

Dimensions of Returns

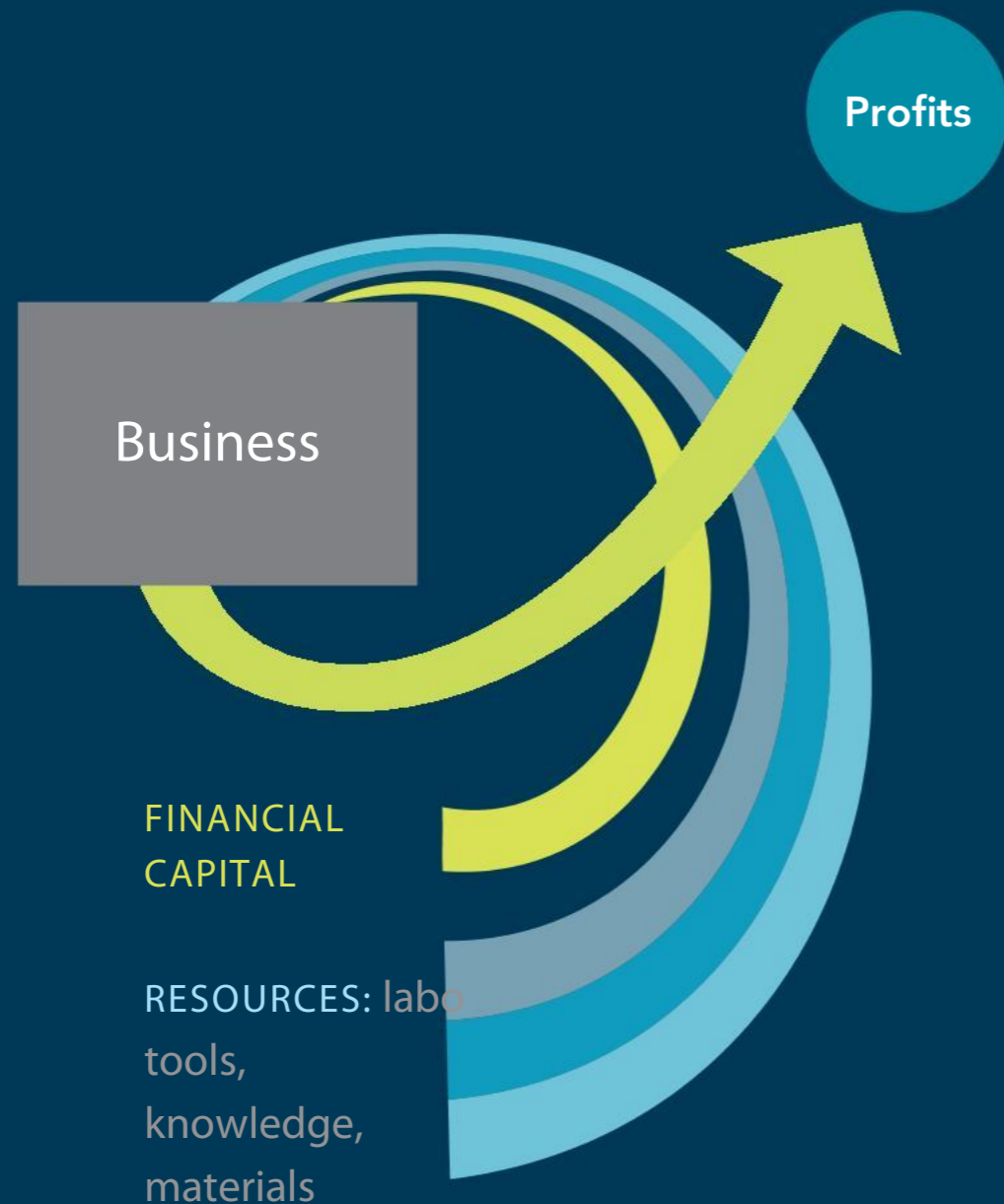
- Financial capital plays a vital role in wealth creation
- The capital markets have rewarded long-term investors
- Markets compensate non-diversifiable risk
- Dimensions point to differences in expected returns
- Portfolios can be structured to pursue dimensions

“The best way to invest is to structure a portfolio along the dimensions of expected returns.”

—David Booth

Founder, Chairman, and co-CEO
Dimensional Fund Advisors

Financial Capital Plays a Vital Role in Wealth Creation



Using financial capital and other resources, a business produces goods or services that can be sold for a profit.

As providers of financial capital, investors expect a return on their money.

