

Morningstar DirectSM Asset Flows Commentary: United States

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Data through Dec. 31, 2016
U.S. Mutual Funds and
Exchange-Traded Products

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U.S. Investors Favored Passive Funds Over Active by a Record Margin in 2016

Investors closed out 2016 by pumping a fresh monthly record of new cash into passively managed U.S. equity funds in December, capping a year that saw a widening gap between the fortunes of actively managed funds and their index-tracking competitors across most major investment categories.

Broadly, investors ended the year favoring stock funds over bond funds, marking a shift from the first 10 months of 2016 where flows had strongly favored bonds over stocks. This changing dynamic came amid growing optimism about the U.S. economy and expectations for continued rising interest rates and inflation.

But this trend toward stocks did little to help the overall fortunes of active managers. Among U.S. equity funds, passively managed funds—led by Vanguard’s offerings—took in \$50.8 billion during December, which topped the previous monthly record of \$41.9 billion set in November.

Meanwhile, investors pulled \$23 billion out of actively managed U.S. equity funds, extending the group’s streak of outflows to 33 consecutive months.

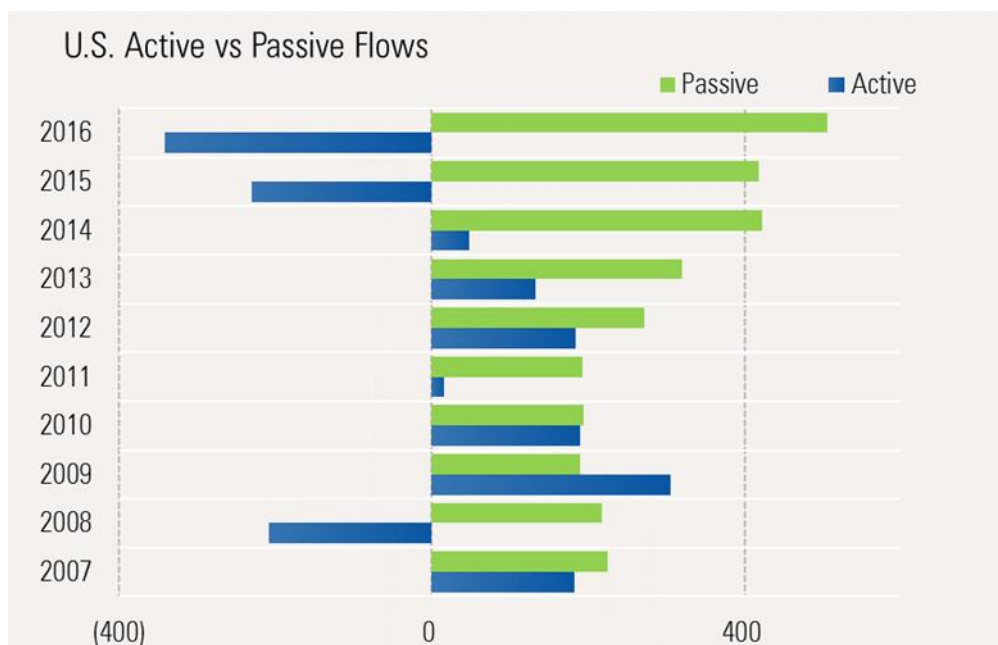
Estimated Net Flows*	Active			Passive		
	Dec 2016	1 Year	Assets \$Bil	Dec 2016	1 Year	Assets \$Bil
U.S. Equity	(23,043)	(263,790)	3,545	50,811	236,667	2,981
Sector Equity	(3,402)	(31,819)	371	5,696	33,781	410
International Equity	(8,181)	(59,800)	1,387	14,707	66,644	915
Allocation	(3,927)	(53,531)	1,157	(4,445)	(48)	59
Taxable Bond	1,830	46,327	2,272	12,769	147,755	910
Municipal Bond	(15,879)	26,280	603	1,611	6,773	28
Alternative	(2,943)	(7,169)	164	(1,465)	2,458	45
Commodities	118	3,366	26	(3,241)	10,745	62
All Long Term	(55,425)	(340,137)	9,525	76,444	504,776	5,409
Money Market	8,535	(35,452)	2,710			

*Includes liquidated and merged funds.

Source: Morningstar Direct Asset Flows.

This sea-change in investor preferences toward passive strategies and away from active managers is especially stark when viewed on a calendar-year basis.

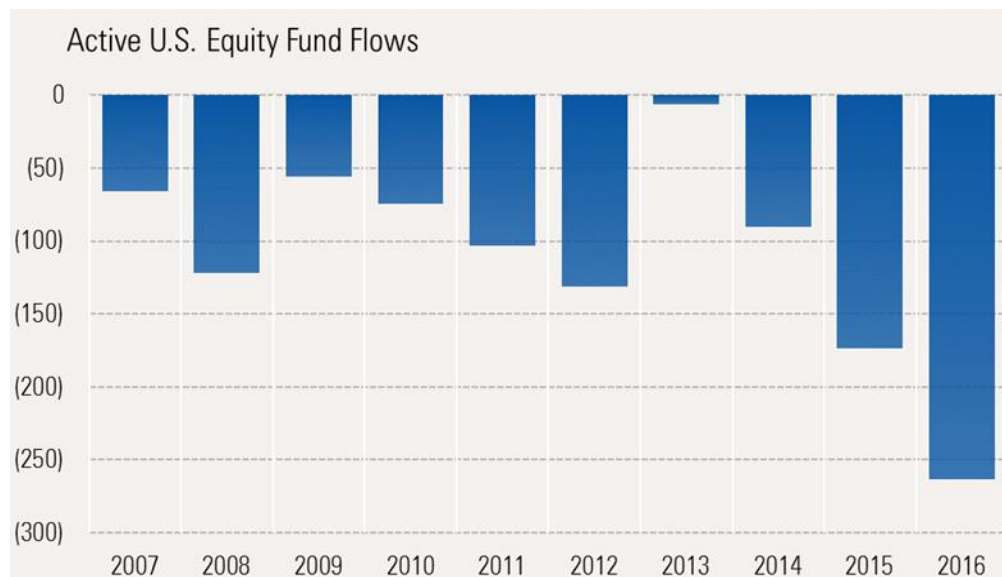
During 2016, passive fund strategies in the United States took in a record \$504.8 billion, far outpacing the previous high-water mark of \$422.7 billion set in 2014 and 2015's tally of \$418.5 billion. By way of contrast, last year's inflows for passive funds was double the group's take in 2007.



