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# DIVERSIFICATION: RISK ASSET ALLOCATION THROUGH ETFs AND MUTUAL FUNDS

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- Any investment outside of investment-grade fixed income.
- Provide greater potential yields, but with greater risk of loss and/or return volatility.

## Investment-Grade Ratings:

S&P: “BBB” and Above

Moody’s: “Baa” and Above

NAIC: Bonds Rated 1 to 2

- Most common risk assets used by Mutual Insurers:
  - Domestic and/or International Equities
  - High-Yield Bonds
  - Certain Long-Term Schedule Ba Investments

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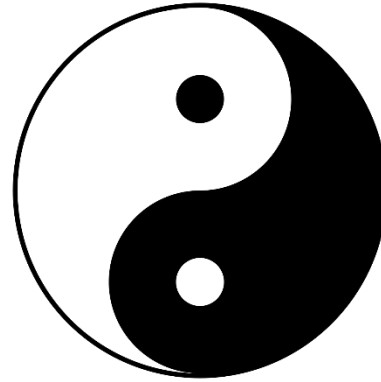
## Q: WHAT ARE YOUR MUTUAL INSURER'S RISK ASSETS?

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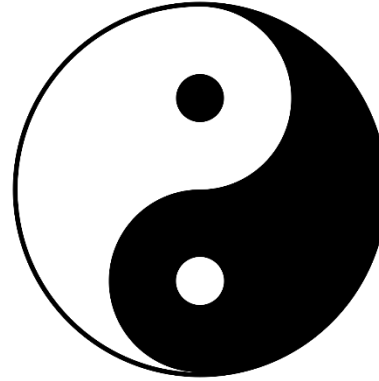
Select All That Apply

- A. Domestic Equities
- B. High-Yield Bonds
- C. International Equities
- D. Other

# THE YIN AND YANG OF RISK ASSETS

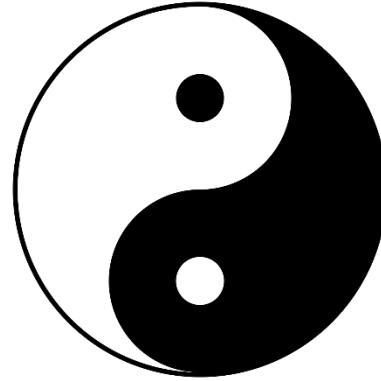


Yin	Yang
Receptive	Active
Winter	Summer
Disorder	Order
Risk	Reward



Risk	Reward
Can be overdiversified (5% heuristic)	Diversifier that can improve risk adjusted return
Can be over valued	Higher investment income (sometimes)
Downside can be vicious and timely, resulting in decreased surplus	Upside results in increased surplus

# SOURCES OF RISK AND REWARD



Sources of Risk	Sources of Reward
Drawdown and Volatility	Dividends or interest
Capital losses	Capital gains
Mean reversion (if over valued)	Mean reversion (if under valued)

# BUILDING BLOCK #1: RISK APPETITE

Risk Assets-to-Surplus Ratio	Net Assets/Surplus (\$MM)	Risk Assets (\$MM)	Risk Assets As % of Total Portfolio	Surplus Level (\$MM): Worst negative return trend	Downside Impact: As % of Surplus	Surplus Level (\$MM): Worst Calendar Year Decline	Downside Impact: As % of Surplus
100%	\$2,076.4	\$2,076.4	54.90%	\$1,011.7	-51.30%	\$1,260.8	-39.30%
85%	\$2,076.4	\$1,764.9	46.70%	\$1,164.3	-43.90%	\$1,376.1	-33.70%
75%	\$2,076.4	\$1,557.3	41.20%	\$1,266	-39.00%	\$1,452.9	-30.00%
65.60%	\$2,076.4	\$1,362.1	36.00%	\$1,361.7	-34.40%	\$1,525.1	-26.60%
50%	\$2,076.4	\$1,038.2	27.50%	\$1,520.4	-26.80%	\$1,645	-20.80%
40%	\$2,076.4	\$830.6	22.00%	\$1,622.1	-21.90%	\$1,721.8	-17.10%
35%	\$2,076.4	\$726.7	19.20%	\$1,673	-19.40%	\$1,760.2	-15.20%
30%	\$2,076.4	\$622.9	16.50%	\$1,723.9	-17.00%	\$1,798.6	-13.40%
25%	\$2,076.4	\$519.1	13.70%	\$1,774.7	-14.50%	\$1,837	-11.50%
20%	\$2,076.4	\$415.3	11.00%	\$1,825.6	-12.10%	\$1,875.4	-9.70%
15%	\$2,076.4	\$311.5	8.20%	\$1,876.5	-9.60%	\$1,913.8	-7.80%
10%	\$2,076.4	\$207.6	5.50%	\$1,927.3	-7.20%	\$1,952.3	-6.00%

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## WHAT % OF SURPLUS IS YOUR RISK APPETITE?

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- |             |              |
|-------------|--------------|
| A. 0 – 10%  | G. 61 – 70%  |
| B. 11 – 20% | H. 71 – 80%  |
| C. 21 – 30% | I. 81 – 90%  |
| D. 31 – 40% | J. 91 – 100% |
| E. 41 – 50% |              |
| F. 51 – 60% |              |



A good portfolio is more than a long list of good stocks and bonds. It is a balanced whole, providing the investor with protections and opportunities with respect to a wide range of contingencies.

— *Harry Markowitz* —

**AZ QUOTES**

- Different assets zig when others zag
- Correlation statistic: -1 to +1
  - Plus 1: Perfect direct relationship
  - Minus 1: Perfect inverse relationship
  - Zero: No relationship
- Investment grade bonds are highly correlated with each other
- Risk assets not as highly correlated to IG bonds or many other risk assets
- But, what does that ‘Free Lunch’ of Diversification look like?