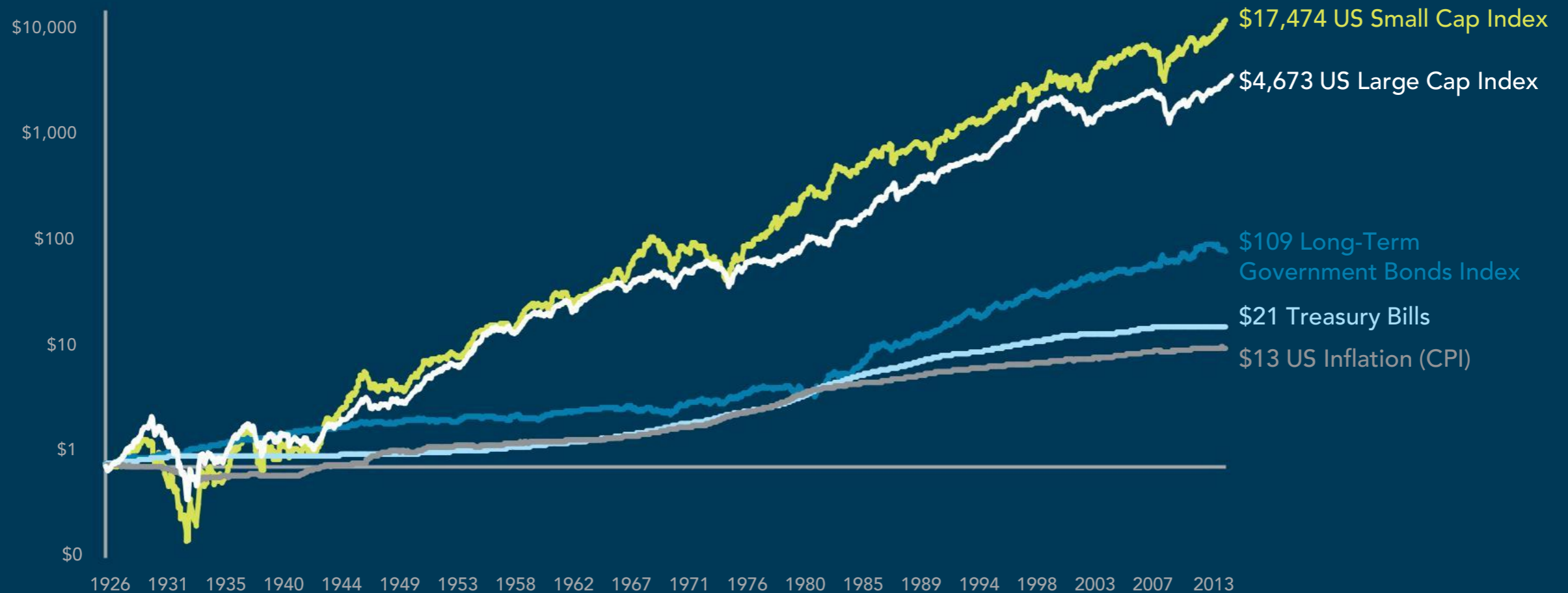
Stocks and Bonds Are Conduits for Capital



Bondholders are lenders to a company. Stockholders are equity owners in the business. Both expect an adequate return for the terms and risk of their investment.

The Capital Markets Have Rewarded Long-Term Investors

Monthly growth of wealth (\$1), 1926-2013



In US dollars. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results. US Small Cap Index is the CRSP 6-10 Index; US Large Cap Index is the S&P 500 Index; Long-Term Government Bonds Index is 20-year US government bonds; Treasury Bills are One-Month US Treasury bills; Inflation is the Consumer Price Index. CRSP data provided by the Center for Research in Security Prices, University of Chicago. The S&P data are provided by Standard & Poor's Index Services Group. Bonds, T-bills, and inflation data © Stocks, Bonds, Bills, and Inflation Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefeld).