Meanwhile, active funds experienced outflows of \$340.1 billion in 2016, exceeding the \$230.5 billion net withdrawals seen in 2015, and even higher than during the financial crisis year of 2008 when active funds saw outflows of \$208.4 billion.

The primary reason: the remarkable exodus from actively managed U.S. equity funds.

Helped by a post-election surge, the S&P 500 closed out 2016 with a 12% gain, a rally that in the past might have seen investors turn to stock-pickers. But investors instead made net withdrawals of \$263.8 billion from active U.S. equity strategies, up sharply from \$173.6 billion in 2015 and more than double the exodus seen in 2008. In fact, active U.S. equity funds haven't seen a calendar year of inflows since 2005.



Passively managed U.S. equity funds, meanwhile, took in \$236.7 billion for the year, more than double the inflows posted in 2015.

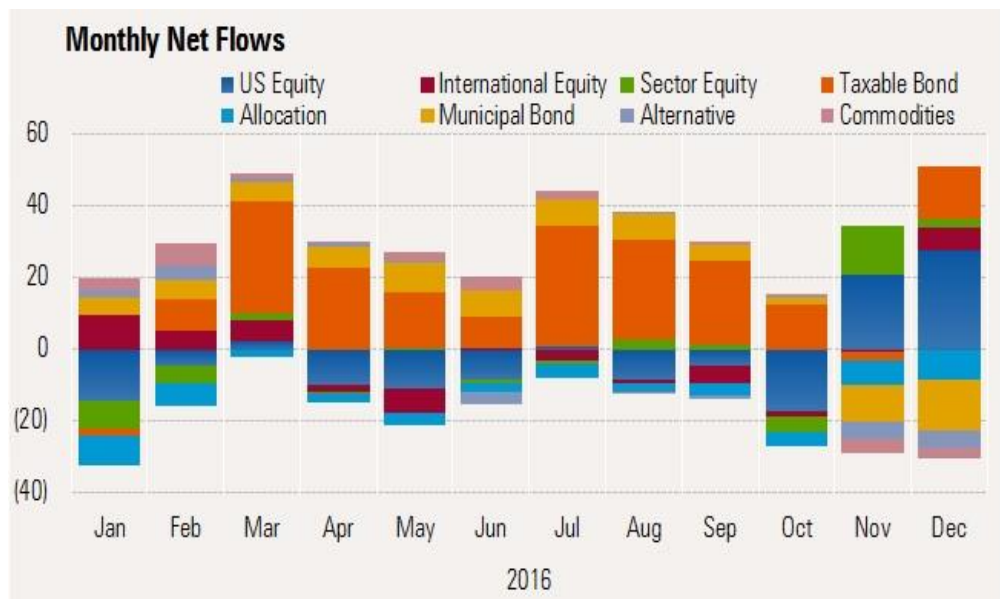
But the preference for passively managed strategies was broader than just U.S. equity funds in 2016. Index-tracking international-stock funds took in \$66.6 billion while their active competitors saw outflows of \$59.8 billion.

Passively managed taxable-bond funds had inflows of \$147.8 billion, far outstripping the \$46.3 billion of inflows for active bond offerings.

A continued bright spot for active managers on the flows front remained tax-exempt bond funds, which saw inflows of \$26.3 billion in 2016 compared with \$6.7 billion for index-tracking muni funds.

Has the Tide Turned in Favor of Stock Funds?

While much of the attention has been on the active/passive divide in flows, the final months of 2016 saw a sharp shift in investor preferences to U.S. stocks and against bonds. Thanks to the record flows into passive U.S. equity funds, the overall inflows tally for U.S. stock funds hit its highest monthly total since April 2000, at \$27.8 billion.



Prior to the November election, bond funds were the clear favorite for investors, as they have been for some time.

But after the U.S. election, the bond market sold off amid expectations of fiscal stimulus as a tightening labor market and long-awaited signs of wage growth raised expectations of Federal Reserve rate increases and rising inflation.

Still, taxable-bond funds saw overall net inflows of \$14.6 billion in December following net redemptions of \$2.9 billion for November.

Muni Funds Take Another Hit

In the municipal-bond market, which was hit hard by the combination of rising rates and expectations of tax cuts that could damp enthusiasm for tax-exempt strategies, outflows totaled \$14.3 billion. In November, the category saw outflows of \$10.5 billion.

Total (Active and Passive)

Estimated Net Flows \$Mil	Dec 2016	1 Year	Assets \$Bil
U.S. Equity	27,769	(27,123)	6,526
Sector Equity	2,294	1,962	781
International Equity	6,526	6,844	2,302
Allocation	(8,371)	(53,579)	1,216
Taxable Bond	14,599	194,082	3,182
Municipal Bond	(14,268)	33,053	631
Alternative	(4,407)	(4,711)	209
Commodities	(3,123)	14,112	88
All Long Term	21,019	164,639	14,934
Money Market	8,535	(35,452)	2,710

Meanwhile, even as the number of alternative-investment strategies continues to expand, investors appeared to lose interest in the group during 2016 amid flagging performance and a growing investor preference for lower-fee investments.

December saw outflows from the group of \$4.4 billion, with full-year outflows of \$4.7 billion. This marked the worst showing for alternative funds since 2005 and was a significant reversal from 2015, when alternative funds took in \$13.3 billion. In fact, inflows to the group have been on a downward trajectory since 2013 when they hit \$57.4 billion.

