Funds, FinTech

Innovation

William A. Birdthistle October 10, 2018 4th Luxembourg FinTech Conference



\$20 TRILION



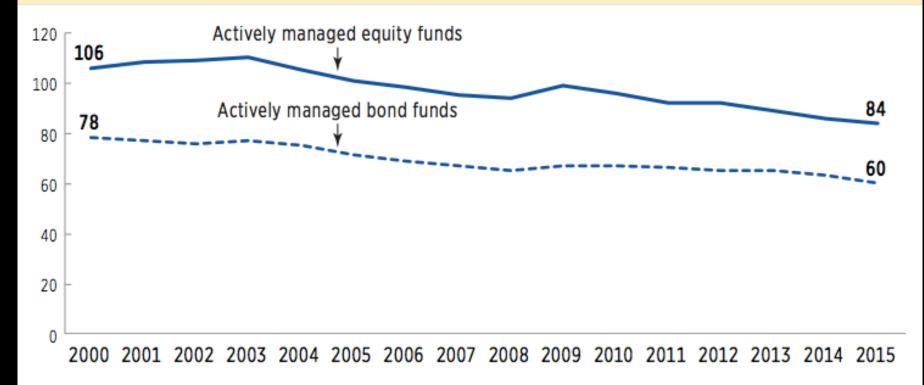
\$50 TRILION



FIGURE 5.6

Expense Ratios of Actively Managed and Index Funds

Basis points, 2000-2015



Note: Expense ratios are measured as asset-weighted averages. Data exclude mutual funds available as investment choices in variable annuities and mutual funds that invest primarily in other mutual funds.

Sources: Investment Company Institute and Lipper



\$100,000,000,000



US\$100,000,000,000





INDEX

EUNDS



BOGLE





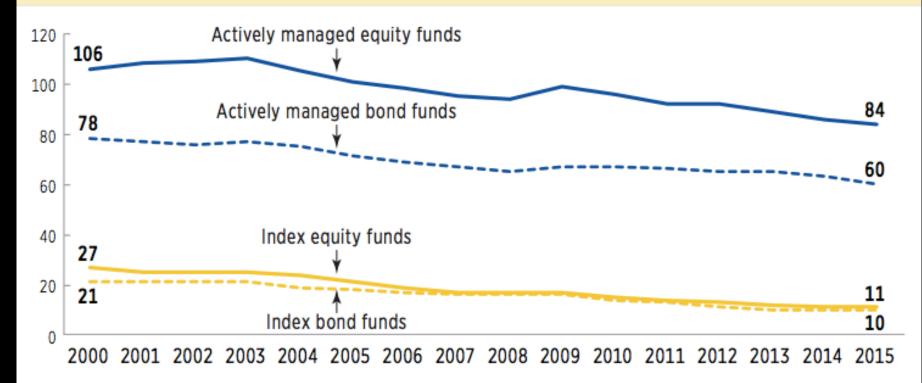




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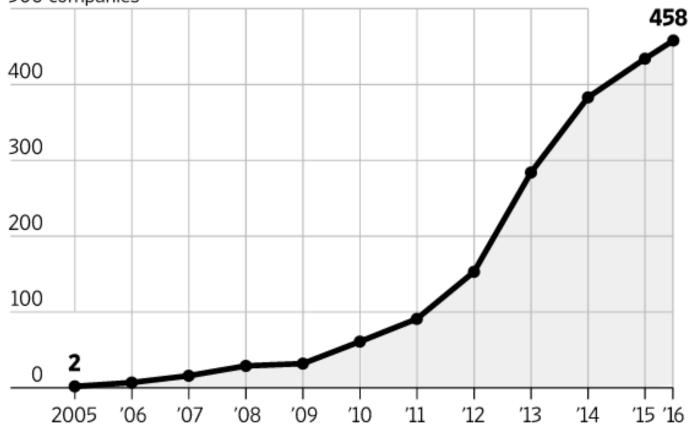


SUCCESS!

Taking Ownership

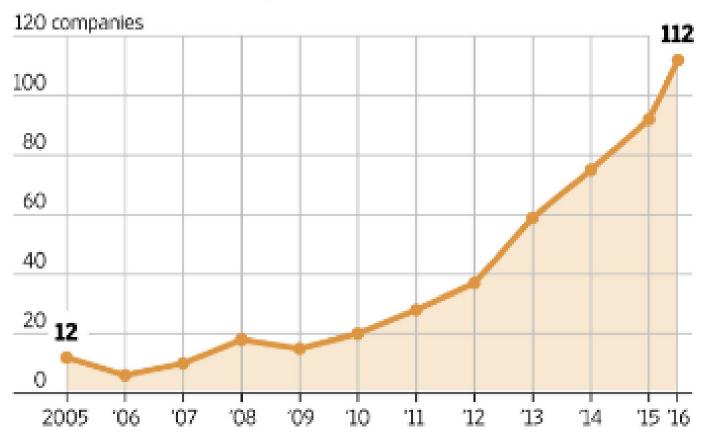
The number of S&P 500 companies in which passive mutual funds and ETFs collectively owned at least 10% has soared.





Note: Applies to total market value of share classes included in the S&P 500. All figures are for U.S.-based funds, as of year-end except for 2016, which is as of June 30. Sources: WSJ analysis of data from Morningstar (funds and stock ownership); S&P Global Market Intelligence (S&P 500 constituents, share classes, share counts and market values) THE WALL STREET JOURNAL.