# BUILDING BLOCK #2: CORRELATIONS

<b>Fixed Income</b>	<b>Correlation to US Agg.</b>
U.S. Aggregate	1.00
U.S. Municipal	0.64
U.S. Int. Treasury	0.79
U.S. Short Gov/Cred	0.76
U.S. TIPS	0.74
U.S. Inv. Grade Corp	0.80
<b>Risk Assets</b>	
U.S. High Yield	0.18
U.S. Leveraged Loans	(0.06)
EM Sovereign	0.53
EM Corporate	0.44
U.S. Large Cap	0.00
U.S. Mid Cap	0.01
U.S. Small Cap	(0.07)
EAFE	0.07
EM Equity	0.12
U.S. REITs	0.28
Global Equity	0.05
Global Infrastructure Equity	(0.03)
Private Equity	(0.22)

<i>Asset Class</i>	<i>Forecast (Annualized)</i>	
	<i>Pre-Tax Return</i>	<i>Risk</i>
<b>Fixed Income</b>		
U.S. Aggregate	2.10%	3.43%
U.S. Municipal	1.90%	3.28%
U.S. Int. Treasury	1.50%	2.83%
U.S. Short Gov/Cred	1.70%	1.50%
U.S. TIPS	1.50%	5.29%
U.S. Inv. Grade Corp	2.50%	6.22%
<b>Risk Assets</b>		
U.S. High Yield	4.80%	8.33%
U.S. Leveraged Loans	5.10%	7.91%
EM Sovereign	5.20%	8.82%
EM Corporate	4.70%	8.52%
U.S. Large Cap	4.10%	14.80%
U.S. Mid Cap	4.40%	16.93%
U.S. Small Cap	4.60%	19.44%
EAFE	6.50%	16.92%
EM Equity	7.20%	21.14%
U.S. REITs	6.50%	15.34%
Global Equity	5.10%	15.76%
Global Infrastructure Equity	6.10%	10.80%
Private Equity	7.80%	18.67%

# PUTTING IT TOGETHER: RISK APPETITE

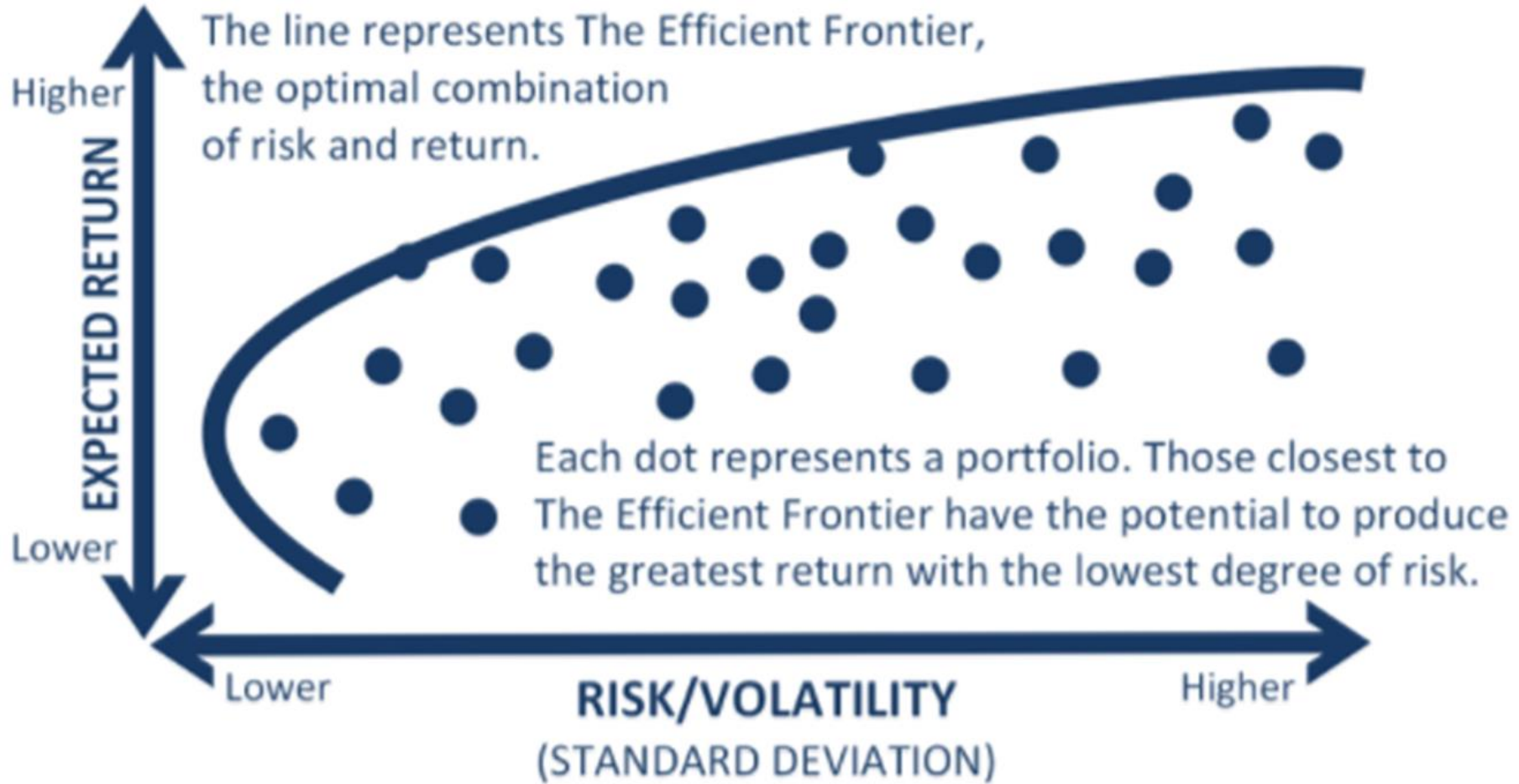
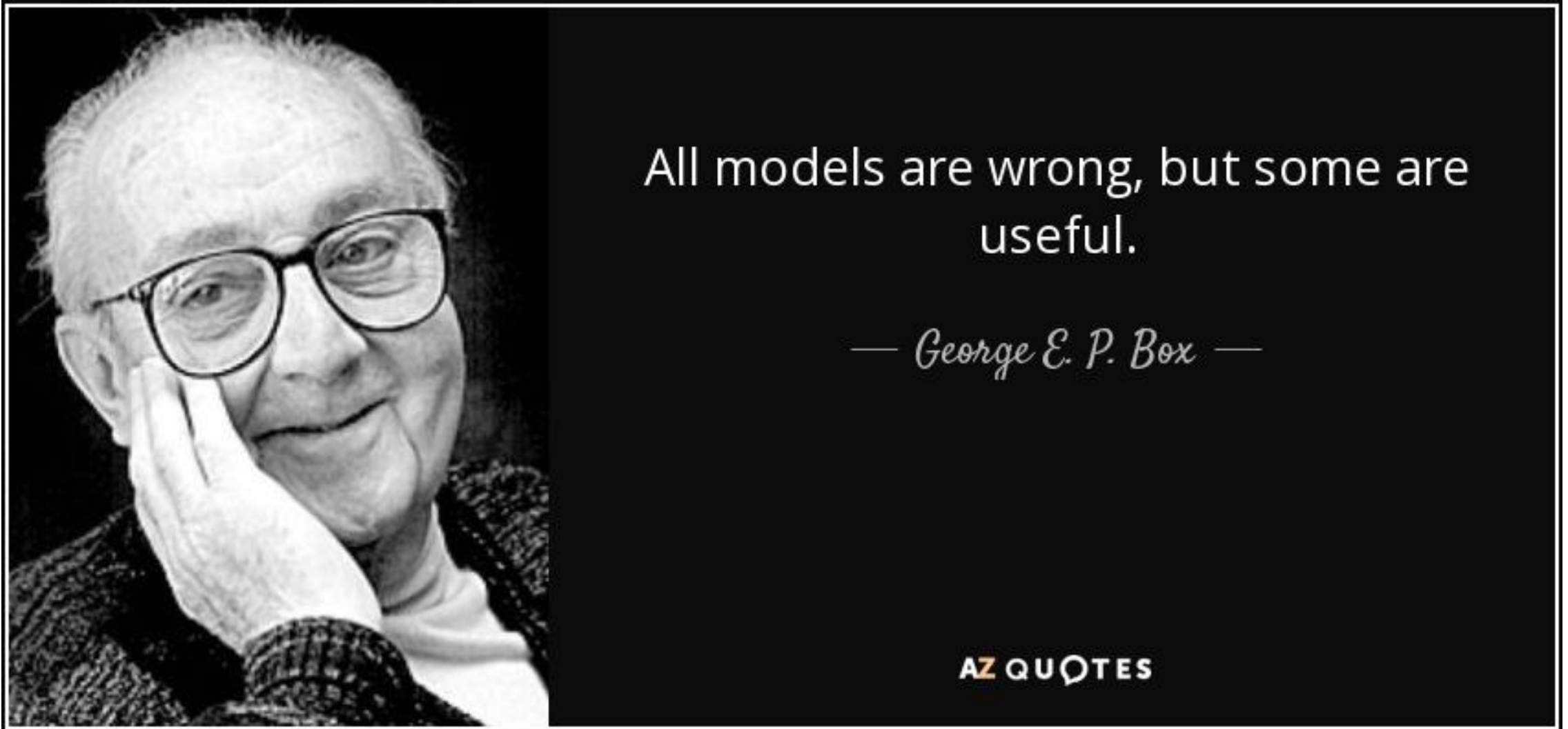
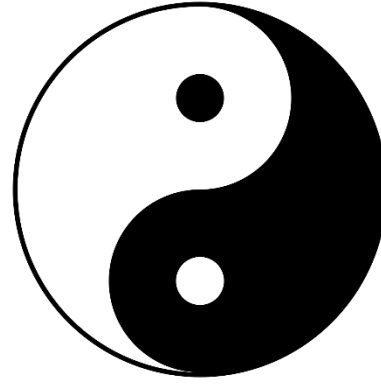


