



ISSUE BRIEF: Q4 2020

THE DOWNSIDE OF INDEX FUNDS

**AS HIGH NET WORTH INVESTORS
FLEE FOSSIL FUEL STOCK, CHANCES ARE,
YOU'RE BUYING MORE OF IT**

 **BUSINESSFORWARD**
FOUNDATION

TOPLINE

1. The battle for global energy dominance is over: renewable energy won.
2. **High net worth investors, following Wall Street's advice, are fleeing fossil fuel companies.** The sector, which underperformed for a decade, is collapsing. And BlackRock, the world's largest asset manager, is instituting market-shaping reforms to integrate ESG across its business.
3. **But if you are an index fund investor, you keep buying fossil fuel equity and debt.** You're even buying coal stocks, which BlackRock, the world's largest money manager, declared "dead"¹ three years ago.
4. **Index funds are "passive," which means they buy the market as it is, no matter what the experts say about where the market's heading. Economists call this the "index effect," and it is propping up coal companies at the expense of renewable energy and other investments.**
5. This would be bad news if you were the exception, but you are the rule. **More than half of the U.S.'s assets are in passive funds, and the asset managers investing those funds will not switch to sustainable alternatives... unless their customers make them.**
6. **This has systemic implications. Artificially high valuations for coal, oil, and gas companies help bring new fields online, accelerating the climate crisis.** And the consolidation of fossil fuel risk in passive funds means that small investors and retirees bear most of the cost as fossil fuel companies decline.
7. Asset managers argue it's too difficult to make exceptions for coal and other fossil fuel companies, but **the solutions are pretty straightforward: 1) require investors in our biggest funds to opt-in to fossil fuels, not opt-out; and, 2) institute clear, reliable standards for "green" investments.**

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There no longer can be any doubt that the creation of the first index mutual fund was the most successful innovation – especially for investors – in modern financial history. The question we need to ask ourselves now is: What happens if it becomes too successful for its own good.

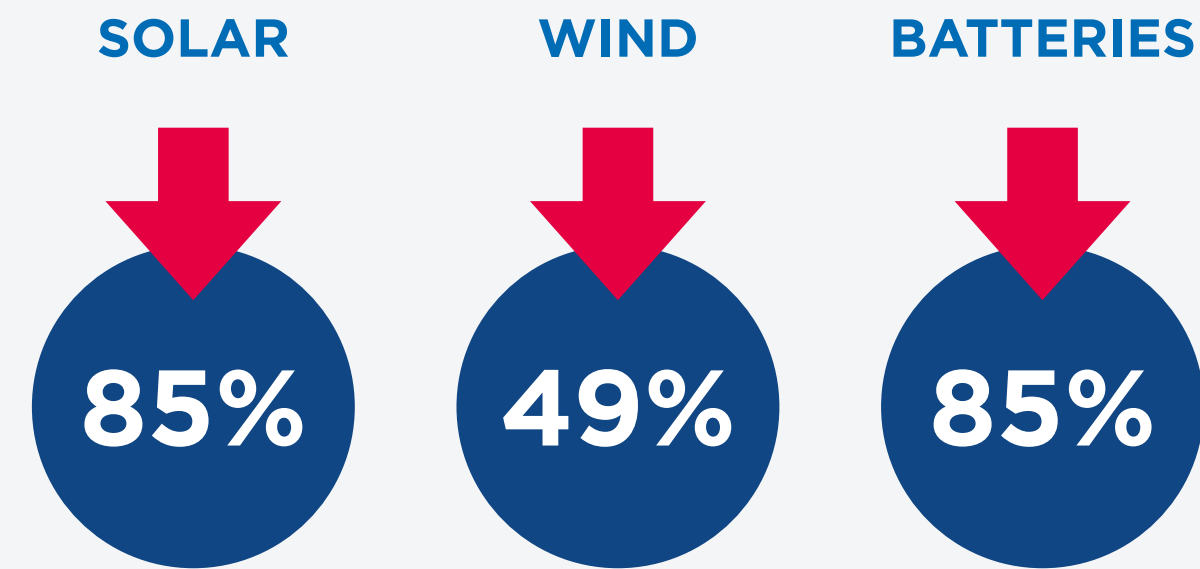
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- JACK BOGLE
FOUNDER, THE VANGUARD GROUP
WSJ, NOVEMBER 2018²

THE GLOBAL ENERGY RACE IS OVER: RENEWABLES WON

INVESTMENT OVER PAST 10 YEARS DROVE PRICES LOWER, WHICH CREATED NEW DEMAND, NEW CAPACITY, AND MORE INVESTMENT³

PRICE DECLINES (2010-2018)

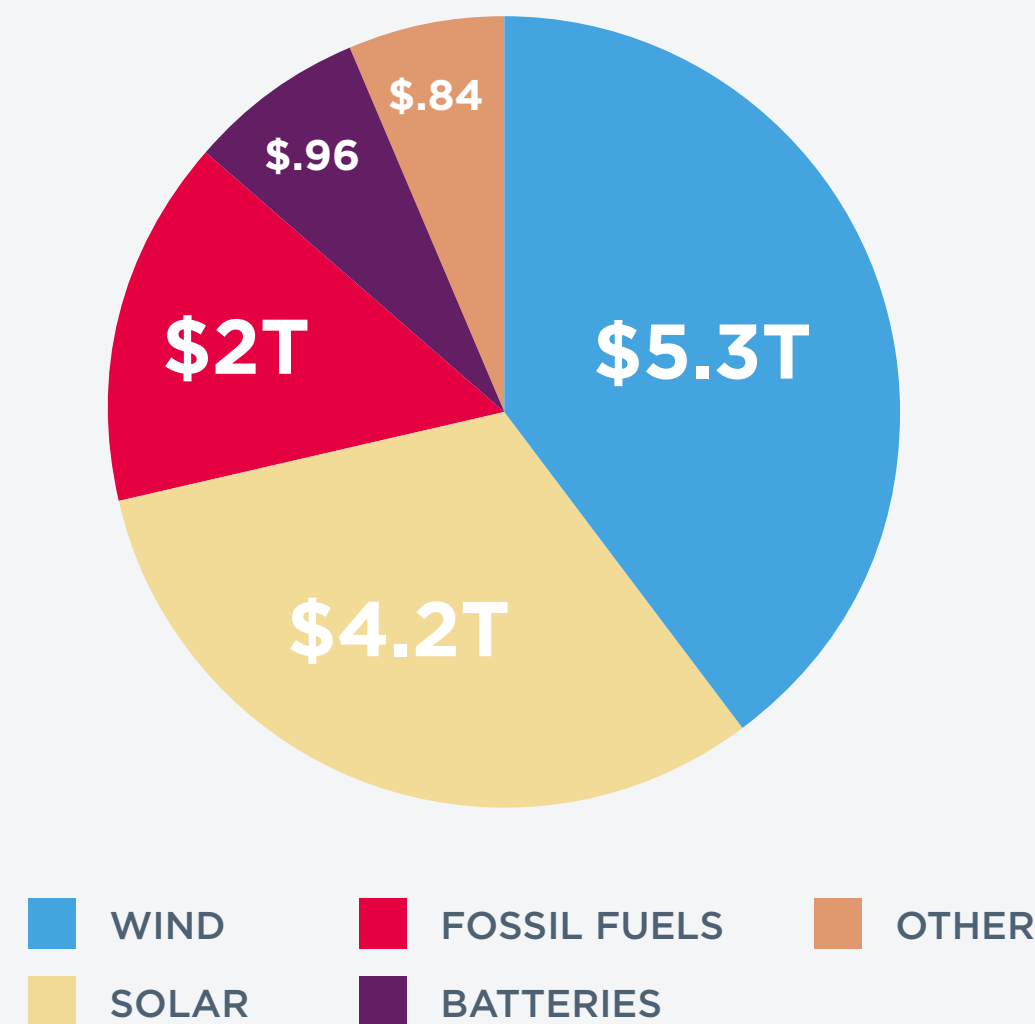


Renewables are more affordable than fossil fuels in two thirds of the world.

By 2030, they will be more affordable nearly everywhere.