Markets Compensate Non-Diversifiable Risk

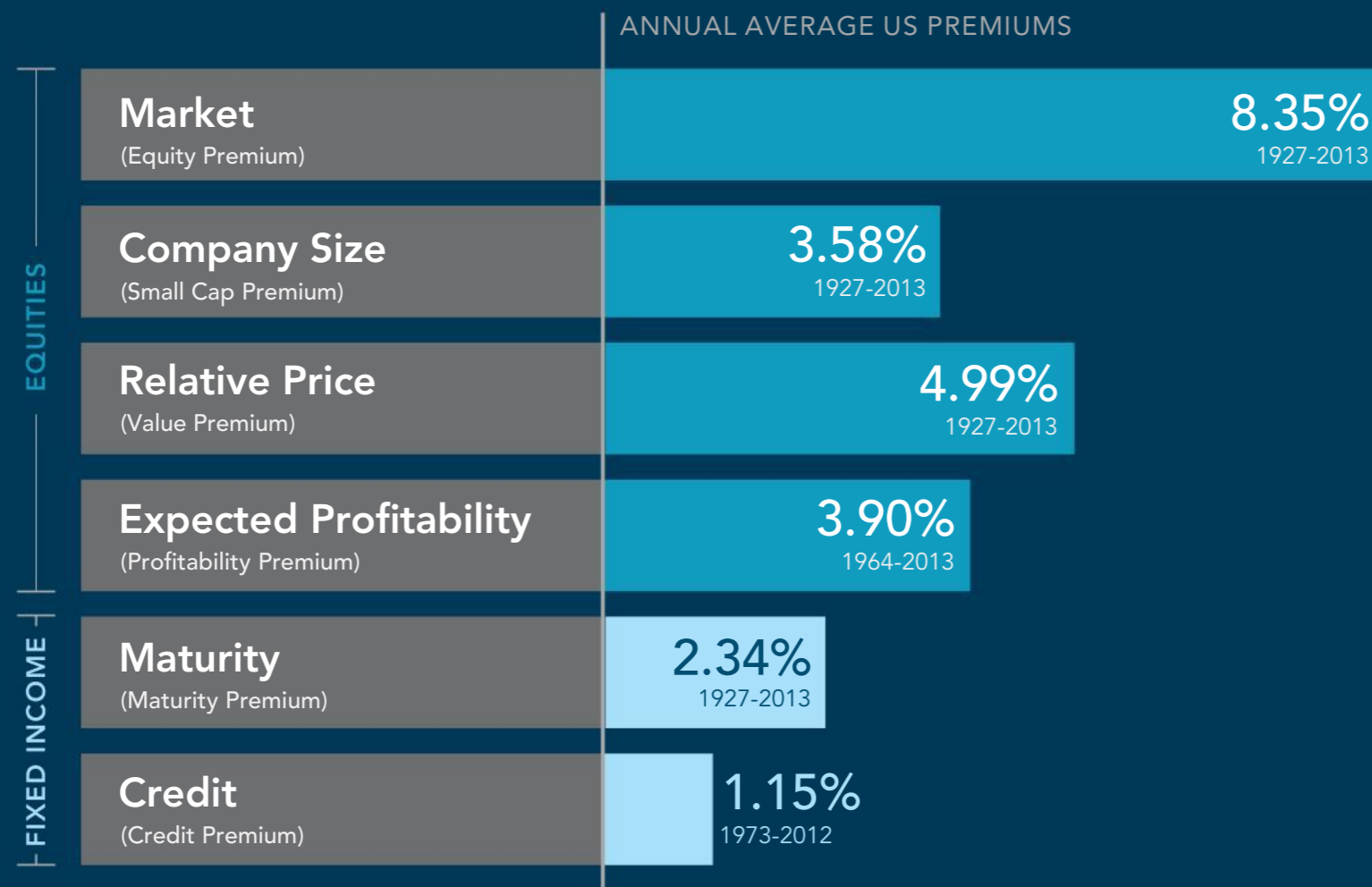
Risk is a complex concept—it is always present, even if it has not been realized, and it cannot be directly observed until it occurs.



The sources of return are directly observable, and decades of academic research have advanced our understanding of them.

Investors balance risk and return by incorporating their expectations and preferences into securities prices.

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.

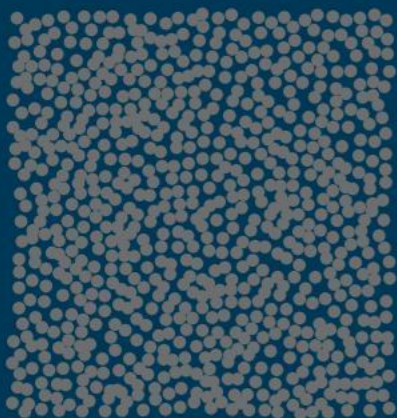
In US dollars. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Market, value, and size premiums (1927-2013) provided by Fama/French. Profitability premium computed by Dimensional using CRSP and Compustat data. Profitability is measured as operating income before depreciation and amortization minus interest expense, scaled by book. The annual profitability premium is computed as the average annual return on six high profitability groups of stocks (Large High Book-to-Market High Profitability, Large Medium Book-to-Market High Profitability, Large Low Book-to-Market High Profitability, Small High Book-to-Market High Profitability, Small Medium Book-to-Market High Profitability, and Small Low Book-to-Market High Profitability) minus the average annual return on six low profitability groups of stocks (Large High Book-to-Market Low Profitability, Large Medium Book-to-Market Low Profitability, Large Low Book-to-Market Low Profitability, Small High Book-to-Market Low Profitability, Small Medium Book-to-Market Low Profitability, and Small Low Book-to-Market Low Profitability). Maturity premium is the arithmetic annual average of Long-Term Government Bonds minus One-Month US Treasury Bills, each provided by Ibbotson Associates. Credit premium is calculated as the average annual return of Barclays US Intermediate Credit A Index and Barclays US Intermediate Credit Baa Index minus the average annual return of Barclays US Government Bond Index Intermediate. Credit premium data provided by Barclays Bank PLC.