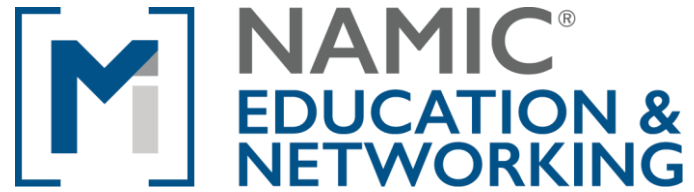
Figure 1: Efficient Frontier [2]



# THE YIN AND YANG OF RISK ASSETS



Yin	Yang
Receptive	Active
Winter	Summer
Disorder	Order
Risk	Reward



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# VANGUARD AND STRATEGIC ASSET ALLIANCE

## Risk Asset Allocation and Implementation

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1. What's an ETF?
2. Active vs Passive/ Index Investing
3. ETFs in insurance portfolios
4. What is Environmental, Social Governance (“ESG”) Investing?
5. Questions?

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Alton R. Cogert, CFA, CPA, CAIA,  
FDP, CGMA  
President & CEO  
Strategic Asset Alliance

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# What's an ETF?

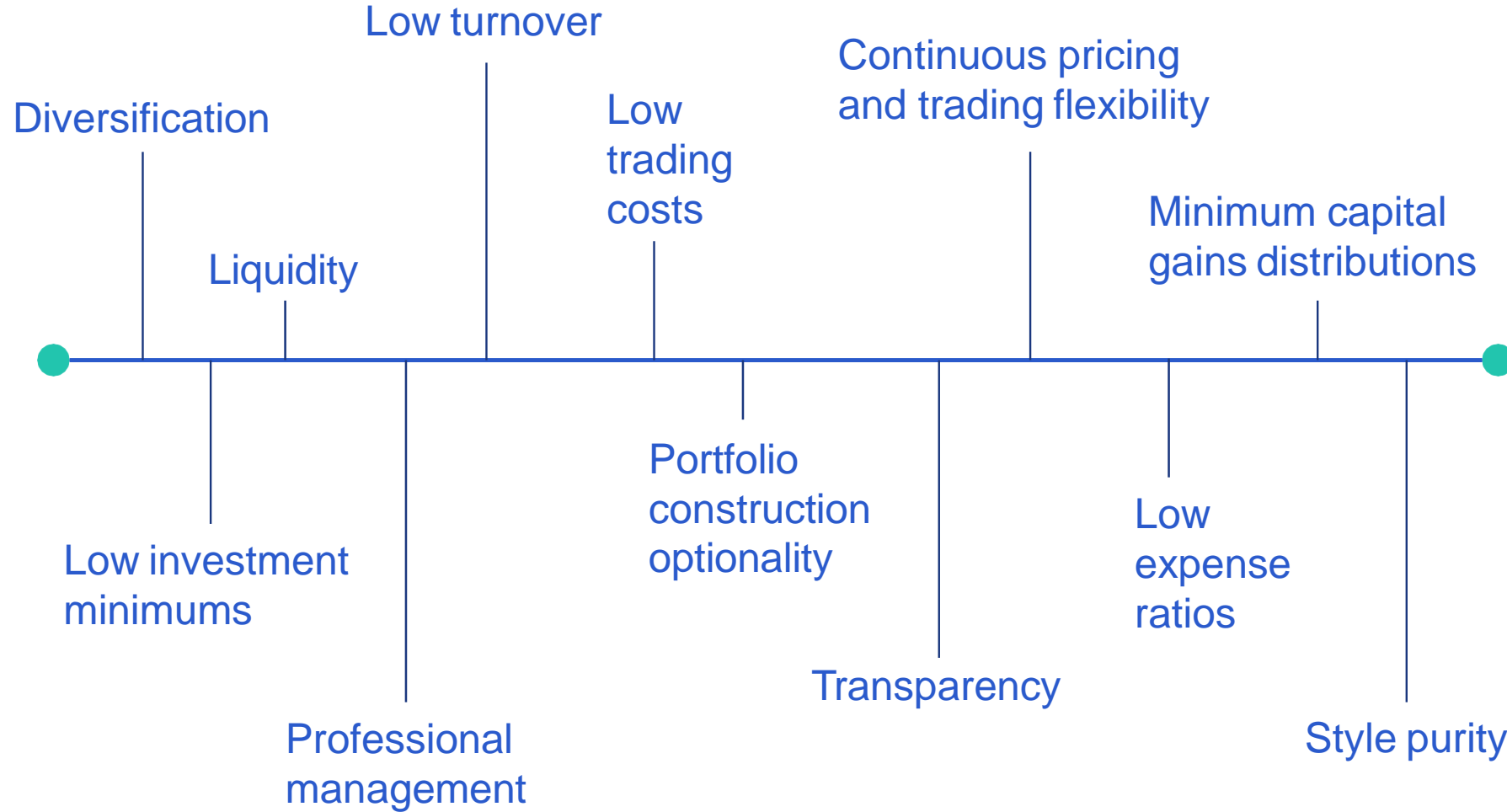
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# AN EXCHANGE-TRADED FUND (ETF)

A professionally managed portfolio of securities that trades on an exchange



# ETFs OFFER A WIDE RANGE OF BENEFITS



# DIFFERENCES BETWEEN AN ETF AND A MUTUAL FUND?

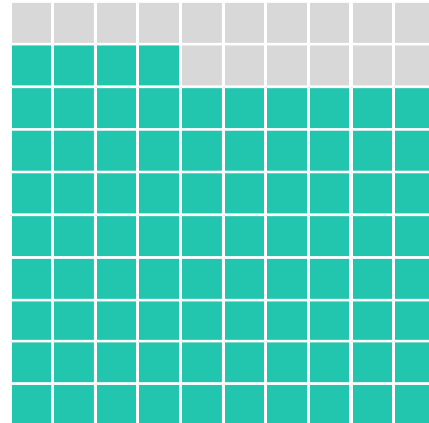
Although ETFs and mutual funds are both pooled investment vehicles that offer diverse benefits, there are distinct differences between the products

	ETF	Mutual fund
<b>Price</b>	The <i>market price</i> is <b>continually updated</b> throughout the day	The <i>price (NAV)</i> is <b>calculated once a day</b> after the financial markets close
<b>Costs</b>	<i>Transaction costs</i> include <b>commission and bid-ask spread, and premiums/discounts</b>	<i>Transaction costs</i> vary depending upon a fund's <b>sales load policy or purchase and redemption fees</b>
<b>Purchase/trade</b>	<b>Can</b> buy on margin, short-sell, and place stop and limit orders	<b>Cannot</b> buy on margin, short-sell, or place stop and limit orders
<b>Available services</b>	Automatic investment/withdrawals are not generally available because ETFs are bought and sold in <b>whole share amounts</b>	Automatic investment/withdrawals are available because mutual funds can be bought and sold in <b>fractional shares</b>
<b>Distributions</b>	<b>Purchased and sold on an exchange</b> between investors and can be accessed only through a <b>brokerage account</b>	<b>Purchased and sold from the sponsor directly</b> and can be accessed through a transfer agent account or a brokerage account

A majority of ETFs follow pure market-cap-weighted indexes

### Market-cap-weighted index ETFs

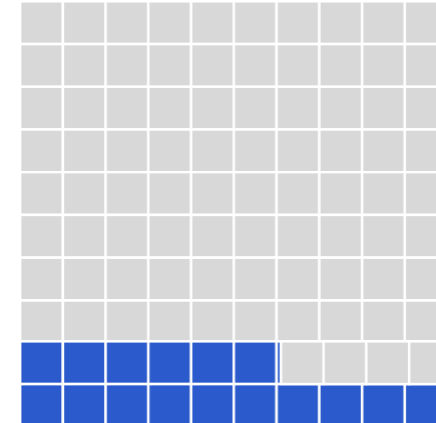
**84%**  
of invested  
ETF assets



### Other types of ETFs

- Actively managed
- Commodity and currency
- Factor-based
- Equal-weighted
- Fundamentally weighted
- Inverse/leveraged