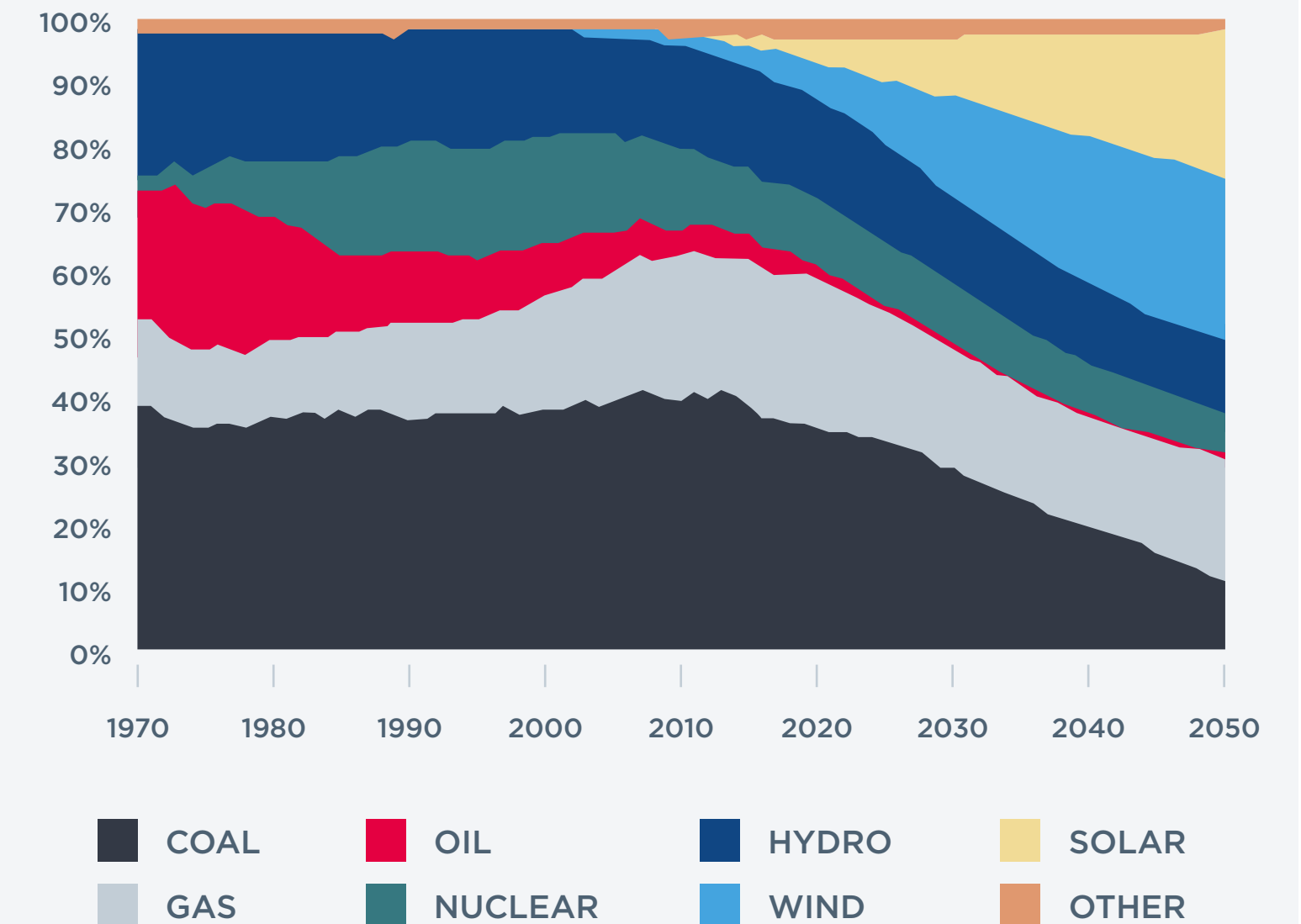
RENEWABLES WILL CAPTURE 78 CENTS OF EVERY NEW ENERGY DOLLAR WORLDWIDE (2018-2050)⁴

\$13.3 TRILLION IN INVESTMENT FROM 2018 TO 2050



Result: 80% of new power capacity from 2019-2050 will be zero carbon

MARKET SHARE WILL SHIFT DRAMATICALLY⁵



BY 2050

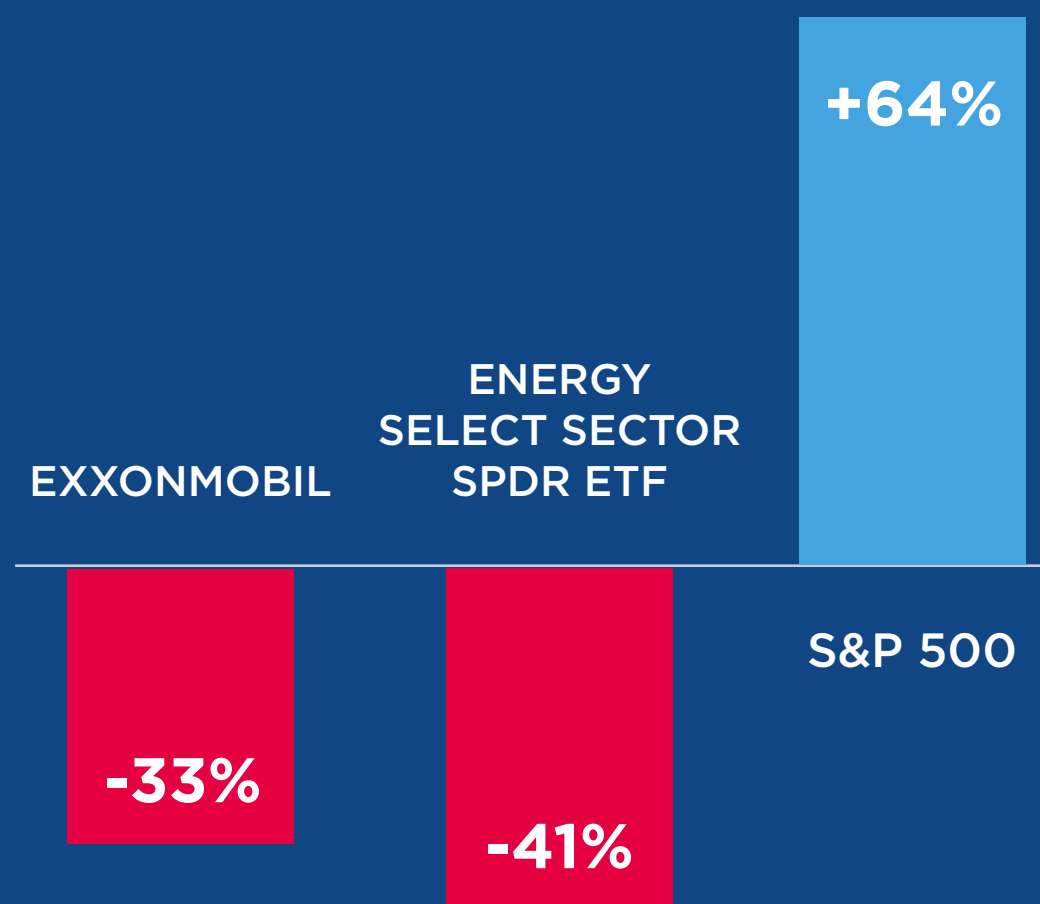
31% FOSSIL FUELS
48% SOLAR & WIND
62% RENEWABLES

FOSSIL FUELS' DECLINE IS ACCELERATING

FOSSIL FUEL MARKET PERFORMANCE HAS DECLINED SINCE 2014

Meanwhile, the stock market as a whole has grown by 64%.⁶

PERCENT CHANGE IN STOCK PRICE
(JUNE 2014 - DEC. 2019)



THE LOST DECADE: ENERGY STOCKS SEEK RELEVANCY AS INVESTORS FLEE

“Struggling with profitability and volatile commodity prices, the sector has seen a flight of capital in what was once a hotbed of merger-and-acquisition activity.”

DECEMBER 23, 2019
MICHAEL BELLUSCI

Bloomberg

THIS 5-YEAR BEAR MARKET IN ENERGY STOCKS COULD TURN INTO FOREVER

“[T]he five-year bear market in energy stocks may turn out to be as permanent as the secular decline in newspaper publishers or department stores.”

FEBRUARY 19, 2020
HOWARD GOLD

MarketWatch

NEARLY HALF OF GLOBAL COAL PLANTS WILL BE UNPROFITABLE THIS YEAR

APRIL 7, 2020
NINA CHESTNEY

REUTERS

MURRAY ENERGY RECEIVES NO BIDS FOR ITS COAL ASSETS, CANCELS BANKRUPTCY AUCTION

MARCH 23, 2020
TAYLOR KUYKENDALL

S&P Global

WIND AND SOLAR PLANTS WILL SOON BE CHEAPER THAN COAL IN ALL BIG MARKETS AROUND WORLD, ANALYSIS FINDS

MARCH 11, 2020
ADAM MORTON

The Guardian

RENEWABLES HANDILY BEAT OIL AND GAS STOCKS IN 2019

JANUARY 17, 2020
MICHAEL COPLEY &
BILL HOLLAND

S&P Global

ASSET MANAGERS (LIKE BLACKROCK, VANGUARD AND STATE STREET) ARE ADVISING THEIR HIGH NET WORTH CLIENTS TO AVOID FOSSIL FUEL COMPANIES

BLACKROCK'S WARNING

“ Because sustainable investment options have the potential to offer clients better outcomes, we are making sustainability integral to the way BlackRock manages risk, constructs portfolios, designs products, and engages with companies. We believe sustainability should be our standard for investing. ”

- LARRY FINK
CEO OF BLACKROCK⁷

A SECTOR-WIDE TREND

100 “GLOBALLY SIGNIFICANT FINANCIAL INSTITUTIONS”
HAVE DIVESTED FROM THERMAL COAL

INCLUDING

40%

OF THE TOP 40 GLOBAL
BANKS AND...