Portfolios Can Be Structured to Pursue Dimensions

● Company ●●●● Higher Expected Return
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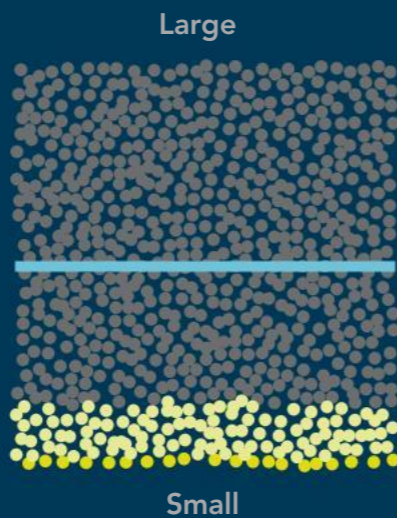
MARKET

Beta¹
 (Equity Premium)



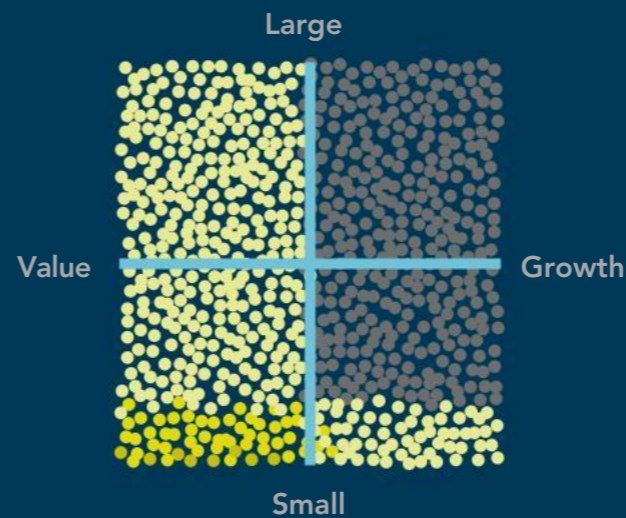
COMPANY SIZE

Market Cap
 (Small Cap Premium)



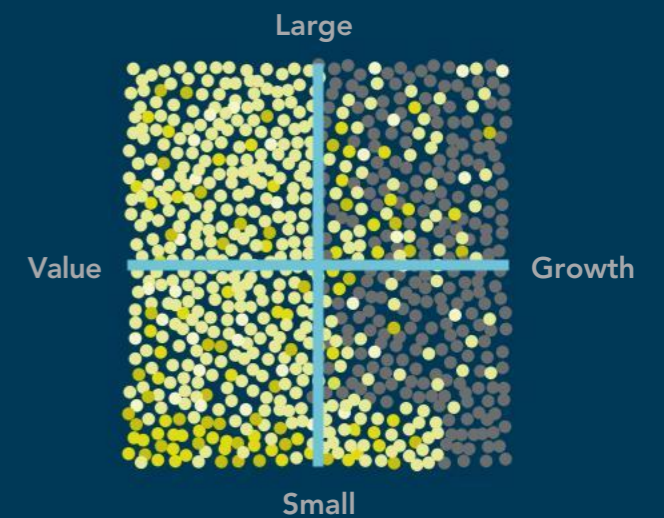
RELATIVE PRICE

Price-to-Book²
 (Value Premium)



EXPECTED PROFITABILITY

Direct Profitability³
 (Profitability Premium)



Investors can pursue higher expected returns through a low-cost, well-diversified portfolio that targets these dimensions.

1. **Beta:** A quantitative measure of the co-movement of a given stock, mutual fund, or portfolio with the overall market.
2. **Price-to-Book Ratio:** A company's capitalization divided by its book value. It compares the market's valuation of a company to the value of that company as indicated on its financial statements.
3. **Direct Profitability:** A measure of a company's current profits. We define this as operating income before depreciation and amortization minus interest expense, scaled by book equity.