

BofA Securities Equity Client Flow Trends

2023 flow wrap

2023: hedge fund buying, Tech/TMT stocks, Value ETFs

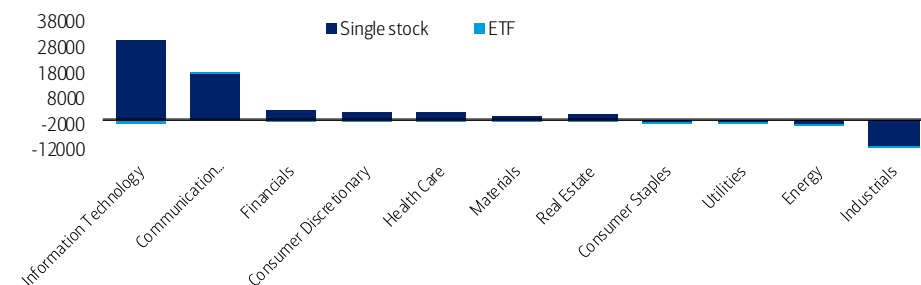
- **Another big year for equity inflows:** BofA Securities clients were net buyers of \$66B of US equities in 2023. In addition to corporates, hedge funds led the buying (first inflows by this group since '19). Private clients were the largest sellers (biggest outflows since '19) alongside institutional clients.
- **Buybacks accelerated:** Corporate client buybacks accelerated relative to 2022 both on an absolute basis and as a % of S&P 500 market cap (0.26% vs. 0.23% in '22). However, they have not recovered to pre-COVID levels (0.37%).
- **Tech & TMT stocks led the crowd:** Clients bought stocks in seven of the 11 sectors, led by Tech & Comm. Svcs. Industrials, Energy, Staples & Utilities saw outflows, led by Industrials (largest cumulative outflow in our data history since '08).
- **Passive flows: Comm Svcs. & Value:** Clients sold ETFs across ten of the 11 sectors, with the biggest outflows from Real Estate and biggest inflows into Comm. Svcs. Growth/Value/Blend ETFs all saw inflows (led by Value). By size, Large/Small/Broad Market ETFs saw inflows while Mid cap ETFs saw outflows.

Last week: muted outflows by all clients

- **Holiday outflows:** During last week's quiet week (where the S&P 500 was +0.3%), clients were small net sellers of US equities for the second week (-\$0.4B).
- **TLC flows:** all clients were net sellers for a second straight week. Flows for institutional clients tend to rebound the most post-Oct. (tax loss selling by mutual funds), while private clients are typically sellers in Dec. (as they were last month) vs. big net buyers in Jan.
- **Clients sold 7 of the 11 sectors,** led by Cons. Disc. and Health Care: Clients bought Comm. Svcs. for a ninth straight week.

Exhibit 3: Tech + TMT stocks > everything else

Cumulative flows by sector by BofA clients in 2023 (\$mn)



Source: BofA Securities

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Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Refer to important disclosures on page 17 to 19.

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03 January 2024

Equity and Quant Strategy
United States

BofA

Data
Analytics



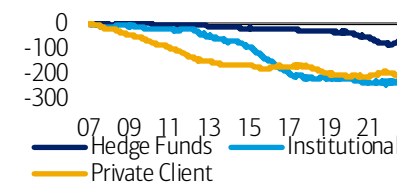
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Exhibit 1: Institutional clients are the biggest net sellers post-crisis

Cumulative flows (\$ bn) by client type, January 2008-present

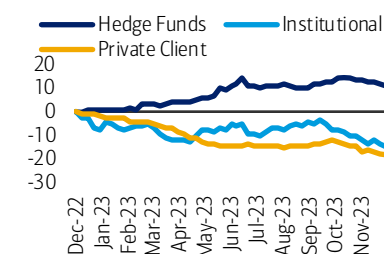


Source: BofA Securities

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Exhibit 2: Hedge funds are the biggest net buyers in the past 12 months