20

LEADING INSURERS⁸

“Global capital is fleeing the coal sector. This is no passing fad.”⁹



Bloomberg

THE LOST DECADE:
ENERGY STOCKS SEEK
RELEVANCY AS
INVESTORS FLEE

Struggling with profitability and volatile commodity prices, the sector has seen a flight of capital in what was once a hot bed of merger and acquisition activity.¹⁰

DECEMBER 23, 2019
MICHAEL BELLUSCI

SKEPTICAL? ASK BLACKROCK, THE WORLD'S TOP ASSET MANAGER

BLACKROCK'S COMMITMENT



Climate change has become a defining factor in companies' long-term prospects... In the near future – and sooner than most anticipate – there will be a significant reallocation of capital...

Our investment conviction is that sustainability- and climate-integrated portfolios can provide better risk-adjusted returns to investors.... [W]e believe that sustainable investing is the strongest foundation for client portfolios going forward.



- LARRY FINK
CEO OF BLACKROCK¹¹

BLACKROCK UNVEILS SUITE OF ESG MULTI-ASSET ETFs

SEPTEMBER 10, 2020
ANNA FEDOROVA

INVESTMENT
WEEK

HERE'S HOW THE WORLD'S LARGEST MONEY MANAGER IS OVERHAULING ITS STRATEGY BECAUSE OF CLIMATE CHANGE

JANUARY 14, 2020
PIPPA STEVENS



WORLD'S BIGGEST FUND MANAGER VOWS TO DIVEST FROM THERMAL COAL

JANUARY 14, 2020
JOANNA PARTRIDGE

The
Guardian

BLACKROCK VOTES AGAINST 49 COMPANIES FOR LACK OF CLIMATE CRISIS PROGRESS

It announced in its annual investment stewardship report that it cast more than 5,100 votes against company directors in the past 12 months to hold management [accountable] for failing to make headway on a range of issues...This was 300 more than in the previous year.

SEPTEMBER 17, 2020
JOANNA PARTRIDGE

The
Guardian

BLACKROCK TO DOUBLE DOWN ON ESG DESPITE NEW DOL PROPOSAL

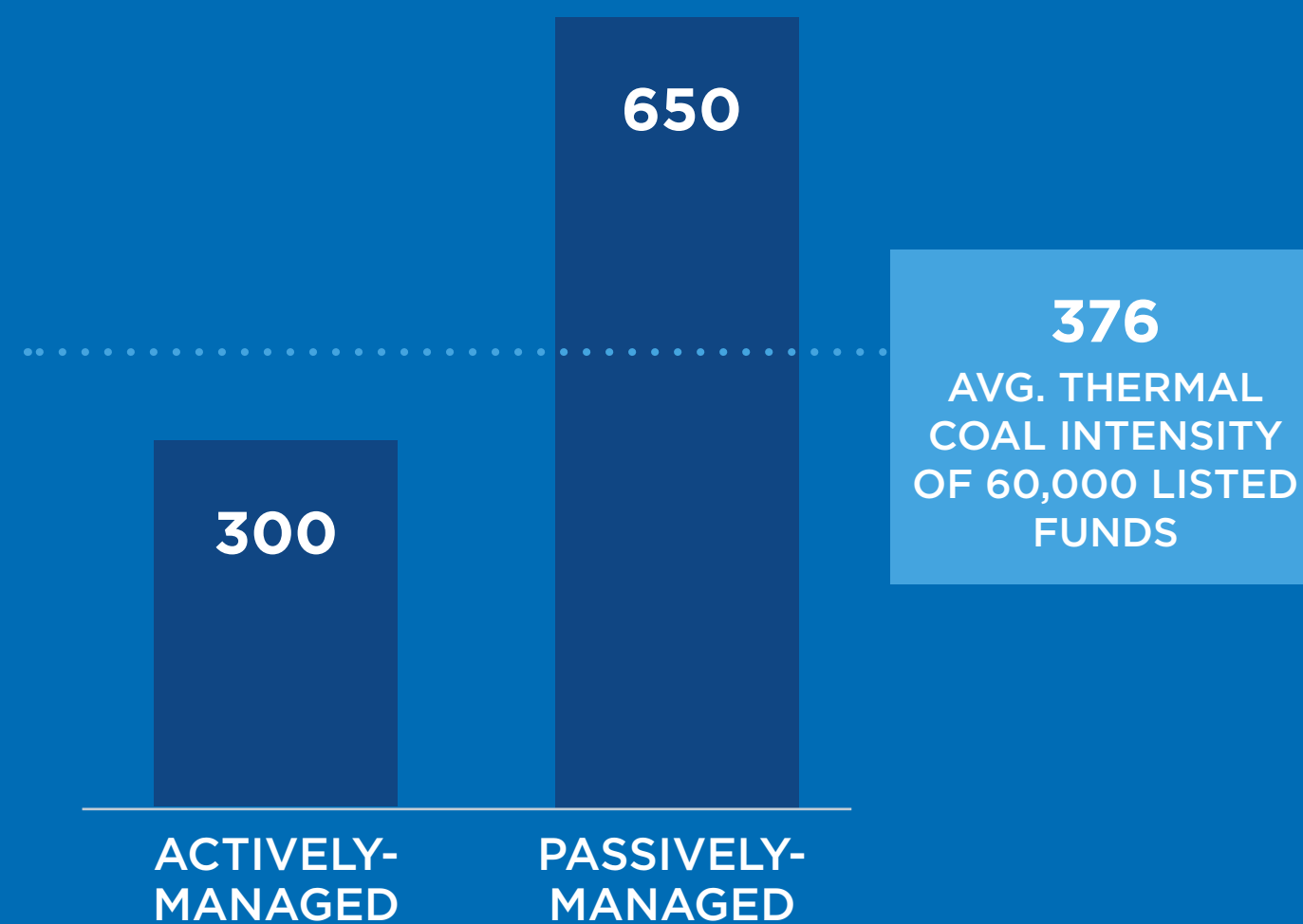
OCTOBER 7, 2020
RYAN W. NEAL

Financial
Planning

COAL'S "INVESTOR OF LAST RESORT" IS INDEX FUNDS

AS ACTIVELY MANAGED FUNDS DISCARD FOSSIL FUEL RISK, IT POOLS IN PASSIVE INVESTMENTS – THE INDEX FUNDS FAVORED BY SMALL INVESTORS