Leading and Lagging Categories

Taking a deeper dive into the Morningstar Category trends for December, bank-loan funds, which can help shield investors against the impact of rising rates, saw inflows of \$6.0 billion on the active side and \$1.4 billion for passive strategies, continuing a recent trend of rising interest in these funds.

On the active side of the fence, investors also favored the safety of ultrashort-bond funds, which took in \$2.7 billion.

Estimated Net Flows* \$Mil	Active			Passive		
	Dec 2016	1 Year	Assets \$Bil	Dec 2016	1 Year	Assets \$Bil
Leading						
US Fund Large Blend	(5,447)	(61,854)	685	26,853	143,455	1,865
US Fund Foreign Large Blend	(1,755)	(10,293)	313	10,321	67,823	500
US Fund High Yield Bond	4,265	8,339	268	3,815	8,125	43
US Fund Bank Loan	6,029	6,057	108	1,399	3,927	8
US Fund Mid-Cap Blend	402	(8,240)	104	5,103	14,030	282
Lagging						
US Fund Large Growth	(11,875)	(111,282)	1,115	3,288	5,159	188
US Fund Muni National Interm	(5,633)	13,384	167	1,034	3,304	11
US Fund Health	(2,960)	(18,053)	97	(721)	(3,669)	43
US Fund Muni National Short	(3,814)	2,262	114	556	1,125	8
US Fund Corporate Bond	(659)	9,547	79	(2,307)	11,425	59

Excludes money market.

At the opposite end of the risk spectrum in fixed income, high-yield funds saw inflows for both active and passive strategies, likely in response to the big rally in stocks.

Top Active Categories

Estimated Net Flows, \$ millions

	Dec-16	4th Qtr	2016
Bank Loan	6,029	10,560	6,057
High Yield Bond	4,265	(3,637)	8,339
Ultrashort Bond	2,702	7,280	13,040
Financial	699	1,040	(424)
Small Value	670	550	(1,428)

Bottom Active Categories

Estimated Net Flows, \$ millions

	Dec-16	4th Qtr	2016
Large Growth	(11,875)	(32,595)	(111,282)
Muni National Interm	(5,633)	(6,579)	13,384
Large Blend	(5,447)	(17,640)	(61,854)
Intermediate-Term Bond	(4,504)	(4,920)	41,190
Muni National Short	(3,814)	(3,900)	2,262

When it came to active-strategy outflows within the categories, the top-five list was dominated by a mix of U.S. equity funds hit by the general trend away from active stock funds and bonds, in particular, municipal-bond funds. Top passive categories were paced by the huge inflows into the stock market.

Top Passive Categories

Estimated Net Flows, \$ millions

	Dec-16	4th Qtr	2016
Large Blend	26,853	53,359	143,455
Foreign Large Blend	10,321	22,014	67,823
Large Value	7,333	15,149	37,601
Intermediate-Term Bond	6,298	14,950	70,096
Mid-Cap Blend	5,103	9,027	14,030

On the outflows side for passive funds, December saw a bit of a mishmash, although commodities strategies continued their recent trend of outflows, with \$2.5 billion going out the door.

Bottom Passive Categories

Estimated Net Flows, \$ millions

	Dec-16	4th Qtr	2016
Commodities Precious Metals	(2,536)	(6,906)	9,906
Corporate Bond	(2,307)	(3,607)	11,425
Trading--Leveraged Commodities	(1,328)	(1,498)	(1,195)
Target-Date 2025	(1,095)	(999)	(733)
Commodities Energy	(986)	(683)	(490)

There Was Vanguard, and Then There Was Everybody Else

By far, 2016 belonged to Vanguard. The low-cost juggernaut dominated the flows landscape to a remarkable degree. The firm took in \$277 billion in new money during the year, finishing at \$3.4 trillion in long-term assets.

American Funds managed to weather the actively managed fund exodus with a relatively small \$4.9 billion in outflows, while Fidelity Investments was able to offset some of the bleeding on the active side with \$37 billion in index-tracking inflows.

Franklin Templeton was hit especially hard, with \$42.5 billion out the door.

Estimated Net Flows \$Mil	Active			Passive		
	Dec 2016	1 Year	Assets \$Bil	Dec 2016	1 Year	Assets \$Bil
Vanguard	(5,625)	20,367	845	29,388	256,890	2,559
American Funds	(2,477)	(4,927)	1,255			
Fidelity Investments	(7,207)	(60,451)	971	5,139	37,186	258
BlackRock/iShares	(2,697)	(18,467)	203	21,368	117,898	1,000
T. Rowe Price	(1,358)	(4,952)	470	(387)	432	31
SPDR State Street Global Advisors	148	1,616	5	17,328	53,091	497
Franklin Templeton Investments	(1,957)	(42,544)	307	(13)	298	0
PIMCO	(1,893)	(15,780)	295	286	427	4
Dimensional Fund Advisors				1,699	21,417	316
JPMorgan	(352)	(11,074)	267	78	726	6

Source: Morningstar Direct Asset Flows.

Among managers of active strategies for the year, Vanguard's top position was followed by AQR funds, which benefited from the growing interest in strategic-beta strategies.

Actively Managed Strategies Estimated Net Flows, \$ millions

	Dec-16	4th Qtr	2016
Vanguard	(5,625)	20,367	20,367
AQR Funds	(559)	10,390	10,390
Bridge Builder	732	8,393	8,393
Baird	332	7,986	7,986
DoubleLine	(2,954)	7,937	7,937

Passively Managed Strategies Estimated Net Flows, \$ millions

	Dec-16	4th Qtr	2016
Vanguard	29,388	73,852	256,890
iShares	19,176	41,638	107,637
SPDR State Street Global Advisors	17,328	36,383	53,091
Fidelity Investments	5,139	12,001	37,186
Dimensional Fund Advisors	1,423	4,600	18,819

In December, among index-fund and exchange-traded fund providers, there was a tight race for second place between BlackRock's iShares group and State Street's SPDR offerings. Both firms experienced strong inflows in December, with the SPDR S&P 500 ETF taking in \$14.3 billion.