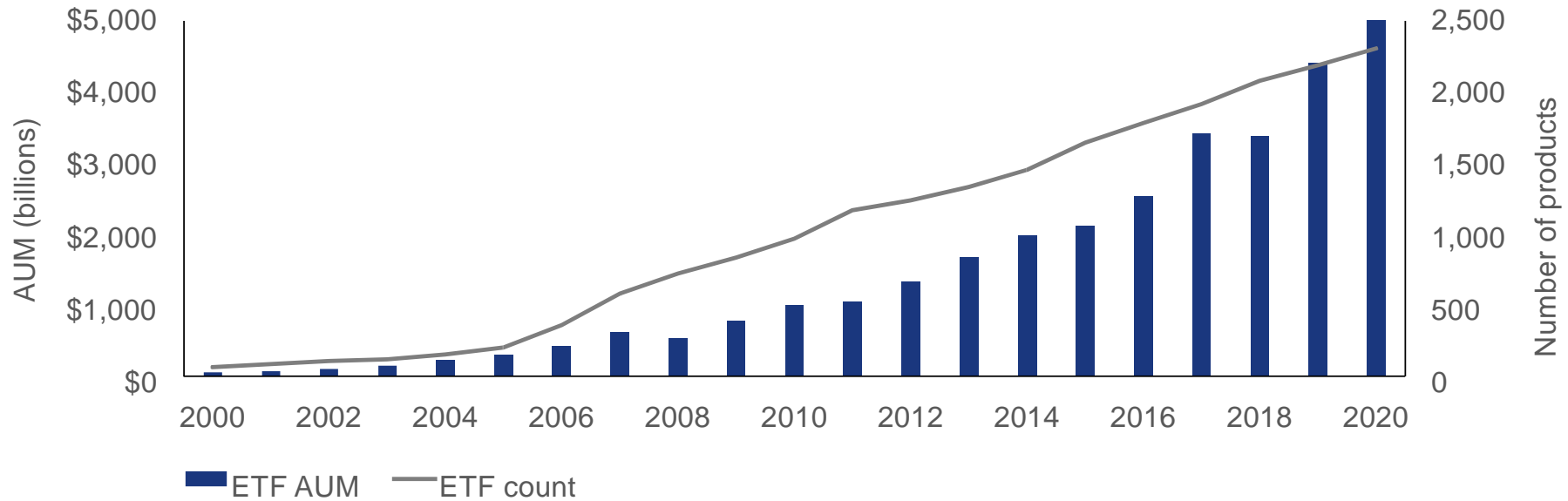
**16%**  
of invested  
ETF assets



Source: Morningstar, as of December 31, 2020.

# ETF GROWTH AND LANDSCAPE

**\$5.5 trillion AUM | ~165 ETF issuers | ~2,300 ETFs | 19% CAGR over ten years**



**ETF growth has been driven by a variety of factors, including:**

- Popularity of indexing
- Investor cost sensitivity
- ETF usage in model portfolios
- Advisor adoption prompted by a shift to fee-based advisory services
- Growth of fixed income ETFs

Source: Morningstar, as of December 31, 2020.

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# Active vs Passive/ Index Investing

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# THE CASE FOR ACTIVE MANAGEMENT

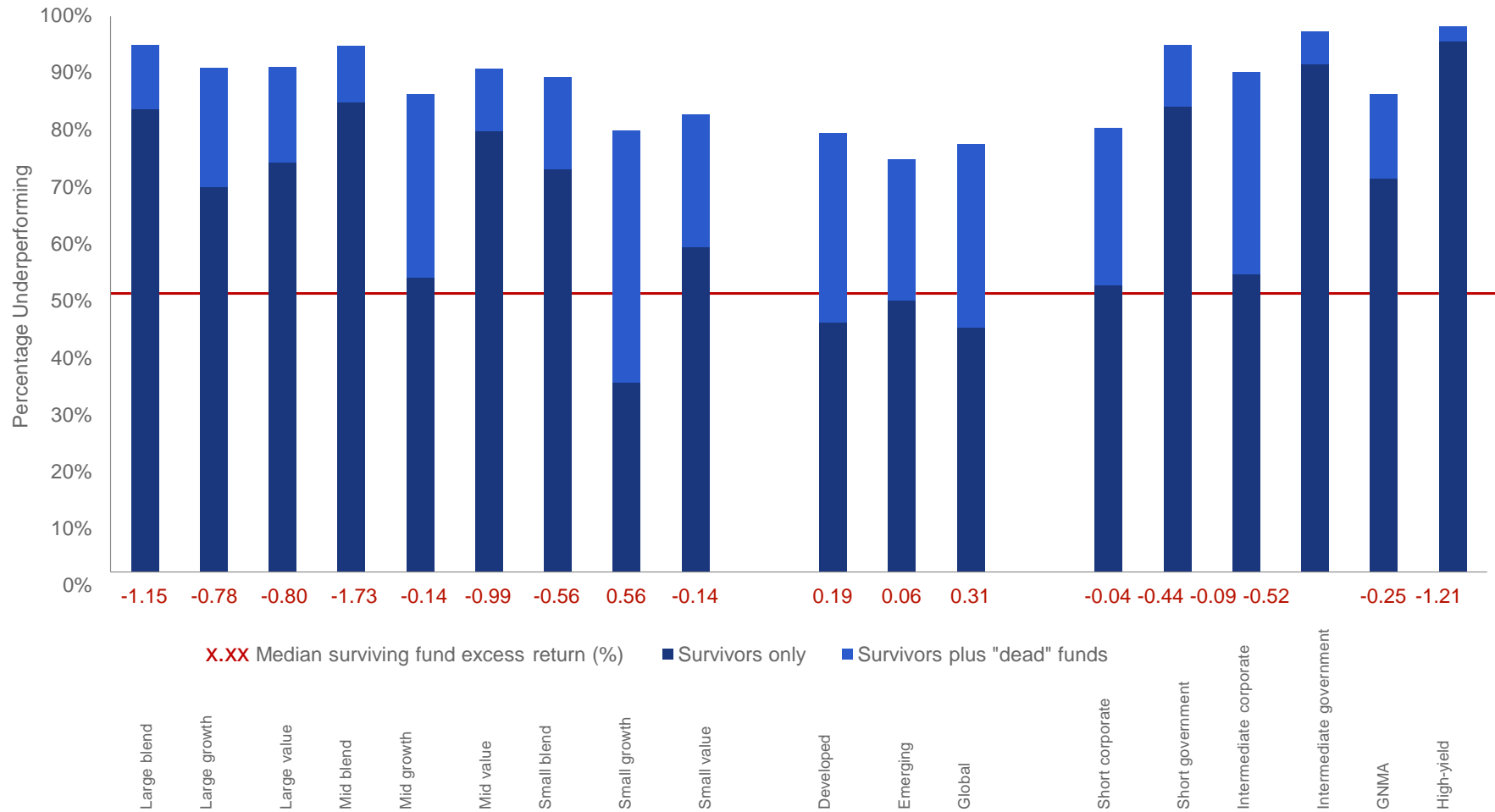
Markets are highly efficient, but not perfectly efficient

Zero-sum game works in aggregate, not at the investor or fund level

Talented, disciplined active managers with low costs can provide opportunity for excess returns in tax-advantaged accounts