THERMAL COAL INTENSITY OF BLACKROCK FUNDS¹²



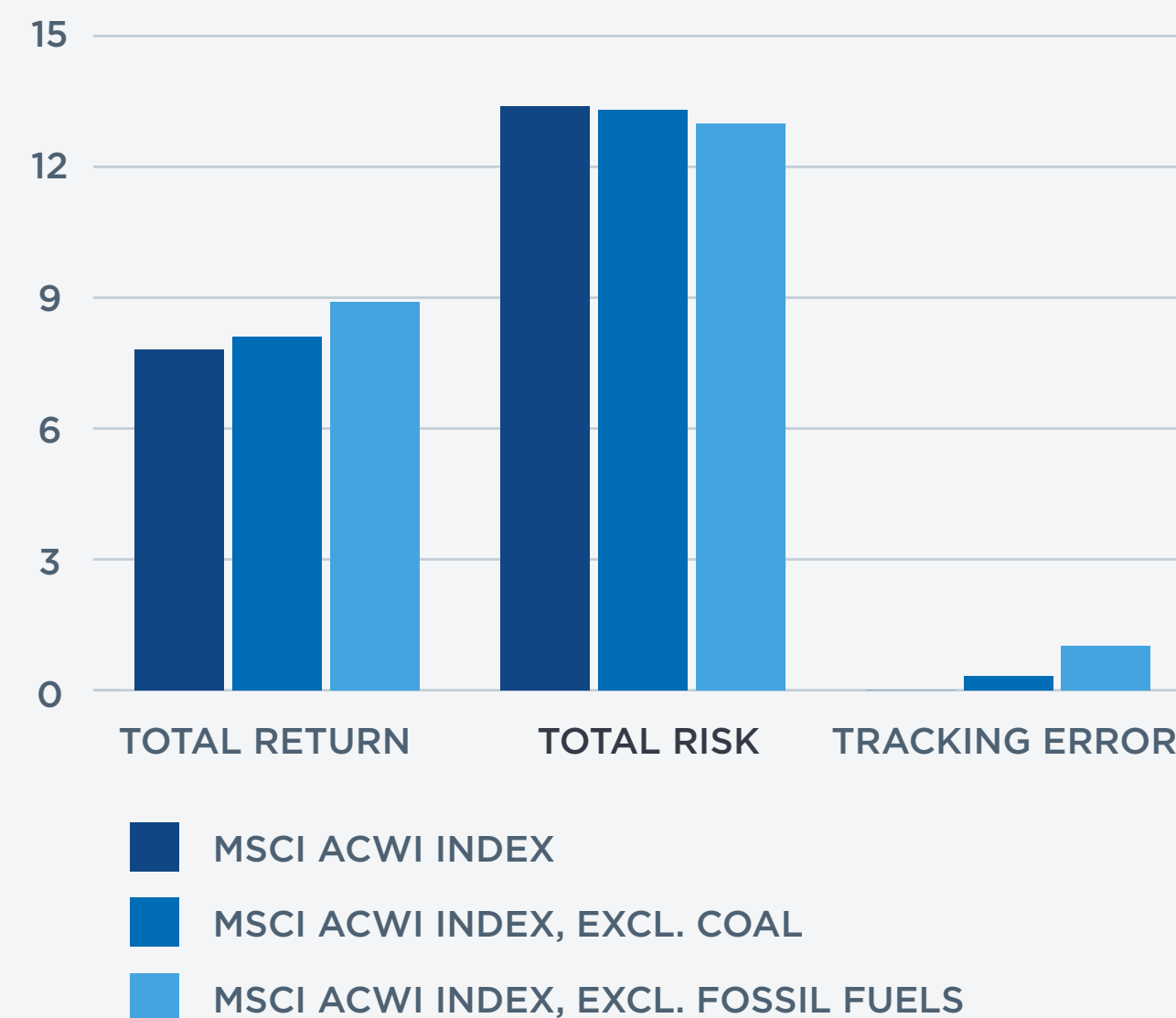
"[T]he fallout will be borne overwhelmingly by average investors, pensioners, and retirees, all of whom are significantly passively invested."¹³

The Passives Problem and Paris Goals: How Index Investing Trends Threaten Climate Action

FOR YEARS, INDEX FUND INVESTORS HAVE FACED LOWER RETURNS, HIGHER RISK DUE TO THEIR FOSSIL FUEL HOLDINGS

CASE STUDY: MSCI FLAGSHIP GLOBAL EQUITY INDEX¹⁴

Excluding fossil fuels = higher return, lower risk, manageable tracking error.

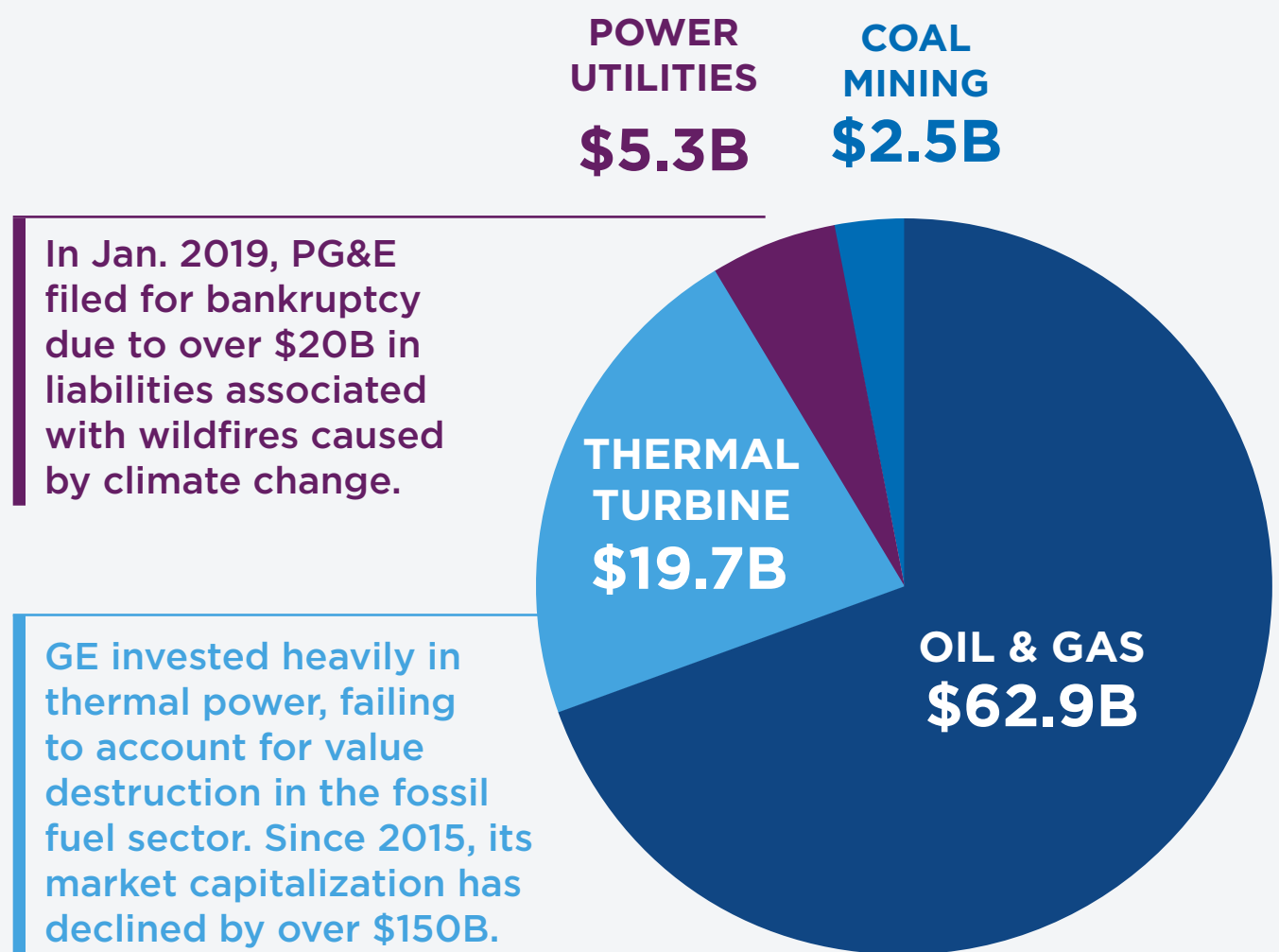


Note: MSCI ACWI is a market capitalization weighted index designed to provide a broad measure of equity-market performance throughout the world. Investment period is (11/30/10 to 5/31/16).

CASE STUDY: BLACKROCK¹⁵

BlackRock's fossil-fuel related risks cost investors more than \$90 billion in value.

FOSSIL-FUEL RELATED VALUE DESTRUCTION (IN BILLIONS OF DOLLARS, JAN. '09- MAR. '19)