Fidelity, benefiting from its effort in recent years to offer index funds in addition to its traditional active lineup, placed third.

Still, among individual index-tracking funds, Vanguard's breadth was clear in December, as it held three of the spots with offerings for U.S. stocks, international stocks, and U.S. bonds.

On the active side for individual funds, PIMCO Income extended its streak of inflows, taking in \$13.7 billion. Franklin Federal Tax Free Income bucked the trend for outflows in December among muni-bond funds, seeing inflows of \$1.4 billion.

Top-Flowing Active and Passive Funds

Estimated Net Flows \$Mil	Dec 2016	1 Year	Assets Dec 2016 \$Mil	Assets Dec 2015 \$Mil
Active Funds				
PIMCO Income	1,514	13,655	70,329	52,104
Franklin Federal Tax Free Income	1,419	1,432	9,578	10,836
Lord Abbett Floating Rate	1,008	3,196	9,800	6,070
Fidelity Series International Growth	906	1,801	13,193	11,807
JPMorgan High Yield	876	2,187	13,143	9,736
Passive Funds				
SPDR S&P 500 ETF	14,300	26,180	224,820	182,039
Vanguard 500 Index Fund	6,225	36,350	282,566	219,272
Vanguard Total Bond Market II Index Fund	4,822	19,836	114,013	92,152
Vanguard Total Intl Stock Idx Fund	3,145	35,278	231,928	186,911
iShares Core S&P 500	2,673	13,222	90,597	70,351

After years of top-ranked performance and inflows, DoubleLine Total Return Bond Fund saw investors head out the door in December.

PIMCO Total Return remained on the top outflows list, a spot that the fund has generally held since the departure of Bill Gross back in 2014.

Bottom-Flowing Active and Passive Funds

Estimated Net Flows \$Mil	Dec 2016	1 Year	Assets Dec 2016 \$Mil	Assets Dec 2015 \$Mil
Active Funds				
DoubleLine Total Return Bond Fund	(3,493)	3,048	55,703	51,638
PIMCO Total Return	(3,226)	(16,110)	75,726	89,856
Fidelity Contrafund	(1,952)	(8,284)	102,722	109,629
JPMorgan Short Duration Bond	(1,864)	(4,512)	6,035	10,477
Vanguard Intermediate-Term Tax-Exempt	(1,719)	3,508	49,365	46,295
Passive Funds				
Vanguard Institutional Index	(3,516)	(6,323)	211,496	194,747
iShares iBoxx \$ Invst Grade Crp Bond	(2,553)	2,546	27,041	24,022
SPDR Gold Shares	(2,069)	7,218	30,629	21,931
Wells Fargo Dow Jones Target 2025 Fund	(1,158)	(1,312)	1,079	2,268
VelocityShares 3x Long Crude Oil ETN	(975)	(1,134)	229	897

Note: The figures in this report were compiled on Jan. 11, 2017, and reflect only the funds that had reported net assets by that date. The figures in both the commentary and the extended tables are survivorship-bias-free.

This report includes both mutual funds and ETFs but not funds of funds unless specifically stated.

Important methodology note

Morningstar computes flows using the approach that is standard in the industry: Estimated net flow is the change in assets not explained by the performance of the fund. Our method assumes that flows occur uniformly over the course of the month. Adjustments for mergers are performed automatically. When liquidated funds are included, the final assets of the fund are counted as outflows. Reinvested dividends are not counted as inflows. We use fund-level reinvestment rates to improve accuracy in this respect. We make ad hoc adjustments for unusual corporate actions such as reverse share splits, and we overwrite our estimates with actual flows if managers are willing to provide the data to us. Please click [here](#) for a full explanation of our methodology.



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Fund Flows

Monthly Market Summary: US Open-end & ETF ex MM ex FoF Excluding merged and liquidated funds

Effective Date
12-31-2016

Morningstar Categories Ranked by Current TNA (\$Mil)