L12m cumulative flows (\$ bn) by client type, December 2022-present



Source: BofA Securities

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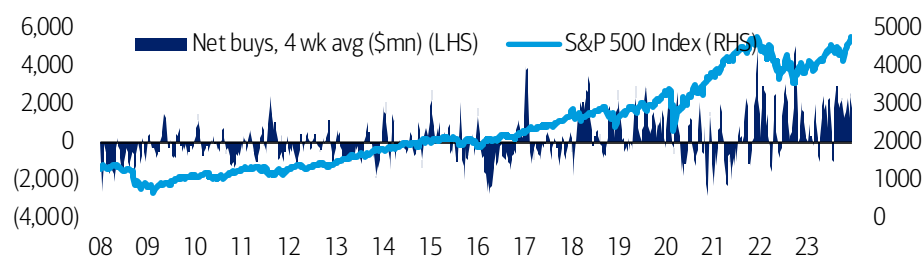
For more details on BofA Securities client flows and a complete methodology behind the data in this report, please see pg.15-16. Note that flows span Monday-Friday of the previous week

BofA Equity Client Flow Trends

This weekly product provides an aggregated view of BofA client trading flows into US stocks executed by the firm's cash equities business. By aggregating flows across many execution platforms and trading desks, we provide an overview of what sectors and market cap size segments are being bought or sold, and what type of client is buying or selling. The client types we include are hedge funds, institutional clients and private clients. The sectors are the 11 GICS (global industry classification standard) sectors, as well as ETFs, and the market caps are large, mid and small. Our data history spans January 2008-present. This product is not meant to be predictive of the market but aims to provide a holistic view of BofA client trading flows. For more details, see the Methodology section.

Exhibit 5: Rolling four-week avg. flows positive since mid-Jan.

BofA client total net buys of US equities: four-week moving avg (\$ mn) and S&P 500, 2008-present



Source: BofA Securities, FactSet

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Exhibit 6: BofA Securities equity client flows by year

Cumulative net buying (selling) in \$mn by sector, client type, size segment and overall