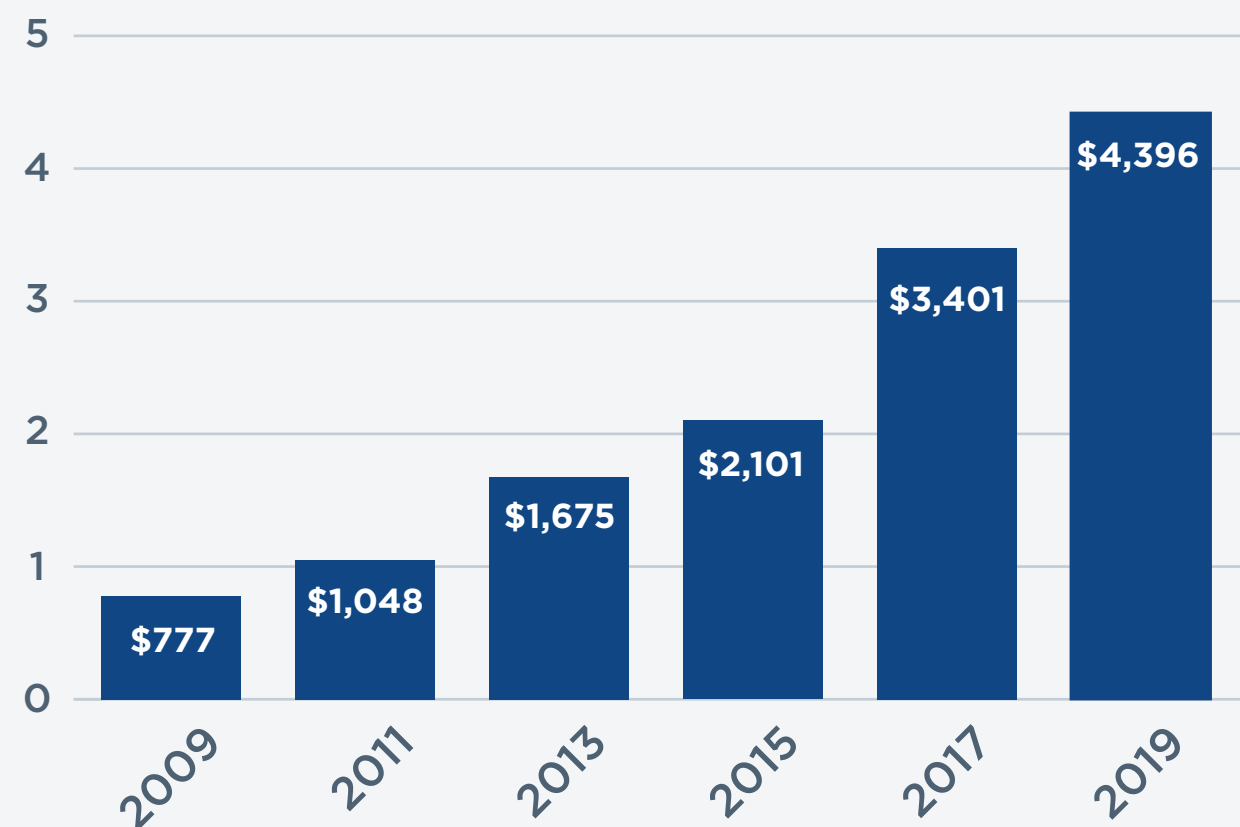
THIS IS A BIG DEAL, BECAUSE INDEX FUNDS REPRESENT MORE THAN HALF THE MARKET, AND THEY ARE GROWING RAPIDLY

THEY HAVE GROWN RAPIDLY

Because index investing offers lower risk, lower fees, more diversification, and better long-term returns than stock picking, index investments attract \$3 billion in inflows per day.¹⁶

Exchange traded funds have grown by more than five times over the last decade. In 2019, passively managed assets surpassed actively managed assets in the U.S.¹⁷

TOTAL NET ASSETS OF ETFS (IN BILLIONS OF DOLLARS)¹⁸



HIGHLY CONCENTRATED

JUST 3 INDEX FUND MANAGERS ACCOUNT FOR:

80%

OF ALL PASSIVELY MANAGED FUNDS¹⁹

BLACKROCK, VANGUARD, AND STATE STREET VOTE AN AVERAGE OF

25%

OF VOTES AT S&P 500 COMPANIES²⁰

TOGETHER, THE "BIG THREE" REPRESENT THE LARGEST SHAREHOLDER IN:

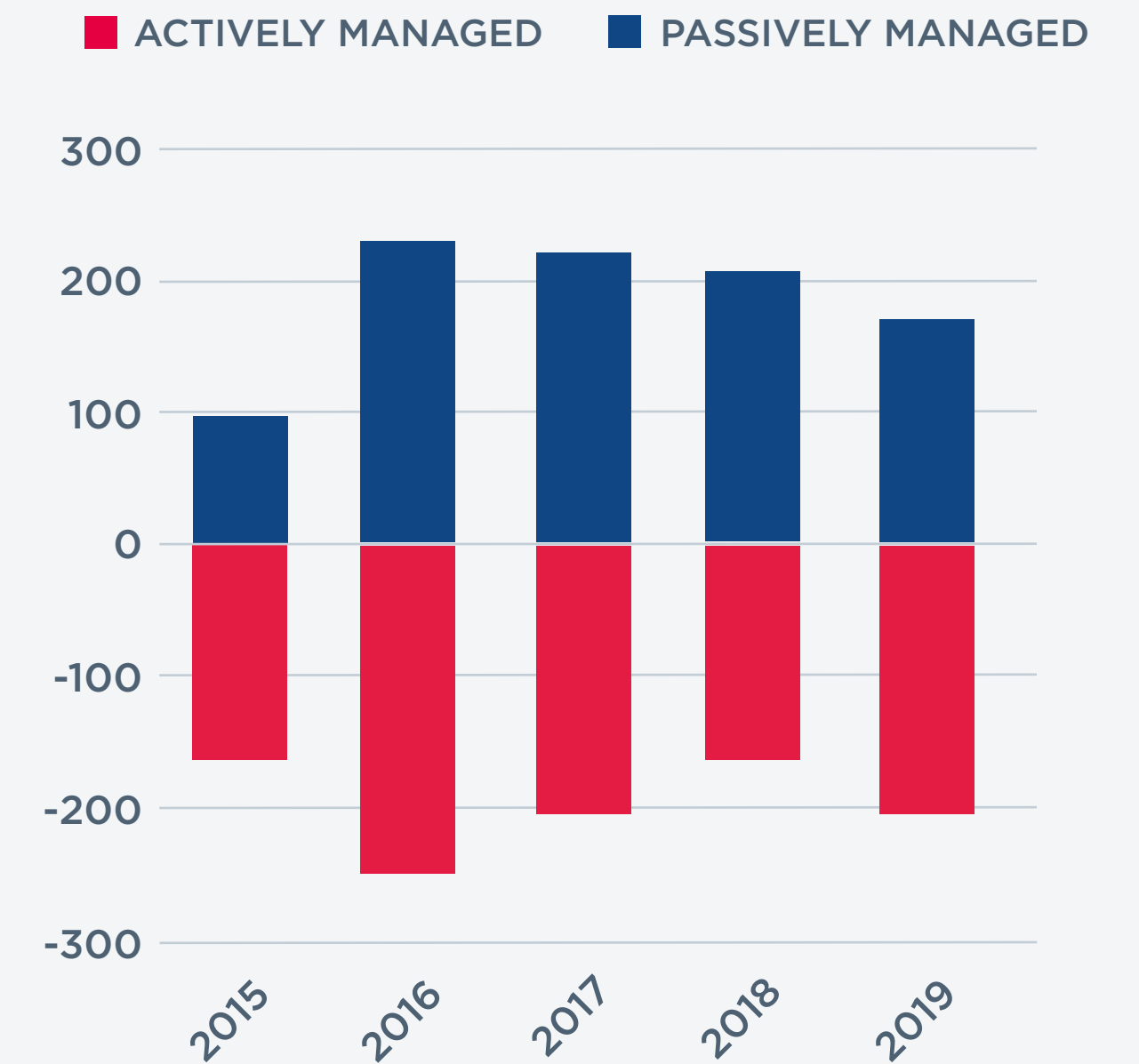
88%

OF S&P 500 COMPANIES²¹

IF TRENDS CONTINUE...

If the next 20 years reflect the past 10, the Big Three will own more than one-third of equity in the S&P 500, and could vote 40% of company shares.²²