Rank	Name	Estimated Net Flow (\$mil)				Total Net Assets (\$bil)				Total Return	
		1-Mo	QTD	YTD	1-Yr	12-2016	Mkt Sh %	12-2015	Mkt Sh %	1-Mo	YTD
1	US Fund Large Blend	21,429	39,443	86,865	86,865	2,552	16.99	2,211	15.91	3.40	20.74
2	US Fund Large Growth	(8,590)	(21,708)	(101,780)	(101,780)	1,311	8.73	1,357	9.77	1.10	6.45
3	US Fund Intermediate-Term Bond	1,815	11,792	114,383	114,383	1,231	8.20	1,091	7.86	0.50	6.46
4	US Fund Large Value	4,026	4,905	15,378	15,378	1,111	7.40	956	6.88	4.18	29.62
5	US Fund Foreign Large Blend	8,601	19,145	60,457	60,457	813	5.42	746	5.37	4.31	1.57
6	US Fund Allocation--50% to 70% Equity	(334)	(2,145)	(2,769)	(2,769)	490	3.26	454	3.26	2.53	14.69
7	US Fund World Stock	(2,418)	(5,039)	(17,360)	(17,360)	387	2.58	387	2.78	3.02	11.08
8	US Fund Mid-Cap Blend	5,509	8,272	6,429	6,429	386	2.57	332	2.39	2.94	28.28
9	US Fund Diversified Emerging Mkts	188	47	19,840	19,840	378	2.52	328	2.36	0.02	16.94
10	US Fund Short-Term Bond	(1,500)	(1,017)	12,827	12,827	343	2.29	324	2.33	0.30	4.15
11	US Fund Small Blend	3,514	13,598	15,273	15,273	338	2.25	267	1.92	5.89	41.56
12	US Fund Foreign Large Growth	(762)	(3,698)	(7,342)	(7,342)	321	2.14	346	2.49	1.95	(4.29)
13	US Fund High Yield Bond	8,080	64	17,406	17,406	316	2.10	267	1.92	3.45	26.59
14	US Fund World Allocation	(2,880)	(7,859)	(34,001)	(34,001)	291	1.94	308	2.22	2.96	12.08
15	US Fund Mid-Cap Growth	(1,146)	(4,463)	(22,941)	(22,941)	259	1.73	274	1.98	0.55	12.06
16	US Fund Mid-Cap Value	1,226	19	(3,967)	(3,967)	235	1.56	211	1.52	3.48	36.12
17	US Fund Allocation--30% to 50% Equity	(232)	(1,065)	(136)	(136)	207	1.38	191	1.38	2.38	13.24
18	US Fund World Bond	529	676	(7,732)	(7,732)	207	1.38	207	1.49	0.79	7.25
19	US Fund Small Growth	(305)	(1,552)	(12,130)	(12,130)	197	1.31	191	1.37	1.59	22.40
20	US Fund Multisector Bond	358	287	2,535	2,535	189	1.26	174	1.25	1.88	15.04
21	US Fund Muni National Interm	(4,614)	(5,639)	16,746	16,746	181	1.21	166	1.19	1.75	(0.39)
22	US Fund Foreign Large Value	1,053	(572)	1,400	1,400	154	1.03	148	1.06	5.79	6.67
23	US Fund Small Value	2,189	3,631	7,483	7,483	153	1.02	115	0.83	7.09	51.97
24	US Fund Real Estate	(111)	(3,761)	8,362	8,362	151	1.01	137	0.99	8.17	13.79
25	US Fund Health	(3,678)	(4,670)	(21,713)	(21,713)	141	0.94	184	1.32	(1.15)	(21.20)
26	US Fund Corporate Bond	(2,947)	(4,062)	21,352	21,352	138	0.92	113	0.81	1.34	13.01
27	US Fund Allocation--70% to 85% Equity	(337)	(1,468)	(5,730)	(5,730)	130	0.87	125	0.90	2.92	15.87
28	US Fund Inflation-Protected Bond	1,604	7,166	14,495	14,495	127	0.84	101	0.73	0.23	9.18
29	US Fund Muni National Short	(3,260)	(3,231)	3,423	3,423	122	0.81	119	0.86	0.54	(0.30)
30	US Fund Bank Loan	7,428	12,652	9,987	9,987	116	0.77	98	0.71	2.27	18.50
31	US Fund Intermediate Government	(845)	(1,971)	7,312	7,312	111	0.74	103	0.74	(0.32)	1.78
32	US Fund Ultrashort Bond	3,164	8,200	12,215	12,215	106	0.71	92	0.66	0.22	2.81
33	US Fund Nontraditional Bond	(333)	(1,086)	(20,710)	(20,710)	104	0.70	122	0.88	1.76	10.57
34	US Fund Technology	566	2,502	(4,383)	(4,383)	89	0.59	86	0.62	0.58	21.67
35	US Fund Muni National Long	489	(431)	5,921	5,921	87	0.58	82	0.59	1.82	0.00

Fund Flows

Monthly Market Summary: US Open-end & ETF ex MM ex FoF Excluding merged and liquidated funds

Effective Date
12-31-2016

Morningstar Categories Ranked by Current TNA (\$Mil)

Rank	Name	Estimated Net Flow (\$mil)				Total Net Assets (\$bil)				Total Return	
		1-Mo	QTD	YTD	1-Yr	12-2016	Mkt Sh %	12-2015	Mkt Sh %	1-Mo	YTD
36	US Fund High Yield Muni	(2,155)	(6,652)	4,241	4,241	83	0.56	79	0.57	1.31	1.80
37	US Fund Emerging Markets Bond	(1,470)	(1,702)	7,421	7,421	62	0.41	50	0.36	2.75	21.01
38	US Fund Short Government	343	648	1,309	1,309	58	0.39	57	0.41	(0.02)	1.11
39	US Fund Equity Energy	916	2,451	5,854	5,854	58	0.39	40	0.29	2.09	58.43
40	US Fund Financial	2,416	12,957	6,219	6,219	56	0.37	46	0.33	8.70	38.19
41	US Fund Europe Stock	(365)	(3,537)	(26,230)	(26,230)	55	0.37	84	0.60	9.11	(3.32)
42	US Fund Multialternative	(691)	(2,103)	90	90	52	0.35	53	0.38	1.43	2.76
43	US Fund Global Real Estate	(822)	(2,137)	(4,226)	(4,226)	51	0.34	55	0.39	4.60	3.93
44	US Fund Energy Limited Partnership	826	1,918	6,223	6,223	47	0.31	35	0.25	7.69	54.60
45	US Fund Commodities Precious Metals	(2,546)	(6,920)	9,926	9,926	46	0.31	34	0.24	(4.98)	20.48
46	US Fund Preferred Stock	(674)	(806)	9,065	9,065	43	0.28	35	0.25	1.77	11.32
47	US Fund Natural Resources	409	577	774	774	39	0.26	30	0.22	0.99	53.38
48	US Fund Muni California Long	(778)	(1,589)	1,068	1,068	36	0.24	34	0.24	2.04	0.14
49	US Fund Long-Short Equity	(56)	59	(4,823)	(4,823)	34	0.23	38	0.27	1.69	4.67
50	US Fund Commodities Broad Basket	424	548	4,746	4,746	34	0.23	26	0.18	3.10	24.32
51	US Fund Foreign Small/Mid Growth	(227)	(608)	(1,867)	(1,867)	34	0.22	37	0.26	1.66	(5.95)
52	US Fund Japan Stock	1,081	1,590	(9,423)	(9,423)	33	0.22	44	0.32	2.29	4.33
53	US Fund Utilities	(393)	(2,213)	741	741	33	0.22	28	0.20	7.85	27.50
54	US Fund Tactical Allocation	226	821	252	252	33	0.22	31	0.23	2.66	11.97
55	US Fund Miscellaneous Region	860	1,423	(1,983)	(1,983)	31	0.21	32	0.23	—	—
56	US Fund Foreign Small/Mid Blend	122	645	200	200	30	0.20	30	0.21	3.56	3.58
57	US Fund Managed Futures	(1,576)	(1,805)	8,047	8,047	30	0.20	24	0.17	0.39	(5.50)
58	US Fund Long Government	(681)	(2,211)	583	583	26	0.17	25	0.18	(0.86)	2.36
59	US Fund Industrials	1,243	6,740	7,379	7,379	26	0.17	15	0.11	1.21	36.09
60	US Fund Equity Precious Metals	297	513	6,249	6,249	25	0.17	13	0.10	0.31	109.62
61	US Fund Foreign Small/Mid Value	(171)	(181)	(708)	(708)	25	0.16	24	0.17	4.72	8.47
62	US Fund Muni California Intermediate	(980)	(1,398)	1,937	1,937	24	0.16	22	0.16	1.93	(1.14)
63	US Fund Consumer Cyclical	(78)	(596)	(6,535)	(6,535)	24	0.16	30	0.22	(0.25)	8.94
64	US Fund Allocation--85%+ Equity	(208)	(1,871)	(3,826)	(3,826)	23	0.15	24	0.17	3.34	16.90
65	US Fund Muni Single State Long	(481)	(588)	648	648	22	0.14	21	0.15	1.49	1.17
66	US Fund Market Neutral	(242)	(1,661)	(2,497)	(2,497)	21	0.14	23	0.17	0.94	4.46
67	US Fund Pacific/Asia ex-Japan Stk	(832)	(1,014)	(985)	(985)	21	0.14	22	0.16	(4.50)	5.24
68	US Fund Long-Term Bond	(580)	(712)	(2,143)	(2,143)	20	0.13	21	0.15	1.06	12.09
69	US Fund Trading--Leveraged Equity	541	1,761	(3,321)	(3,321)	19	0.13	19	0.14	—	—
70	US Fund Muni New York Long	(394)	(591)	(161)	(161)	19	0.12	19	0.13	1.75	1.14