Sector	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Consumer Discretionary	2,760	4,221	(8,511)	(8,129)	(757)	336	(14,600)	(6,584)	(3,137)	(4,427)	(6,271)	(3,520)	2,180	(1,470)	(660)	(5,297)
Consumer Staples	(1,149)	617	(5,212)	(3,101)	(1,046)	(884)	(4,976)	(1,997)	1,072	(5,228)	(3,895)	(6,731)	(4,426)	(3,412)	(3,260)	(7,334)
ETFs	23,383	36,406	77,404	36,169	24,435	26,836	57,133	23,551	28,158	34,363	12,139	18,684	6,597	8,432	5,702	7,935
Energy	(1,641)	1,955	3,831	3,591	3,987	(1,615)	(5,712)	(5,054)	(1,230)	(4,074)	(3,288)	(5,323)	(933)	(4,290)	(1,970)	(8,694)
Financials	3,742	(442)	11,845	1,929	20,159	14,650	155	(4,726)	(858)	(5,408)	(4,983)	(2,248)	(1,730)	(4,734)	4,784	(2,257)
Health Care	3,077	2,289	(8,559)	(2,705)	1,909	6,755	(12,796)	(5,490)	(5,517)	(4,101)	(829)	2,243	(3,991)	(1,888)	(6,115)	(6,115)
Industrials	(10,631)	(2,979)	(8,188)	(8,475)	(971)	519	(10,502)	(10,507)	(3,036)	786	(2,110)	(1,699)	(653)	(1,576)	(91)	(6,736)
Information Technology	30,778	21,852	(2,796)	(2,421)	15,441	7,271	(6,603)	(8,518)	1,193	(3,128)	(2,703)	(1,217)	2,730	1,475	(4,355)	(6,177)
Materials	1,318	4,502	251	(1,084)	3,319	387	(2,678)	(2,418)	(3,479)	(1,229)	(3,664)	(3,045)	(1,783)	(1,270)	(413)	(1,068)
Real Estate	1,793	3,156	2,750	2,939	(3,216)	(1,624)	(4,155)	(366)								
Communication Services	17,938	5,867	(11,418)	(904)	1,974	(2,509)	(806)	1,028	596	3,223	1,743	(204)	690	(517)	365	(273)
Utilities	(1,009)	(642)	(312)	2,066	(2,569)	(1,036)	(2,968)	(942)	156	(636)	425	(808)	732	(893)	(461)	(1,622)
Client																
Hedge Funds	10,953	(26,688)	(18,609)	(7,646)	363	(7,297)	(2,164)	(2,957)	(2,434)	(4,683)	(3,417)	(2,085)	(5,695)	(4,456)	6,418	(1,223)
ex. ETFs	1,515	(26,293)	(39,181)	(12,160)	(4,722)	(2,989)	(3,852)	(4,894)	(5,944)	(8,933)	(822)	(2,723)	(3,590)	(3,607)	7,568	(1,556)
Institutional	(15,002)	6,655	(18,133)	(286)	758	(17,246)	(52,717)	(49,137)	(26,153)	(18,235)	(32,792)	2,668	1,493	(13,755)	6,088	(15,150)
ex. ETFs	(7,169)	5,460	(26,187)	(9,025)	(9,852)	(11,255)	(60,771)	(52,225)	(19,309)	(25,640)	(29,542)	(4,693)	1,725	(15,002)	7,823	(16,713)
Retail	(18,384)	16,086	(1,287)	(10,737)	(28,106)	(1,462)	7,787	(13,983)	1,764	(13,205)	(18,800)	(39,973)	(23,049)	(25,999)	(23,361)	(21,266)
ex. ETFs	(40,162)	(19,521)	(50,065)	(33,652)	(36,846)	(38,596)	(39,604)	(34,366)	(29,728)	(35,914)	(34,997)	(50,657)	(31,983)	(34,033)	(31,949)	(27,305)
Corporates	92,617	80,823	89,112	38,544	89,721	75,091	38,587	37,019	40,767	44,850	39,401	32,449	32,897	31,964	8,609	N/A
Size																
Large cap	74,613	45,249	45,701	27,060	59,743	46,487	(4,151)	(20,314)	665	4,815	(16,887)	(10,081)	4,480	(9,505)	(3,755)	(33,155)
ex. ETFs	54,279	30,321	(12,266)	1,056	46,762	33,004	(45,223)	(35,414)	(9,903)	(13,568)	(15,814)	(17,812)	5,284	(10,483)	(3,820)	(34,028)
Mid cap	(7,964)	23,919	5,571	(6,377)	1,842	4,098	(2,004)	(6,543)	9,329	3,991	2,151	3,050	237	(2,845)	301	(3,074)
ex. ETFs	(8,178)	10,635	(6,663)	(10,557)	(4,856)	(4,542)	(12,476)	(11,340)	(1,441)	(6,010)	(4,742)	(3,851)	(3,819)	(6,363)	(1,159)	(7,356)
Small cap	1,596	2,349	(188)	(806)	1,152	(1,498)	(2,351)	(2,202)	3,950	(80)	(872)	90	928	103	1,207	(1,410)
ex. ETFs	(748)	(2,598)	(7,391)	(6,793)	(3,605)	(6,211)	(7,941)	(5,856)	(2,870)	(6,060)	(5,402)	(3,961)	(2,416)	(3,830)	(2,970)	(4,187)
Untagged flow	(4,021)	(8,206)	(41,521)	(14,367)	(13,155)	(1,984)	11,422	(4,215)	(2,331)	(3,345)	(4,427)	(979)	(1,154)	586	(511)	(13,179)
Total	66,338	68,597	9,563	5,508	49,510	47,103	2,916	(33,274)	11,613	5,380	(21,136)	(7,919)	4,492	(11,659)	(2,758)	(50,817)
Single stocks only (ex-ETFs)	46,976	40,396	(26,320)	(16,294)	38,230	22,251	(65,640)	(52,610)	(14,214)	(25,638)	(28,848)	(25,625)	(951)	(20,677)	(7,949)	(45,573)
Total ex. corporate buybacks	(26,279)	(12,227)	(79,549)	(33,036)	(40,211)	(27,988)	(35,672)	(70,293)	(29,154)	(39,469)	(60,537)	(40,368)	(28,405)	(43,624)	(11,366)	N/A

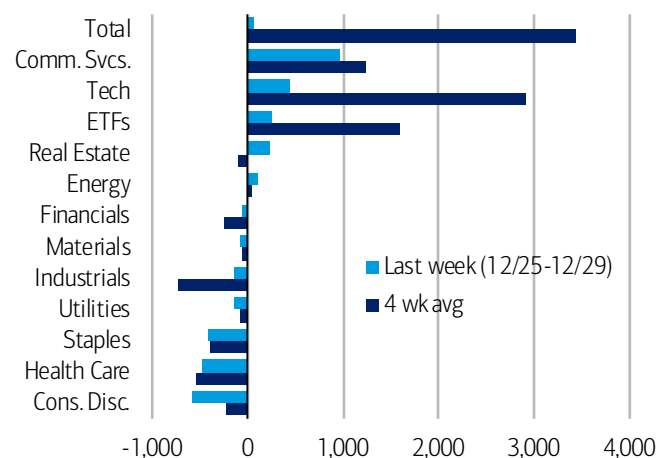
Source: BofA Securities. Note: Data on Real Estate since 8/31/16. Fins. includes Real Estate prior to 8/31/16. Comm. Svcs. based on new sector from 10/1/18-present & previous Telecom. Svcs. prior to 10/1/18

