1–3 Year Bond from January 1985 to January 2019. The
Dimensional Global Real Estate Income Index (Hedged to USD) is represented by
ON THE COVER

Over the course of nearly 40 years, Dimensional has pioneered a systematic approach to fixed income investing that uses information in current market prices to pursue higher expected returns. Research insights, market structure improvements, and clients’ evolving needs have fueled innovation through the years. The front cover visualizes advances across four distinct decades and depicts the growing count of Dimensional fixed income strategies from 1983 through 2019.