Fund Flows

Monthly Market Summary: US Open-end & ETF ex MM ex FoF Excluding merged and liquidated funds

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Morningstar Categories Ranked by Current TNA (\$Mil)

Rank	Name	Estimated Net Flow (\$mil)				Total Net Assets (\$bil)				Total Return	
		1-Mo	QTD	YTD	1-Yr	12-2016	Mkt Sh %	12-2015	Mkt Sh %	1-Mo	YTD
71	US Fund Consumer Defensive	209	(3,007)	(2,230)	(2,230)	18	0.12	20	0.14	5.95	10.64
72	US Fund Convertibles	202	256	(2,007)	(2,007)	16	0.11	18	0.13	2.01	15.36
73	US Fund Infrastructure	320	583	(672)	(672)	14	0.10	14	0.10	4.04	18.35
74	US Fund China Region	(876)	(937)	(3,895)	(3,895)	14	0.09	19	0.13	(9.43)	(4.13)
75	US Fund Diversified Pacific/Asia	35	53	(619)	(619)	13	0.09	14	0.10	(1.88)	7.51
76	US Fund Muni Single State Intern	(439)	(523)	246	246	12	0.08	12	0.09	1.68	(0.56)
77	US Fund Option Writing	(399)	(281)	(559)	(559)	12	0.08	12	0.09	1.60	10.89
78	US Fund Allocation--15% to 30% Equity	52	(171)	(275)	(275)	11	0.08	11	0.08	1.71	11.11
79	US Fund Emerging-Markets Local-Currency Bond	(163)	(453)	(1,417)	(1,417)	10	0.07	11	0.08	3.37	16.81
80	US Fund Muni New York Intermediate	(250)	(489)	216	216	10	0.07	10	0.07	1.85	(0.50)
81	US Fund Muni Single State Short	(307)	(376)	(989)	(989)	10	0.07	11	0.08	0.72	(0.28)
82	US Fund Trading--Inverse Equity	(260)	(1,597)	5,270	5,270	10	0.07	9	0.06	—	—
83	US Fund Muni Pennsylvania	(215)	(260)	(16)	(16)	9	0.06	9	0.07	1.53	0.72
84	US Fund India Equity	(120)	(227)	(319)	(319)	8	0.06	9	0.06	(2.93)	1.31
85	US Fund Long-Short Credit	(97)	(276)	(2,876)	(2,876)	8	0.05	10	0.07	2.06	9.08
86	US Fund Communications	112	(381)	210	210	8	0.05	7	0.05	9.25	25.17
87	US Fund Multicurrency	78	245	(1,036)	(1,036)	7	0.05	8	0.06	0.37	6.95
88	US Fund Latin America Stock	39	194	1,318	1,318	7	0.05	4	0.03	1.26	64.11
89	US Fund Muni Massachusetts	(309)	(407)	27	27	7	0.04	7	0.05	1.51	(0.45)
90	US Fund Muni New Jersey	(137)	(248)	(168)	(168)	6	0.04	6	0.05	1.57	1.13
91	US Fund Commodities Energy	(986)	(682)	(484)	(484)	6	0.04	5	0.04	16.42	34.40
92	US Fund Muni Ohio	(119)	(166)	144	144	5	0.03	5	0.04	1.78	0.55
93	US Fund Muni Minnesota	(149)	(171)	225	225	5	0.03	5	0.03	1.74	(0.25)
94	US Fund Miscellaneous Sector	22	140	(49)	(49)	4	0.03	4	0.03	—	—
95	US Fund Target-Date 2030	(755)	(655)	(529)	(529)	4	0.03	4	0.03	2.63	14.66
96	US Fund Trading--Inverse Debt	(451)	(736)	(551)	(551)	4	0.03	5	0.04	—	—
97	US Fund Target-Date 2020	(628)	(618)	(531)	(531)	4	0.03	4	0.03	2.04	12.45
98	US Fund Volatility	(9)	(531)	2,801	2,801	3	0.02	4	0.03	—	—
99	US Fund Target-Date 2040	(564)	(469)	(420)	(420)	3	0.02	3	0.02	3.03	15.90
100	US Fund Bear Market	(163)	(411)	(43)	(43)	3	0.02	3	0.02	(4.47)	(42.23)
101	US Fund Target-Date 2025	(1,096)	(1,002)	(740)	(740)	3	0.02	3	0.02	2.33	13.45
102	US Fund Trading--Leveraged Commodities	(1,184)	(1,355)	(1,047)	(1,047)	2	0.02	3	0.02	—	—
103	US Fund Target-Date 2035	(455)	(350)	(121)	(121)	2	0.01	2	0.01	2.86	15.13
104	US Fund Target-Date 2050	(630)	(576)	(454)	(454)	2	0.01	2	0.01	3.14	16.44
105	US Fund Commodities Agriculture	(30)	(97)	115	115	1	0.01	1	0.01	(0.10)	0.71