U.S. EQUITY FUND FLOWS (YEARLY, IN BILLIONS OF DOLLARS)²³

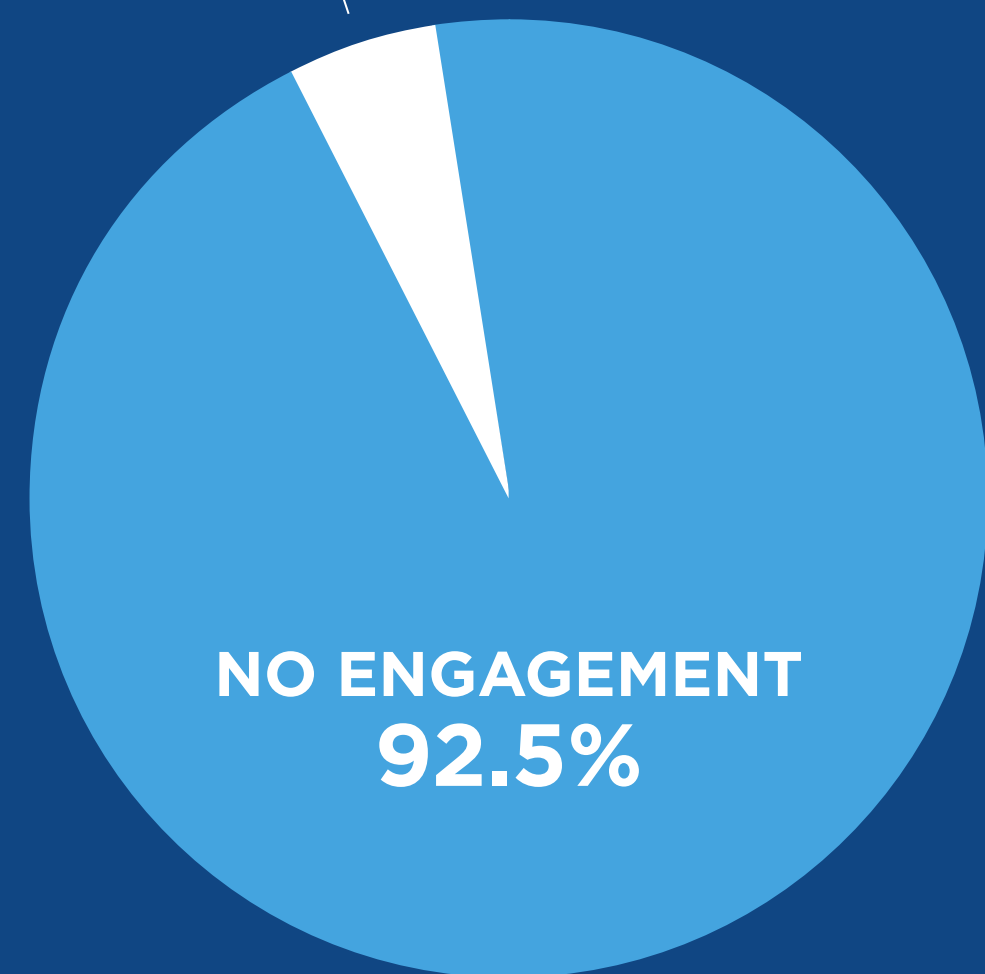


UNDER TODAY'S INDEX FUND RULES, MORE THAN HALF THE MARKET IS ON "AUTOPILOT"

LITTLE PRIVATE ENGAGEMENT WITH COMPANIES THEY OWN

AVERAGE PROPORTION OF COMPANIES
ENGAGED BY THE BIG THREE (2017-19)²⁴

SOME ENGAGEMENT*
7.5%



NO ENGAGEMENT
92.5%

*ONLY 2.3% WERE CONTACTED MORE THAN ONCE

NO SHAREHOLDER PROPOSALS SUBMITTED



OUT OF
~1,500

CORPORATE
GOVERNANCE
PROPOSALS
SUBMITTED
DURING 2014-2018

ZERO

WERE SUBMITTED BY BLACKROCK,
VANGUARD, AND STATE STREET²⁵

SUBMITTED FEW COMMENTS TO THE SEC



OUT OF
80

SEC PROPOSALS
SUBMITTED
DURING 1995-2018

LESS THAN 10%

WERE SUBMITTED BY BLACKROCK,
VANGUARD, AND STATE STREET²⁶

BUSINESS AS USUAL AMONG INDEX FUND MANAGERS POSES SYSTEMIC RISK

“INDEX EFFECT” ARTIFICIALLY RAISES THE VALUATION OF CARBON-INTENSIVE COMPANIES

“Passive investing bakes in significant new capital flows for listed coal, oil and gas.... [d]espite market underperformance....”

The Passives Problem and Paris Goals: How Index Investing Trends Threaten Climate Action²⁷

IN THE TWO YEARS AFTER PARIS (2016-2018)²⁸

15 OF THE LARGEST ASSET MANAGERS INCREASED THEIR HOLDINGS IN THERMAL COAL BY:



Investment funds new coal, oil, and gas fields that accelerate the crisis.



PASSIVE INVESTING SHIFTS POWER FROM ASSET OWNERS (INVESTORS) TO ASSET MANAGERS (E.G., BLACKROCK), AND THESE ASSET MANAGERS SIDE WITH MANAGEMENT TOO OFTEN

Asset managers find climate action too time-consuming, outside their responsibility, or bad for the other business they do with fossil fuel companies.

AS ACTIVE INVESTORS FLEE A SECTOR, THE RISK COLLECTS DISPROPORTIONATELY IN INDEX FUNDS, CREATING SYSTEMATIC RISK

“

As active investment exits the fossil fuel industry due to these warnings, passive investors are becoming the ‘holders of last resort’ ensuring that losses will be borne overwhelmingly by average investors, savers, pensioners, and retirees.

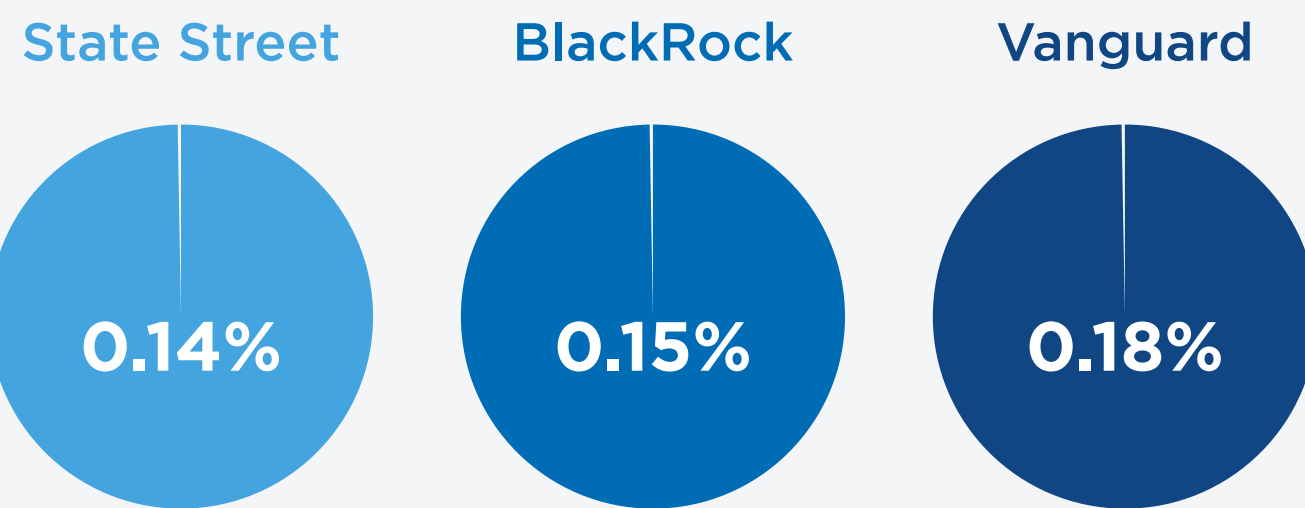
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- THE PASSIVES PROBLEM AND PARIS GOALS: HOW INDEX INVESTING TRENDS THREATEN CLIMATE ACTION²⁹

ASSET MANAGERS SPEND TOO LITTLE ON OVERSIGHT, TALK TOO LITTLE TO COMPANIES THEY OWN, AND DEFER TOO MUCH TO MANAGEMENT

NO BUDGET FOR ENGAGEMENT

PERCENT OF FEES SPENT ON STEWARDSHIP³⁰



To manage the \$3.42 trillion in passive investment they manage (collectively), BlackRock, Vanguard, and State Street each dedicate about half of one employee day, per year, per company.

STAFF DEDICATED PER YEAR, PER COMPANY³¹



POOR EFFORT

Of 4,600 instances of BlackRock, Vanguard, SSGA owning 5% or more of a company, only 9 engagements on director selection reported.