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Weekly flows by client, sector, & size

Exhibit 7: By sector, Comm. Svcs. saw biggest inflows & Cons. Disc. saw biggest outflows

BofA client net buys by sector (\$ mn)

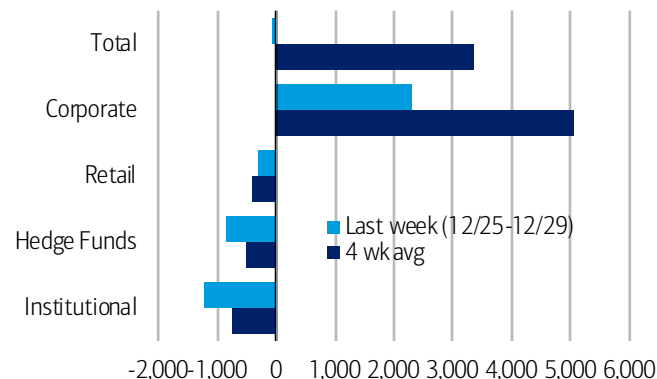


Source: BofA Securities

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Exhibit 8: By clients, Corporate clients led inflows and Institutional clients led outflows

BofA client net buys by client group (\$ mn)

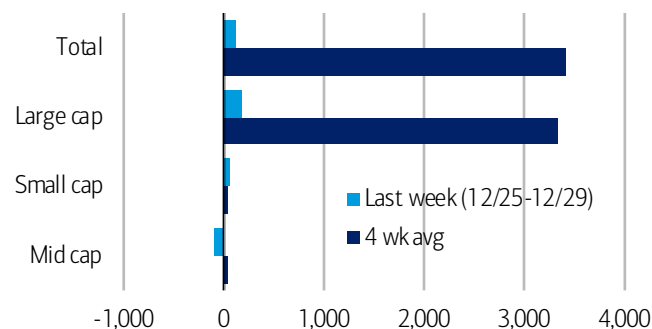


Source: BofA Securities

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Exhibit 11: By size, Large caps saw inflows and Mid caps saw outflows

BofA client net buys by size segment (\$ mn)



Source: BofA Securities

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Exhibit 8: Weekly net buying (selling) by the 11 GICS sectors (single stocks) and ETFs overall

Last four weeks and rolling average trends, \$mn

Sector	Last wk (12/25/23)	12/1 8/23	12/11 /23	12/4/ 23	4 wk. avg.	12 wk avg	52 wk avg
Cons. Disc.	-575	-814	710	-223	-226	-71	53
Cons. Staples	-420	-109	-566	-457	-388	-214	-22
Energy	108	342	98	-337	53	-66	-32
Financials	-71	-490	-102	-310	-243	-171	72
Health Care	-472	534	-1316	-906	-540	-288	59
Industrials	-140	-960	-1355	-458	-728	-445	-204
Tech	440	1784	7259	2188	2918	1,256	592
Materials	-78	-138	304	-354	-67	-43	25
Real Estate	223	-510	-152	40	-100	31	34
Comm. Svcs.	965	1267	1346	1357	1234	641	345
Utilities	-154	-64	-104	10	-78	-7	-19
ETFs	248	1822	2957	1364	1598	1,388	450
Total	74	2665	9081	1914	3433	2,010	1,353
Total ex. ETFs	-174	843	6123	550	1836	622	903
Total incl. untagged flows	-421	2182	6391	-1008	1786	1,759	1,276

Source: BofA Securities; Note: ETFs classified as a 12th "sector" and broken out further on the subsequent page. Real Estate GICS sector was broken out from Fins. beginning 8/31/16. Comm. Svcs. flows based on new sector from 10/1/18 onward & Telecom prior to 10/1/18.