# ACTIVE MANAGEMENT IS A DIFFICULT PROPOSITION: COMPARISON TO SELF-SELECTED BENCHMARK

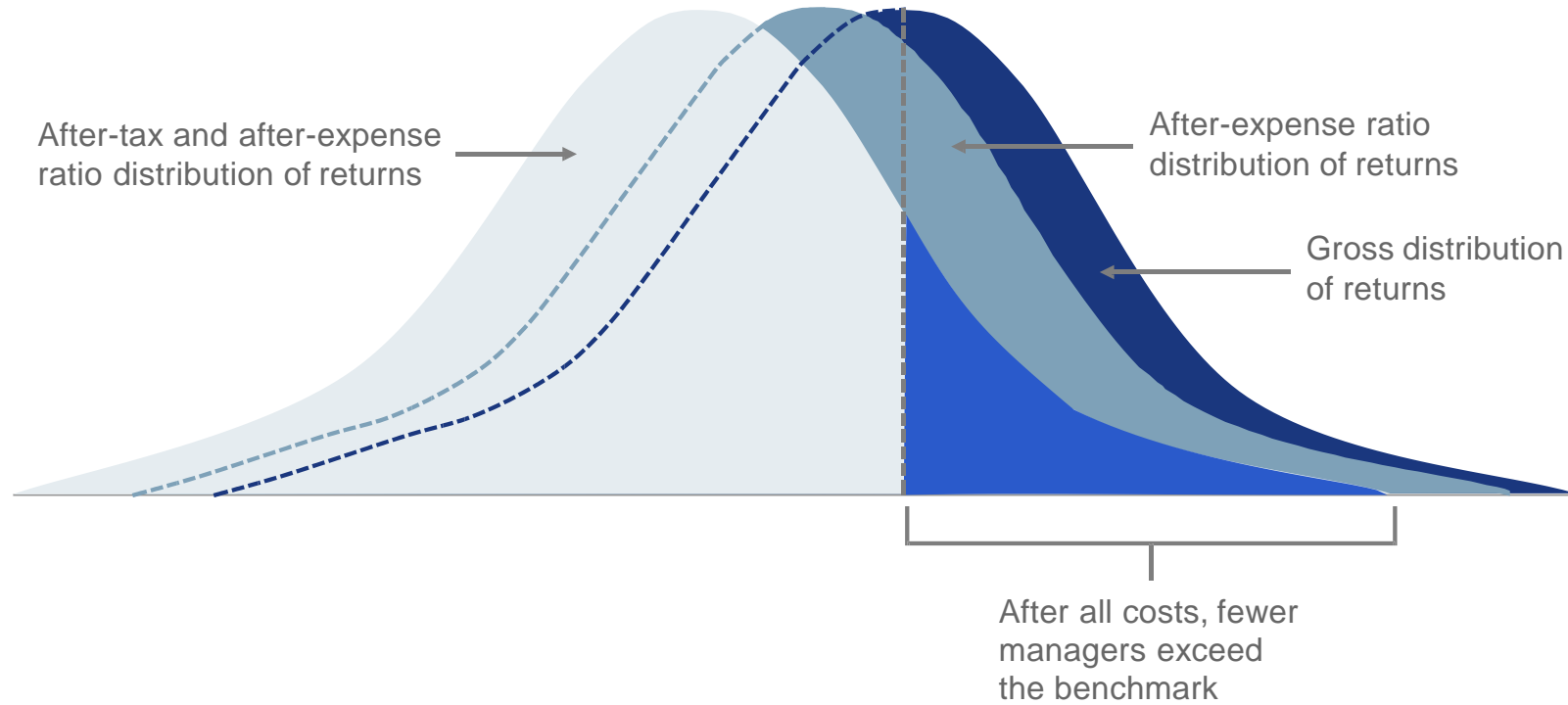
The record of actively managed funds versus their prospectus benchmark (15-year evaluation)



Sources: Vanguard calculations, using data from Morningstar, Inc.

Note: Data reflects the 15-year period ended December 31, 2020. Benchmarks reflect those identified in each fund's prospectus. "Dead" funds are those that were merged or liquidated during the period.

## Hypothetical return distributions



Costs represented by fund expenses and taxes in two separate return reductions.

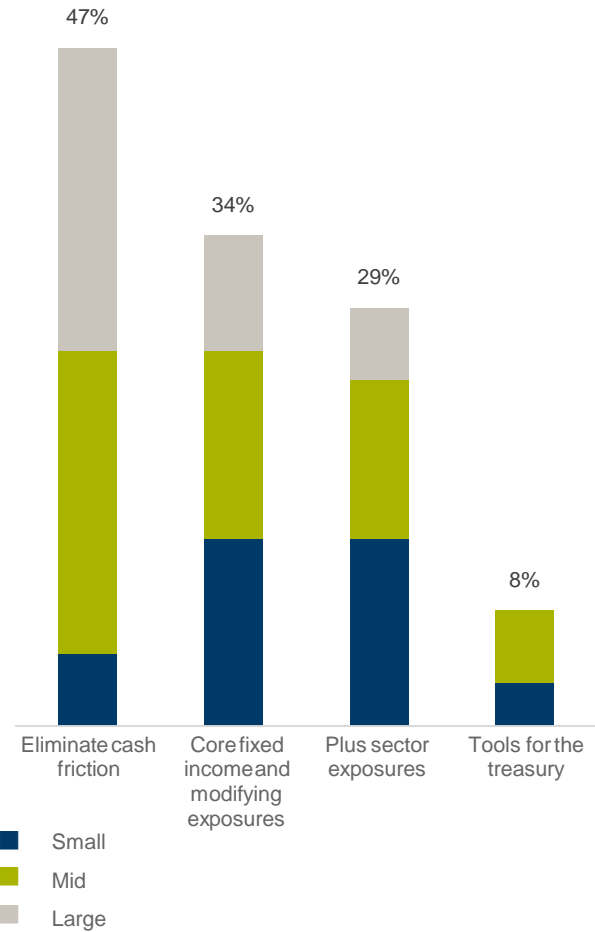
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# ETFs in insurance portfolios