That's less than 0.2% of the time.³²

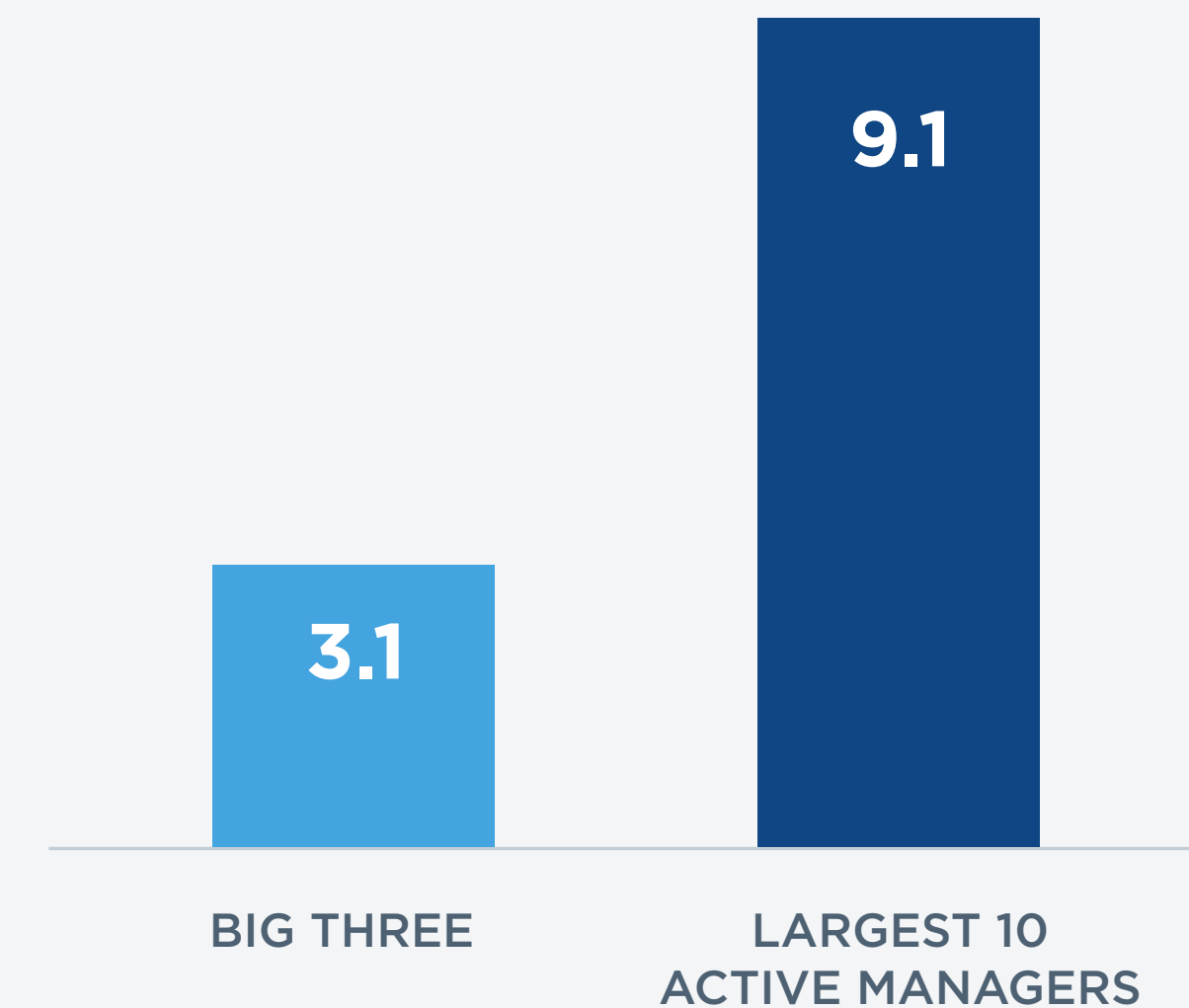
IGNORING FINANCIAL PERFORMANCE BY DESIGN

By their own proxy voting guidelines, Big Three exclude financial underperformance as criteria for engaging with companies they own.³³

TOO DEFERENTIAL TO MANAGEMENT

Active managers are nearly 3X more likely to vote against say-on-pay than the Big Three.

BIG THREE VS. ACTIVE MANAGERS "AGAINST" AVG. VOTES PER YEAR ON SAY-ON-PAY (2012-2018)³⁴

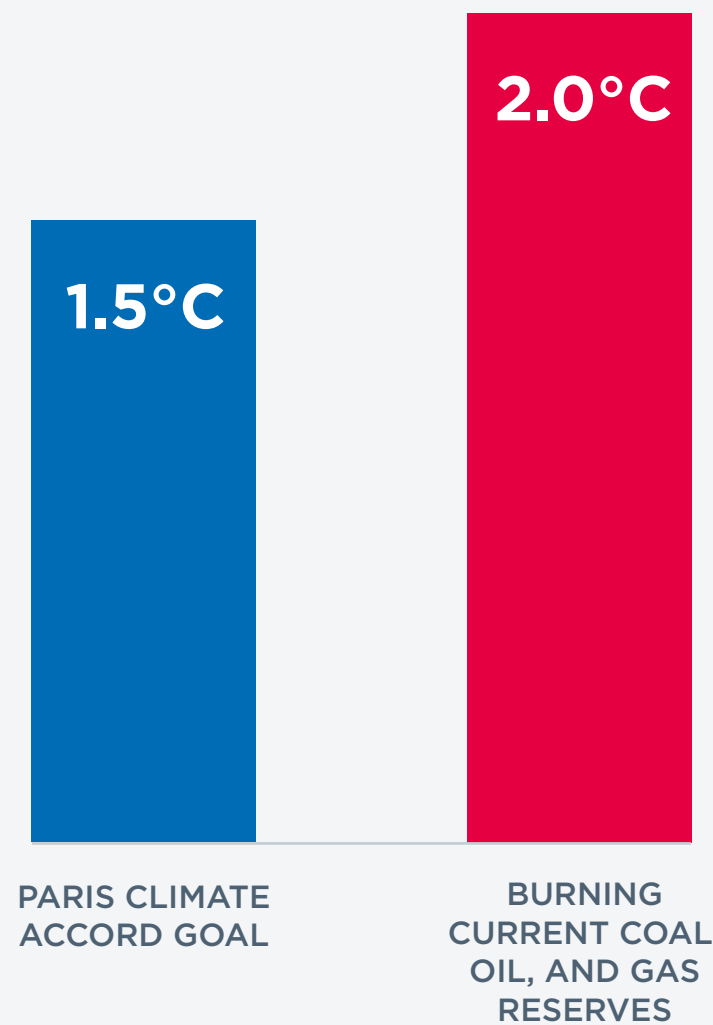


BUSINESS AS USUAL AMONG INDEX FUND MANAGERS ACCELERATES CLIMATE CRISIS

WE ALREADY HAVE MORE FOSSIL FUELS IN PRODUCTION THAN WE CAN SAFELY BURN

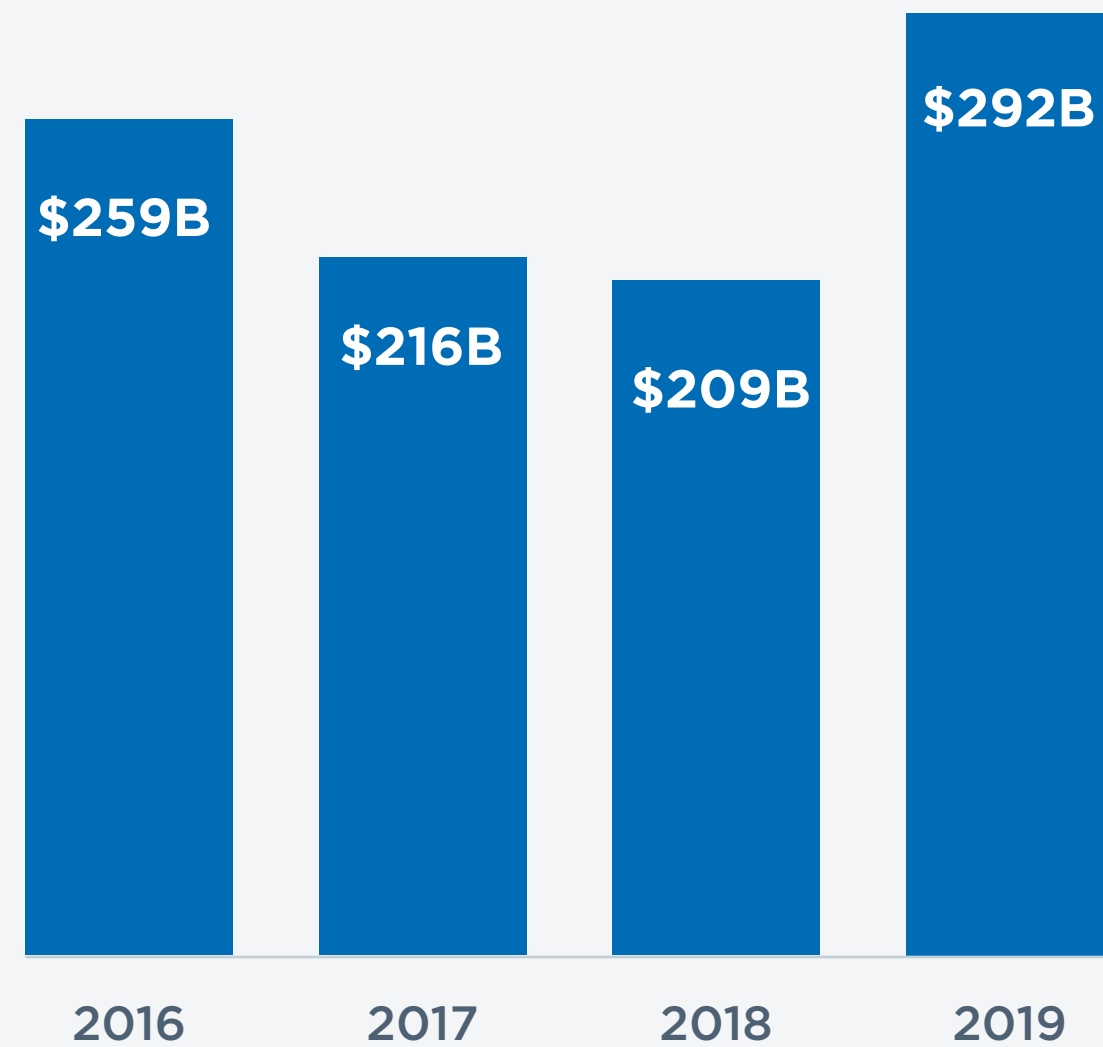
Burning current coal, oil, and gas reserves would generate a 2.0°C increase. Banks helping bring new coal, oil, and gas fields online are making matters worse.