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Exhibit 10: Weekly net buying (selling) by client type

Last four weeks and rolling average trends, \$mn

Client	Last wk (12/25/ 23)	12/18 /23	12/11 /23	12/4/2 3	4 wk. avg.	12 wk avg	52 wk avg
Hedge Funds	-833	-546	-86	-612	-519	-48	211
ex. ETFs	-896	-1375	-54	-502	-707	-222	33
Institutional	-1225	-1529	1782	-2084	-764	-841	-288
ex. ETFs	-545	-1354	219	-1936	-904	-1035	-138
Private Client	-296	-671	-804	159	-403	-394	-354
ex. ETFs	-1031	-1741	-2187	-1452	-1603	-1395	-772
Corporates	2299	5313	8146	4440	5049	3,274	1,781
Total	-55	2568	9039	1903	3364	1,992	1,350
Total ex. ETFs	-174	843	6123	550	1836	622	903
Total incl. untagged flows	-421	2182	6391	-1008	1786	1759	1276

Source: BofA Securities

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Exhibit 12: Weekly net buying (selling) by size segment

Last four weeks and rolling average trends, \$mn

Market Cap	Last wk (12/25/ 23)	12/18 /23	12/1 1/23	12/4/ 23	4 wk. avg.	12 wk avg	52 wk avg
Large cap	185	2425	8997	1697	3326	1,904	1,435
ex. ETFs	7	1053	6575	1058	2173	781	1044
Mid cap	-107	257	-320	306	34	67	-153
ex. ETFs	-71	-45	-780	-312	-302	-125	-157
Small cap	51	-116	225	18	44	47	31
ex. ETFs	-54	-258	148	-88	-63	-25	-14
Total	128	2566	8902	2021	3404	2,017	1,312
Total ex. ETFs	-118	750	5944	658	1809	622	903
Total incl. untagged flows	-421	2182	6391	-1008	1786	1759	1276

Source: BofA Securities

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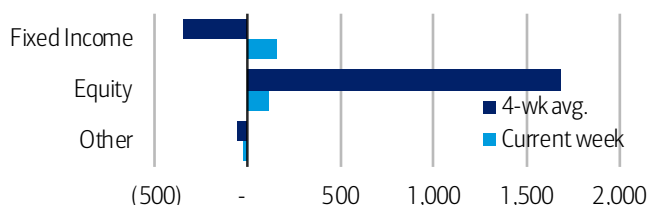


ETF flow color

We provide additional color on ETF net buys¹, with a breakout of this flow available since the start of 2017. We use Bloomberg Fund Classifications to manually tag/group ETFs by asset class focus, sector, strategy, and market cap; see Appendix for details. The majority of ETF flows in a given week are equity ETF flows (about 95% on avg. since '17) and ETFs are included as a category of equity flows in the standard charts beginning on pg 2. See pg. 5 for four-week avg. and cumulative ETF flows by sector.

Exhibit 12: Clients bought Fixed Income/Equity ETFs and sold Other ETFs

ETF net buys by asset class (\$ mn)

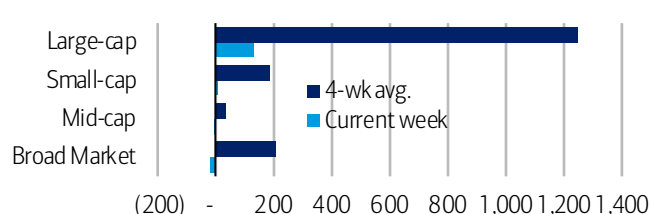


Source: BofA Securities. Note: Other includes Commodity, Specialty, Alternative, Mixed Allocation

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Exhibit 14: By size, Large Cap ETFs led inflows and Broad Market ETFs led outflows

Equity ETF net buys by market capitalization (\$ mn)

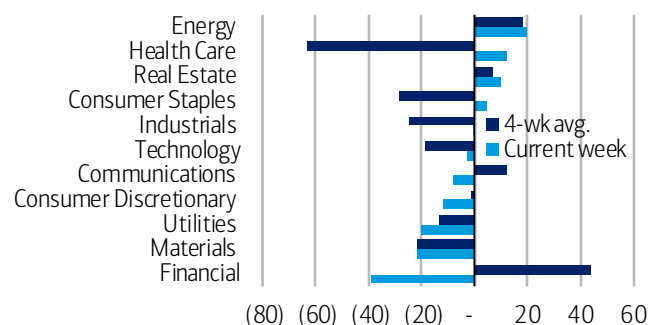


Source: BofA Securities

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Exhibit 14: ETFs most positive in Energy and negative in Financial

Equity ETF net buys by sector (\$ mn)