Number of S&P 500 companies in which U.S.-based passive mutual funds and ETFs collectively own more stock than active ones do



Note: Applies to total market value of share classes included in the S&P 500. All figures as of year-end except for 2016, which is as of June 30.

Sources: WSJ analysis of data from Morningstar (funds and stock ownership); S&P Global Market Intelligence (S&P 500 constituents, share classes, share counts and market values)

THE WALL STREET JOURNAL.

20% of total S&P 500 market value Active funds 17.2% - 16.7% 15 Passive funds 11.6% 10 4.6% 5 0 '06 '07 '10 '11 '12 '13 '15 '16 2005 '08 '09 '14



LUND SHAPIRO



LUND SHAPIRO SOLOMON & FISCH



LUND SHAPIRO SOLOMON & FISCH COATES



PRICE DISCOVERY



PRICE DISCOVERY

GOVERNANCE



PRICE DISCOVERY

Governance

MONOPOLY



SUCCESS?





$\mathbf{80000}$





EREE

FUNDS

THE WALL STREET JOURNAL.

OPINION | COMMENTARY

Next Stop for Mutual-Fund Fees: Zero

That could mean tens of thousands in extra savings for investors in retirement.

By William A. Birdthistle and Daniel J. Hemel June 10, 2018 1:42 p.m. ET



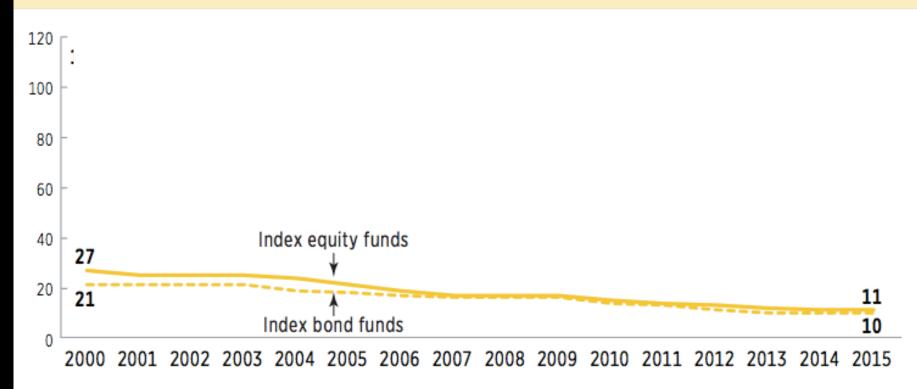




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Sources: Investment Company Institute and Lipper

SCALE

SCALE



S&P500 by market cap

righthouse Financial Inc 0%		Apple
vnopsys Inc.		3. Amazon.com l
nopsys Inc. 1% mnicom Group	\$935.84	3.
1% ynn Resorts Ltd		Alphabet 3.
1% SIOMED Inc	\$894.23	3.
		Microsoft Co
EXX Laboratories	\$837.44	3.
emational Paper		Facebook, I
Niltower Inc.	\$807.66	2
% uity Residential		Berkshire Hathaw
8	\$606.02	JPMorgan Chase & 0
tiv Pic		Exxon Mobil Co
Kesson Corp.	\$496.08	۱. Johnson & Johns
% mpra Energy		1. Visa l
% hnson Controls International	\$379.73	1. Bank of America Co
	\$348.11	1.
ton Corporation	5346.11	Wells Far
ngressive Corp.	\$342.78	Wal-Mart Stor
adarko Petroleum Corp	\$315.59	United Health Group I
		1. Intel Co
nder Morgan	\$305.50	0. AT&T I
udential Financial	\$275.66	0. Chevron Co
rnival Corp.	\$259.88	0
% erson Electric Company	\$245.45	Home Dep 0.
		Pfizer I 0.
stronic Arts		Mastercard I
ston Scientific		0. Verizon Communicatio
% nois Tool Works		0. Boeing Compa
8		0. Procter & Gam
hon Property Group Inc		0.
ke Energy		Cisco Syste
E Group Inc.		0. Oracle Co 0.
% omatic Data Processing		Coca-Cola Company(TI
		0. Citigroup I
serican Tower Corp A		0. Merck & 0
Igreens Boots Alliance		0. The Walt Disney Compa
% S Health		0.
8		Netflix I 0.
igen Inc.		PepsiCo I 0.
terpillar Inc.		Comcast Co
196 - Contract (1970)		0. Adobe Systems
ria Group Inc		Adobe Systems 0.
4%		

SOFT

DOLLARS

SECURITIES

LENDING





Replying to @elonmusk @KishavanBhola and 2 others

Where this breaks down is in passive index funds, which constitute most of the market. The holders of those funds, mostly small investors & retirement funds, don't realize that their stocks are being lent to short sellers, diminishing their true equity return.

5:54 PM - 4 Oct 2018

THE WALL STREET JOURNAL.

MARKETS

Fidelity Doubles Down on Free Fund Strategy

Investment firms are dueling for increasingly cost-sensitive clients

By Justin Baer Sept. 12, 2018 5:17 p.m. ET





HOW

EXPENSIVE IS FREE?





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SECURITIES

LENDING?



EXPENSIVE



UNKNOWABLY

EXPENSIVE