PARIS CLIMATE ACCORD GOAL VS CURRENT TRAJECTORY (INCREASE IN TEMPERATURE)³⁵



ONE-THIRD OF NEW FOSSIL FUEL FUNDING GOES TO EXPLORATION - BRINGING NEW COAL, OIL, AND GAS FIELDS ONLINE

MAJOR BANK LENDING TO EXPLORATION COMPANIES (IN BILLIONS OF DOLLARS)³⁶



“

As our understanding of global warming develops, and as social expectations evolve, the responsibility for holding these thermal coal assets has to sit somewhere.

”

- PATRICK JAHNKE
HOLDERS OF LAST RESORT: THE ROLE OF INDEX FUNDS AND INDEX PROVIDERS IN DIVESTMENT AND CLIMATE CHANGE
FEBRUARY 19, 2019³⁷

“EXIT” SOLUTIONS

MODIFY LEADING FUNDS TO EXCLUDE COAL/FOSSIL FUELS

1. Respects majority consumer preference for sustainable funds – and recognizes limits of putting burden on small investors to opt-in for fossil fuel-free funds
2. Reduces gap between funds’ treatment of active and passive investors
3. Allows minority of investors who want to invest in coal/fossil fuels to opt-into those funds
4. Substantial, immediate impact on investor risk and climate change risk

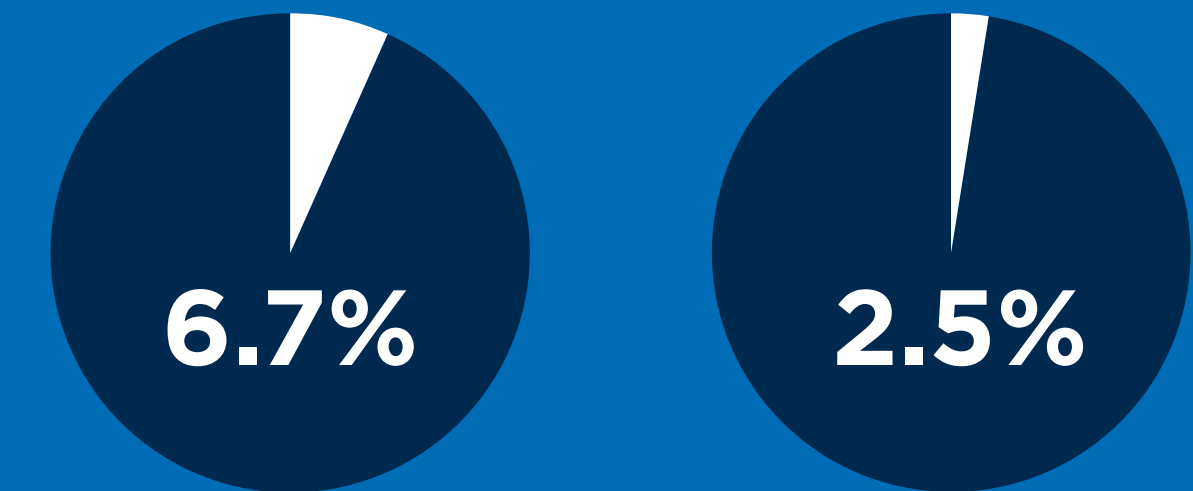
ADOPT COMPREHENSIVE, UNIFORM, COMPARABLE DEFINITIONS AND DISCLOSURE REQUIREMENTS FOR ESG INVESTMENTS

5. Identify pure play fossil fuel companies, as well as diversified companies that exceed specific revenue limits
6. Can choose between just screening out fossil fuel companies and screening in renewable energy companies
7. EU will introduce a green taxonomy framework this year, could take force next year.

FOSSIL FUEL COMPANIES NEED INDEX FUNDS; INDEX FUNDS DO NOT NEED FOSSIL FUEL COMPANIES

CASE STUDY: VANGUARD AND COAL³⁸

VANGUARD OWNERSHIP



PEABODY ENERGY

ARCH COAL

PEABODY AND ARCH COAL REPRESENT ONLY 0.02% OF THE VANGUARD TOTAL STOCK MARKET INDEX FUND ASSETS.

WHAT'S GOOD FOR BLACKROCK'S ACTIVE INVESTORS IS ALSO GOOD FOR BLACKROCK'S PASSIVE INVESTORS

“ With the acceleration of the global energy transition, we do not believe that the long-term economic or investment rationale justifies continued investment in [the thermal coal] sector. ”

- BLACKROCK'S GLOBAL EXECUTIVE COMMITTEE, IN A LETTER TO CLIENTS, JANUARY 2020³⁹

PASSIVE INVESTORS FAVOR ESG, SO THEIR ASSET MANAGERS SHOULD PUSH FOR IT

\$31 TRILLION
“GREEN” OPTION MARKETPLACE⁴⁰

72%
OF U.S. ADULTS ARE INTERESTED IN ESG INVESTMENTS⁴¹

BLOCK TRUMP'S COUNTERPUNCH ON FIDUCIARY DUTY

Despite BlackRock's pronouncement that ESG is essential to strong returns, the Trump Administration is now arguing that considering ESG violates the asset manager's fiduciary duty to her client.



THE RETIREMENT INVESTMENTS FOR A SUSTAINABLE ECONOMY (RISE) ACT gives federal employees a fossil-free investment option in their \$510 billion retirement fund.⁴²

INDEX REFORMS ARE MANAGEABLE

INDUSTRY CONCENTRATION MAKES FIXES EASIER

Extreme concentration means there are fewer players to manage.

Three companies (S&P, MSCI, FTSE Russell) account for nearly 80% of index provider revenue.⁴³

Fixing popular indexes can help fix the market. The S&P 500 alone represents 41% of assets under management benchmarked to the 20 most popular indexes.⁴⁴

“It’s almost inevitable when you see this kind of concentration that it probably will make sense to do something about it.”

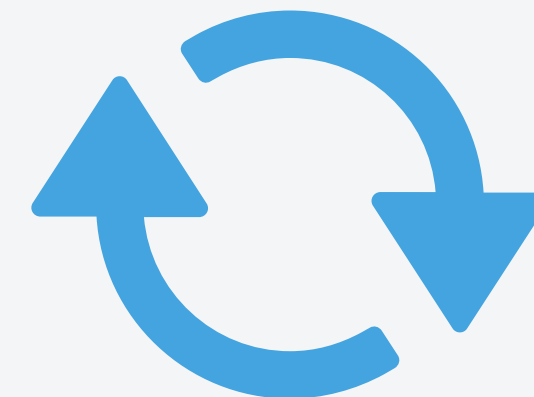
- RON O’HANLEY
CEO, STATE STREET⁴⁵

INDEX PROVIDERS MODIFY INDICES REGULARLY; THIS IS NOT UNPRECEDENTED

Index providers modify their indexes regularly: S&P changed its methodology for the S&P 500 eight times between 2015 and 2018.⁴⁶

Index funds have already created fossil-fuel alternatives for large pension funds, like CALPERS, CALSTRS, and Norwegian Sovereign Wealth Fund.

Many asset managers have started self-indexing, which means modifying those indexes on their own.



ASSEMBLING AN INDEX HAS ALWAYS BEEN A JUDGEMENT CALL, NOT A SCIENCE

Cyrus Taraporevala, CEO of State Street’s investment management arm, defends the inflexibility of passive investments: “We are essentially permanent capital and cannot turn the S&P 500 into the S&P 499.”⁴⁷

But **index funds are not required to hold each stock in its benchmark index, as long as the fund “in aggregate approximates the full index.”** For example, in January 2019 the Vanguard index fund benchmarked to the CRSP US Total Market Index included 3,599 of the 3,639 total stocks.⁴⁸

“Somebody is making very active decisions about which stocks will be in each index or ‘passive’ product.”

- HOWARD MARKS
CO-FOUNDER,
OAKTREE CAPITAL MANAGEMENT⁴⁹

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