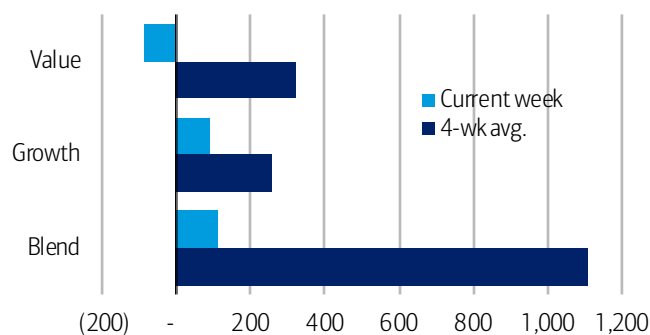


Source: BofA Securities

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Exhibit 16: By styles, Blend ETFs led inflows and Value ETFs led outflows

Equity ETF net buys by style (\$ mn)



Source: BofA Securities

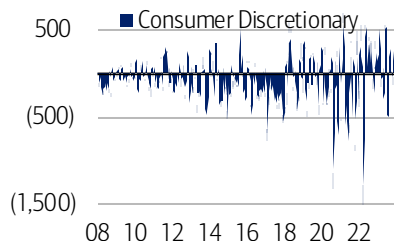
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¹ Note that net buys (sales) of ETFs by our clients presented throughout this report do not include creation of new ETF shares by BofA—these flows would show up as single stock net buys (sales) in the underlying sectors of the stocks that comprise the ETF.

Rolling four-week average trends by sector (single stock)

Exhibit 17: Cons Disc.: recent outflows

4 week avg. flows (\$ mn)

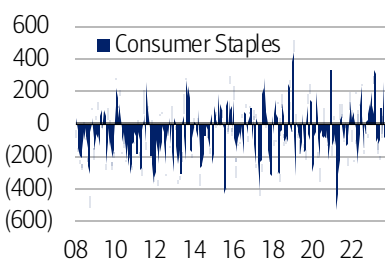


Source: BofA Securities

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Exhibit 18: Staples: recent outflows

4 week avg. flows (\$ mn)

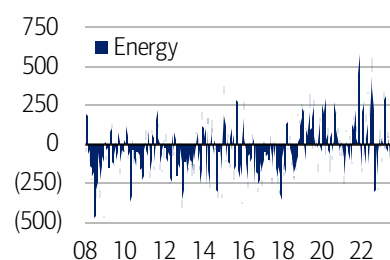


Source: BofA Securities

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Exhibit 19: Energy: flows flip positive

4 week avg. flows (\$ mn)

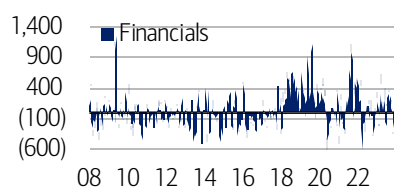


Source: BofA Securities

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Exhibit 20: Financials: recent outflows

4 week avg. flows (\$ mn)

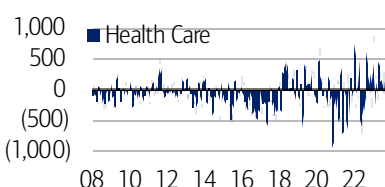


Source: BofA Securities

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Exhibit 21: Health Care: recent outflows

4 week avg. flows (\$ mn)

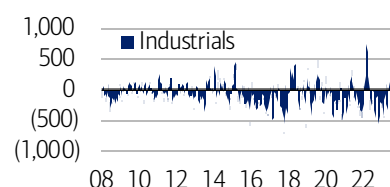


Source: BofA Securities

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Exhibit 22: Industrials: recent outflows

4 week avg. flows (\$ mn)

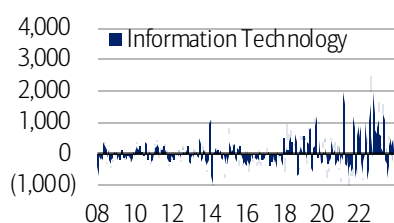


Source: BofA Securities

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Exhibit 23: Tech: recent inflows

4 week avg. flows (\$ mn)

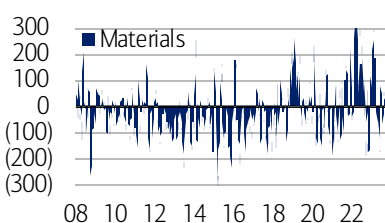


Source: BofA Securities

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Exhibit 24: Materials: recent outflows