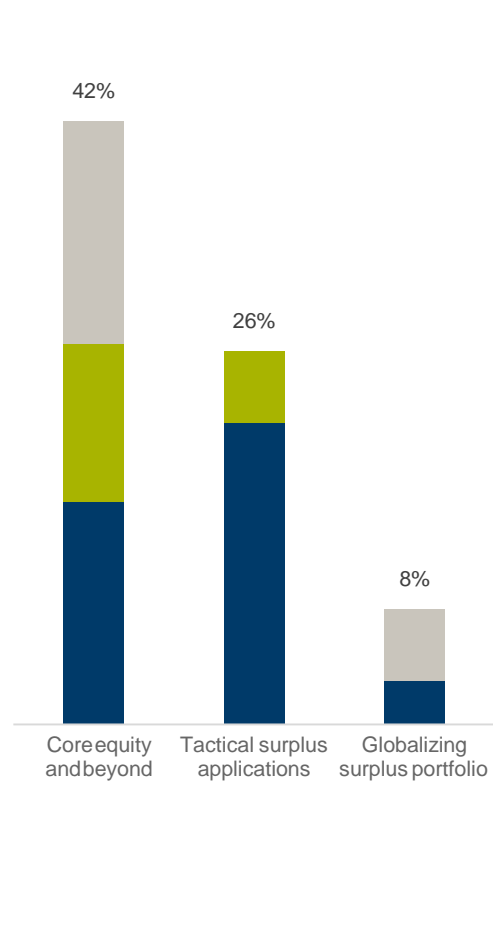
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# COMMON INSURANCE COMPANY USES OF ETFS

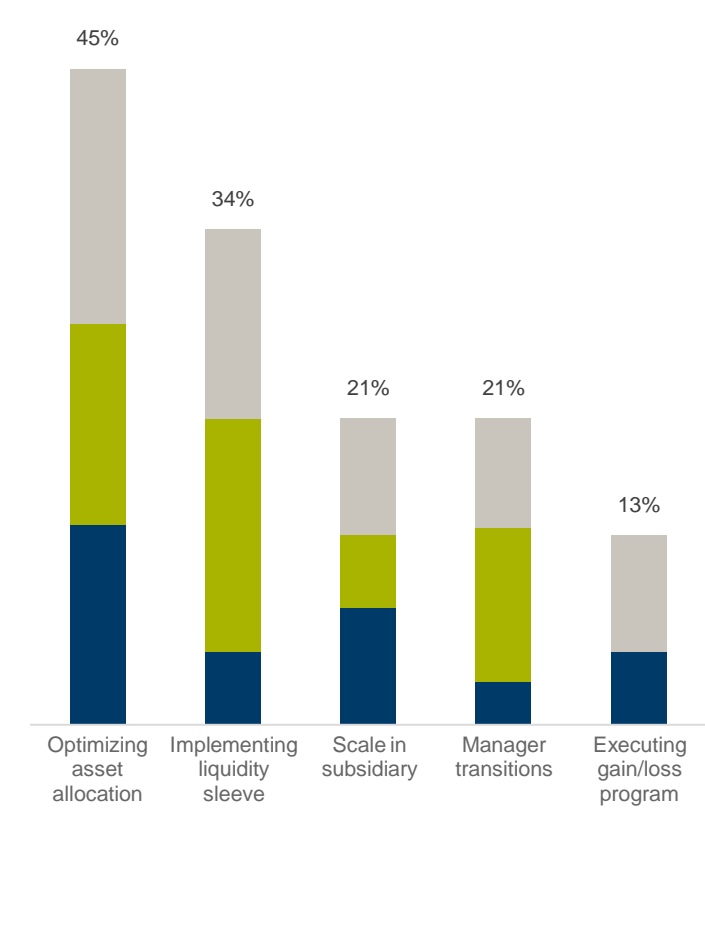
## Reserve assets



## Surplus assets



## General applications



Source: Greenwich Associates 2018 U.S. Insurance ETF Study, cited in Greenwich Associates, Insurance Company Investments in ETFs: Accelerating Growth Ahead, Q12019. Based on responses from 38 insurance companies. Learn more about Vanguard products at [institutional.vanguard.com/insurance](https://institutional.vanguard.com/insurance) or call 844-231-1040.

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What is Environmental, Social  
Governance (“ESG”) Investing?

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# IDENTIFY THE ISSUES THAT MATTER THE MOST



## Environmental

- Air emissions and air quality
- Biodiversity protection
- Community health, safety, and security
- Energy conservation
- Fossil fuels
- Hazardous materials use
- Land contamination
- Natural resource preservation
- Occupational health and safety
- Renewable energy sources
- Waste generation
- Water use and conservation



## Social

- Adequate housing
- Abortion providers
- Adult entertainment
- Alcohol
- Animal testing
- Casinos and gambling equipment
- Consumer privacy
- Employment of minorities and women
- Human rights standards
- Income inequality
- Manufacturers of birth control products
- Obesity
- Opioids
- Religious values
- Tobacco
- Union relationships
- Weapons
- Workforce exploitation



## Governance

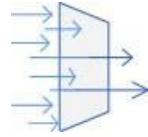
- Antitrust violations
- Auditor independence
- Board diversity
- Board independence and elections
- Consumer fraud
- Disclosure of material risks
- Executive compensation
- Oversight of strategy
- Political contributions
- Reporting transparency
- Short-term focus
- Voting rights

Note: Reflects a sample list of potential issues clients may care about.

# STRATEGIES FOR ENGAGING IN VALUES-BASED INVESTING

ESG is an investment-related activity that accounts for some type of environmental, social, and governance consideration.

Note: Reflects a sample list of potential issues clients may care about.



## Screening

The inclusion in or exclusion from a portfolio of certain sectors, companies, or practices based on specific ESG criteria or minimum standards of practice (norms-based).



## Impact investing

Targeting specific social or environmental outcomes alongside financial returns, either through private or public investments.