Fund Flows

Monthly Market Summary: US Open-end & ETF ex MM ex FoF Excluding merged and liquidated funds

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Morningstar Categories Ranked by Current TNA (\$Mil)

Rank	Name	Estimated Net Flow (\$mil)				Total Net Assets (\$bil)				Total Return	
		1-Mo	QTD	YTD	1-Yr	12-2016	Mkt Sh %	12-2015	Mkt Sh %	1-Mo	YTD
106	US Fund Target-Date Retirement	(142)	(87)	(89)	(89)	1	0.01	1	0.01	1.52	10.21
107	US Fund Single Currency	37	106	(4)	(4)	1	0.01	1	0.01	—	—
108	US Fund Target-Date 2045	(265)	(175)	(19)	(19)	1	0.01	1	0.01	3.10	15.86
109	US Fund Trading--Miscellaneous	(36)	(66)	(88)	(88)	1	0.01	1	0.01	—	—
110	US Fund Trading--Inverse Commodities	25	(369)	325	325	1	0.01	1	0.01	—	—
111	US Fund Target-Date 2015	(214)	(238)	(354)	(354)	0	0.00	1	0.01	1.94	12.23
112	US Fund Target-Date 2055	(159)	(115)	18	18	0	0.00	0	0.00	3.15	15.99
113	US Fund Commodities Industrial Metals	17	95	153	153	0	0.00	0	0.00	—	—
114	US Fund Trading--Leveraged Debt	70	(18)	(89)	(89)	0	0.00	0	0.00	—	—
115	US Fund Target-Date 2000-2010	(81)	(95)	(207)	(207)	0	0.00	0	0.00	1.79	11.72
116	US Fund Target-Date 2060+	3	10	29	29	0	0.00	0	0.00	3.09	15.62
117	US Fund Commodities Miscellaneous	0	0	(1)	(1)	0	0.00	0	0.00	—	—
Top 10		28,726	53,696	194,271	194,271	9,002	59.94	8,186	58.92	—	—
All		20,314	31,791	199,838	199,838	15,017	100.00	13,894	100.00	—	—

Top Fund Families Ranked by Current TNA (\$Mil)

Rank	Name	Estimated Net Flow (\$mil)				Assets Under Management (\$bil)			
		1-Mo	QTD	YTD	1-Yr	12-2016	Mkt Sh %	12-2015	Mkt Sh %
1	Vanguard	23,764	65,446	277,257	277,257	3,405	22.67	2,893	20.83
2	American Funds	(2,477)	(7,419)	(4,900)	(4,900)	1,255	8.36	1,173	8.44
3	Fidelity Investments	(2,068)	(11,171)	(23,217)	(23,217)	1,229	8.18	1,184	8.52
4	iShares	19,471	41,707	107,822	107,822	973	6.48	816	5.88
5	SPDR State Street Global Advisors	17,476	36,717	54,712	54,712	502	3.34	414	2.98
6	T. Rowe Price	(1,745)	(3,855)	(4,520)	(4,520)	501	3.34	467	3.36
7	Franklin Templeton Investments	(2,617)	(11,118)	(42,332)	(42,332)	379	2.53	387	2.79
8	Dimensional Fund Advisors	1,699	5,192	21,481	21,481	316	2.10	262	1.88
9	Pimco	(1,607)	(5,371)	(15,288)	(15,288)	299	1.99	297	2.14
10	JPMorgan	(275)	(4,334)	(10,252)	(10,252)	274	1.82	269	1.94
11	BlackRock	(800)	(3,612)	(8,338)	(8,338)	230	1.53	227	1.63
12	MFS	262	(161)	2,170	2,170	188	1.25	175	1.26
13	Dodge & Cox	(1,122)	(2,378)	(10,170)	(10,170)	185	1.23	175	1.26
14	OppenheimerFunds	(728)	(2,227)	(9,797)	(9,797)	175	1.17	176	1.27
15	Invesco	(279)	(1,565)	1,298	1,298	153	1.02	140	1.01

Fund Flows

Monthly Market Summary: US Open-end & ETF ex MM ex FoF Excluding merged and liquidated funds

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Top Fund Families Ranked by Current TNA (\$Mil)