4 week avg. flows (\$ mn)

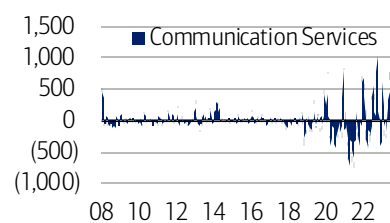


Source: BofA Securities

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Exhibit 24: Comm. Svcs.: recent inflows

4 week avg. flows (\$ mn)

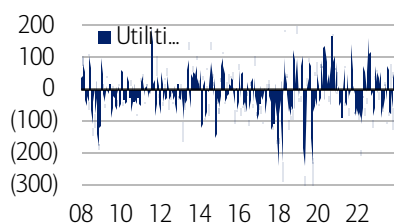


Source: BofA Securities

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Exhibit 26: Utilities: recent outflows

4 week avg. flows (\$ mn)

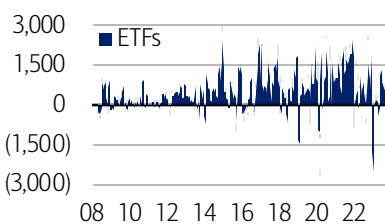


Source: BofA Securities

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Exhibit 27: ETFs: recent inflows

4 week avg. flows (\$ mn)

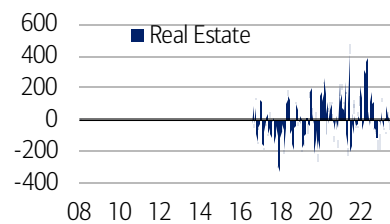


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 27: Real Estate: recent outflows

4 week avg. flows (\$ mn)



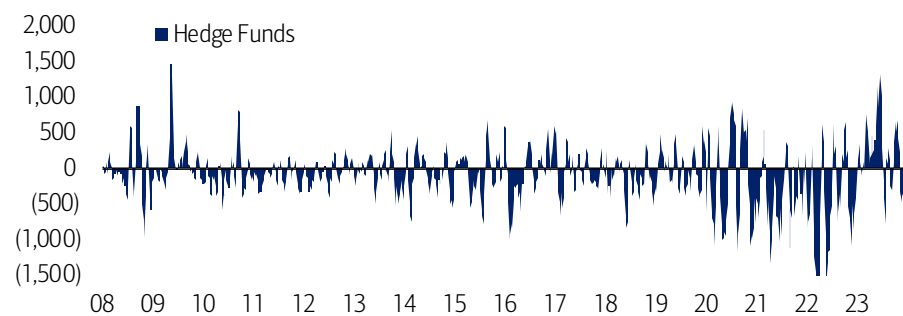
Source: BofA Securities

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Rolling four-week average trends by client type

Exhibit 29: Hedge Funds: recent outflows

Net buys (4 week avg, \$ mn)

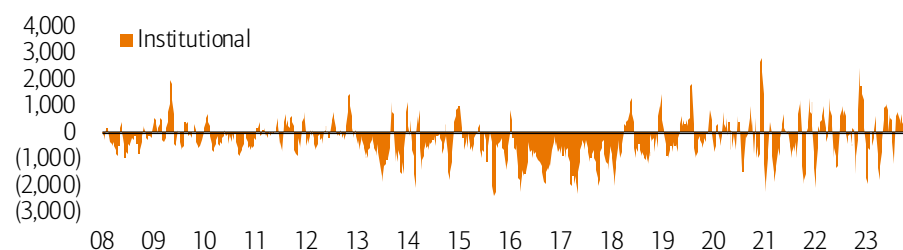


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 30: Institutional clients: recent outflows

Net buys (4 week avg, \$ mn)

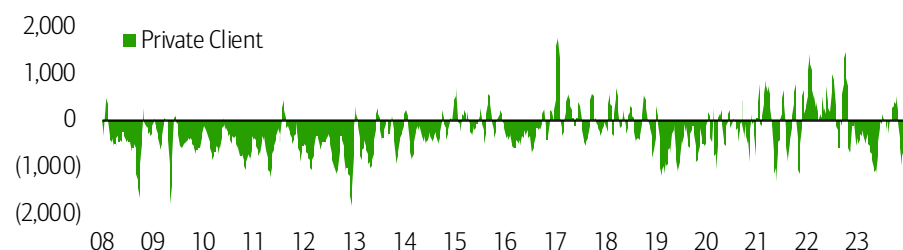


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 31: Private clients: recent outflows