## ESG integration

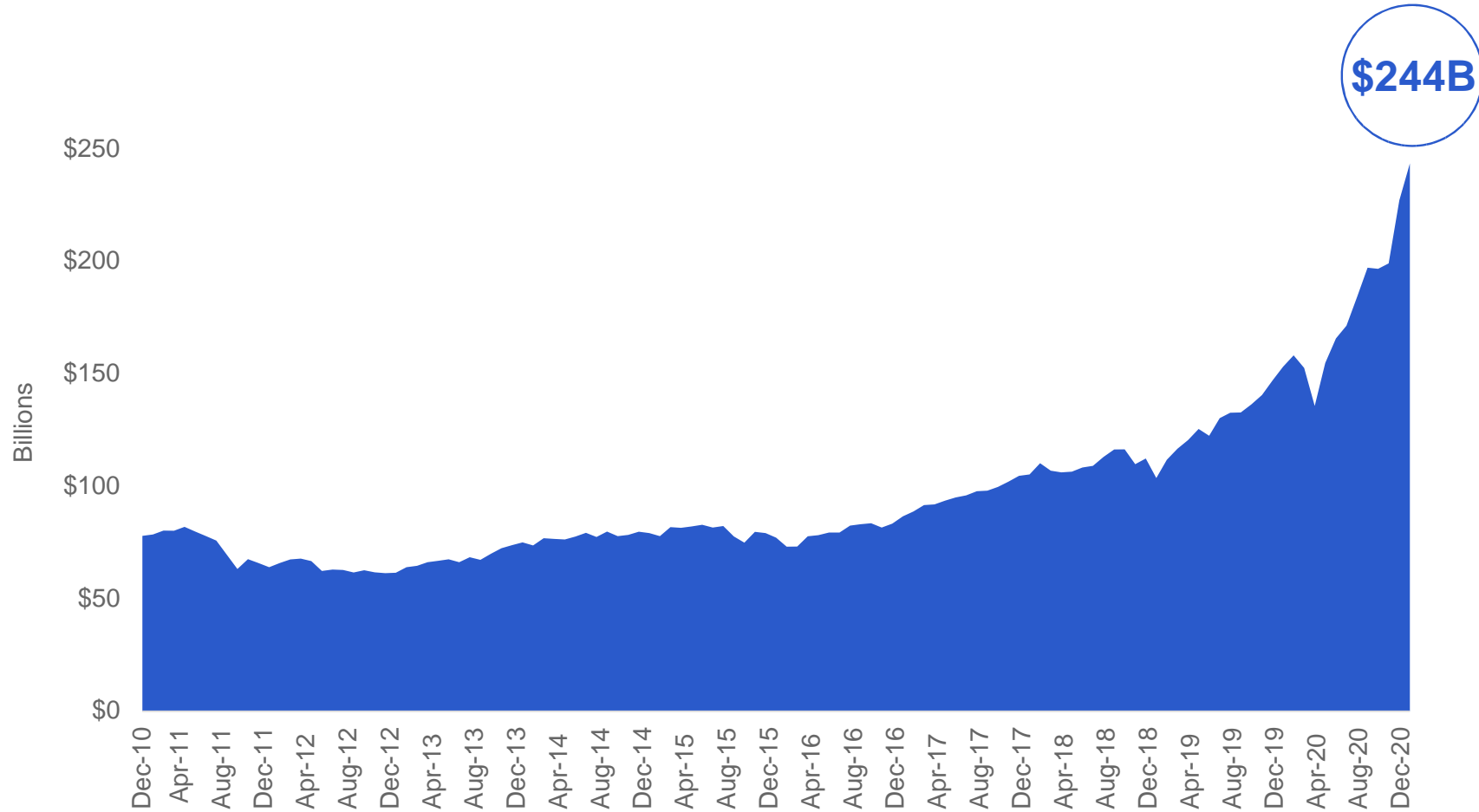
Systematic inclusion of financially material ESG information (risks and opportunities) to complement standard investment analysis.



## Investment stewardship

The use of shareholder power to influence corporate behavior, including direct corporate engagement, and proxy voting.

# ESG INVESTING HAS GONE MAINSTREAM



Source: Morningstar Direct, as of December 31, 2020.

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# Important Information

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*For more information about any fund, visit [institutional.vanguard.com](http://institutional.vanguard.com) or call 866-499-8473 to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing.*

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Mutual funds and all investments are subject to risk, including the possible loss of the money you invest. Prices of mid- and small-cap stocks often fluctuate more than those of large-company stocks. Investments in stocks or bonds issued by non-U.S. companies are subject to risks including country/regional risk and currency risk. These risks are especially high in emerging markets. Funds that concentrate on a relatively narrow sector face the risk of higher share-price volatility. It is possible that tax-managed funds will not meet their objective of being tax-efficient. Because company stock funds concentrate on a single stock, they are considered riskier than diversified stock funds.

Investments in bond funds are subject to the risk that an issuer will fail to make payments on time and that bond prices will decline because of rising interest rates or negative perceptions of an issuer's ability to make payments. High-yield bonds generally have medium- and lower-range credit quality ratings and are therefore subject to a higher level of credit risk than bonds with higher credit quality ratings. Although the income from a municipal bond fund is exempt from federal tax, you may owe taxes on any capital gains realized through the fund's trading or through your own redemption of shares. For some investors, a portion of the fund's income may be subject to state and local taxes, as well as to the federal Alternative Minimum Tax. Diversification does not ensure a profit or protect against a loss.

ESG funds are subject to ESG investment risk, which is the chance that the stocks or bonds screened by the index sponsor for ESG criteria generally will underperform the market as a whole or that the particular stocks or bonds selected will, in the aggregate, trail returns of other funds screened for ESG criteria.

While U.S. Treasury or government agency securities provide substantial protection against credit risk, they do not protect investors against price changes due to changing interest rates. Unlike stocks and bonds, U.S. Treasury bills are guaranteed as to the timely payment of principal and interest.

Investments in Target Retirement Funds or Trusts are subject to the risks of their underlying funds. The year in the fund name refers to the approximate year (the target date) when an investor in the fund or trust would retire and leave the workforce. The fund or trust will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. An investment in the Target Retirement Fund or Trust is not guaranteed at any time, including on or after the target date.

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*A stable value investment is neither insured nor guaranteed by the U.S. government. There is no assurance that the investment will be able to maintain a stable net asset value, and it is possible to lose money in such an investment.*

Factor funds are subject to investment style risk, which is the chance that returns from the types of stocks in which the fund invests will trail returns from U.S. stock markets. Factor funds are subject to manager risk, which is the chance that poor security selection will cause the fund to underperform relevant benchmarks or other funds with a similar investment objective.

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