Rank	Name	Estimated Net Flow (\$mil)				Assets Under Management (\$bil)			
		1-Mo	QTD	YTD	1-Yr	12-2016	Mkt Sh %	12-2015	Mkt Sh %
16	Columbia	(1,317)	(2,646)	(7,509)	(7,509)	144	0.96	141	1.01
17	Jackson National	845	1,476	2,245	2,245	136	0.91	122	0.88
18	John Hancock	(851)	(43)	(2,130)	(2,130)	127	0.84	119	0.86
19	Principal Funds	(491)	(1,095)	374	374	120	0.80	112	0.81
20	Lord Abbett	665	751	4,312	4,312	108	0.72	98	0.71
21	Janus	(214)	(850)	(2,420)	(2,420)	106	0.70	103	0.74
22	American Century Investments	(615)	(1,296)	(297)	(297)	106	0.70	98	0.71
23	PowerShares	1,195	3,608	6,543	6,543	104	0.69	92	0.66
24	TIAA-CREF Asset Management	1,334	3,209	8,162	8,162	104	0.69	88	0.63
25	AXA Equitable	(390)	(1,349)	(5,220)	(5,220)	100	0.67	98	0.70
26	Hartford Mutual Funds	(224)	(946)	(2,865)	(2,865)	96	0.64	93	0.67
27	Legg Mason	(137)	(1,162)	(980)	(980)	94	0.63	90	0.65
28	Wells Fargo Funds	(7,051)	(9,550)	(15,392)	(15,392)	92	0.61	103	0.74
29	SEI	(129)	(1,195)	(328)	(328)	91	0.61	85	0.61
30	Metropolitan West Funds	(756)	(194)	7,309	7,309	87	0.58	78	0.56
31	Prudential Investments	114	661	4,481	4,481	84	0.56	76	0.54
32	Voya	(607)	(2,238)	(7,281)	(7,281)	81	0.54	82	0.59
33	Goldman Sachs	(96)	(1,972)	(11,244)	(11,244)	81	0.54	87	0.63
34	First Eagle	359	467	(618)	(618)	73	0.48	68	0.49
35	DoubleLine	(2,954)	(3,445)	7,944	7,944	72	0.48	62	0.45
36	Eaton Vance	388	668	2,324	2,324	69	0.46	62	0.45
37	Harbor	(1,450)	(3,648)	(10,281)	(10,281)	67	0.45	77	0.55
38	Oakmark	(3,086)	(3,819)	(15,206)	(15,206)	67	0.45	75	0.54
39	Federated	(754)	(1,123)	633	633	65	0.44	62	0.44
40	AllianceBernstein	(181)	(703)	2,348	2,348	65	0.43	59	0.43
41	Nuveen	(1,108)	(3,026)	2,604	2,604	65	0.43	61	0.44
42	Putnam	(425)	(1,114)	(7,322)	(7,322)	63	0.42	65	0.47
43	Schwab Funds	395	259	(1,031)	(1,031)	61	0.41	57	0.41
44	Schwab ETFs	2,485	5,335	16,138	16,138	60	0.40	40	0.29
45	USAA	(247)	(588)	(1,644)	(1,644)	59	0.39	57	0.41
46	Dreyfus	(723)	(1,131)	(1,631)	(1,631)	58	0.38	56	0.40
47	MainStay	(457)	(2,345)	(7,927)	(7,927)	54	0.36	59	0.43
48	GMO	(734)	(3,778)	(15,701)	(15,701)	52	0.34	64	0.46
49	Natixis Funds	(1,089)	(1,871)	(5,726)	(5,726)	52	0.34	55	0.40
50	Northern Funds	(880)	(886)	(322)	(322)	49	0.33	47	0.34

Fund Flows

Monthly Market Summary: US Open-end & ETF ex MM ex FoF Excluding merged and liquidated funds

Effective Date
12-31-2016

Top Fund Families Ranked by Current TNA (\$Mil)

Rank	Name	Estimated Net Flow (\$mil)				Assets Under Management (\$bil)			
		1-Mo	QTD	YTD	1-Yr	12-2016	Mkt Sh %	12-2015	Mkt Sh %
Top 10		51,621	105,794	360,764	360,764	9,133	60.82	8,163	58.75
Top 50		29,766	60,268	278,269	278,269	12,974	86.39	11,847	85.27
Other		(9,452)	(27,288)	(73,355)	(73,355)	2,043	13.61	1,990	14.32
All		20,314	32,980	204,914	204,914	15,017	100.00	13,838	99.60

Fund Flows

Monthly Market Summary: US Open-end & ETF ex MM ex FoF

Excluding merged and liquidated funds

Effective Date
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Asset Classes

Name	Estimated Net Flow (\$mil)				Assets Under Management (\$bil)			
	1-Mo	QTD	YTD	1-Yr	12-2016	Mkt Sh %	12-2015	Mkt Sh %
US Equity	27,851	42,146	(9,390)	(9,390)	6,541	43.56	5,915	42.57
Sector Equity	2,253	11,615	2,202	2,202	784	5.22	744	5.35
International Equity	6,209	7,286	12,484	12,484	2,326	15.49	2,271	16.35
Allocation	(8,497)	(17,871)	(51,908)	(51,908)	1,223	8.14	1,185	8.53
Taxable Bond	14,129	27,467	198,888	198,888	3,208	21.36	2,891	20.81
Municipal Bond	(14,098)	(22,758)	33,508	33,508	638	4.25	608	4.38
Alternative	(4,413)	(9,037)	(401)	(401)	209	1.39	213	1.53
Commodities	(3,120)	(7,056)	14,456	14,456	88	0.58	66	0.48
All Long Term	20,314	31,791	199,838	199,838	15,017	100.00	13,894	100.00

Morningstar Ratings

Name	Estimated Net Flow (\$mil)				Total Net Assets (\$bil)			
	1-Mo	QTD	YTD	1-Yr	12-2016	Mkt Sh %	12-2015	Mkt Sh %
★★★★★	13,267	38,167	160,703	160,703	2,571	17.12	2,250	16.19
★★★★	23,100	33,487	142,886	142,886	6,955	46.31	6,297	45.32
★★★	(16,450)	(37,329)	(109,533)	(109,533)	3,884	25.86	3,804	27.38
★★	(2,167)	(11,379)	(75,242)	(75,242)	1,096	7.30	1,129	8.12
★	(2,435)	(6,721)	(22,365)	(22,365)	117	0.78	135	0.97
Not Rated	4,999	15,567	103,389	103,389	394	2.62	280	2.01
Total	20,314	31,791	199,838	199,838	15,017	100.00	13,894	100.00