Net buys (4 week avg, \$ mn)

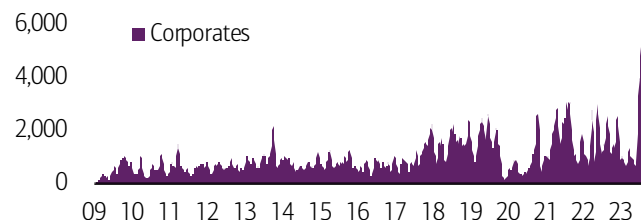


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 32: Buybacks by corp. clients at historical high levels

Corporate clients (4 week avg, \$ mn)

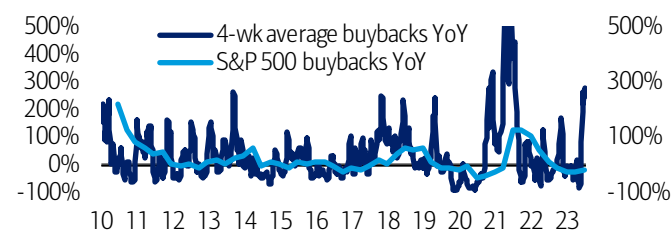


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 33: Corp. client buybacks below S&P 500 buybacks trend

BofA corporate clients' 4 week avg. buybacks (YoY % chg) vs. S&P 500 total quarterly buybacks (YoY % chg), since 2010



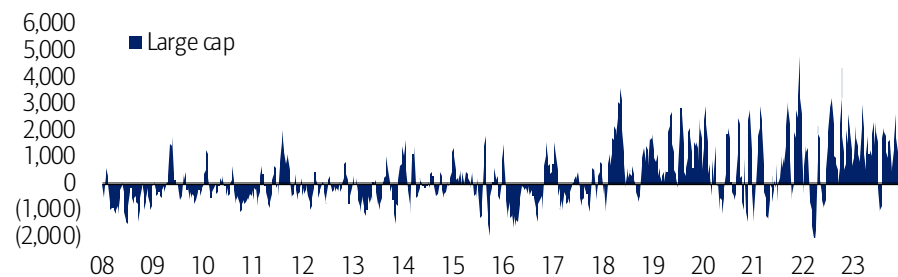
Source: S&P, BofA Securities

BofA GLOBAL RESEARCH

Rolling four-week average trends by market cap

Exhibit 34: Large caps: recent inflows

Large cap net buys (4 week avg, \$ mn)

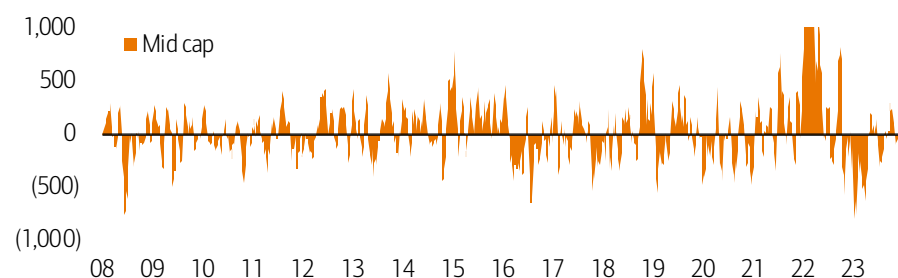


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 35: Mid caps: recent inflows

Mid caps net buys (4 week avg, \$ mn)

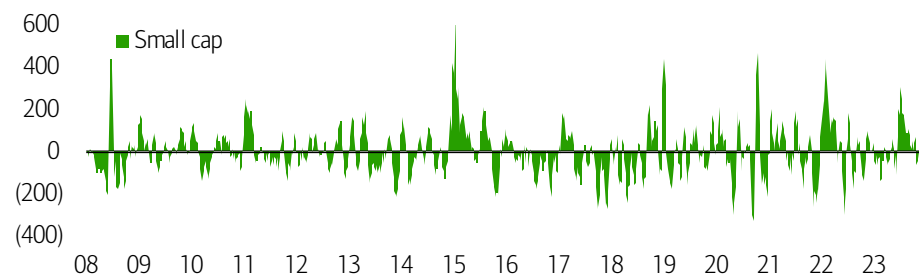


Source: BofA Securities

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Exhibit 36: Small caps: recent inflows

Small caps net buys (4 week avg, \$ mn)



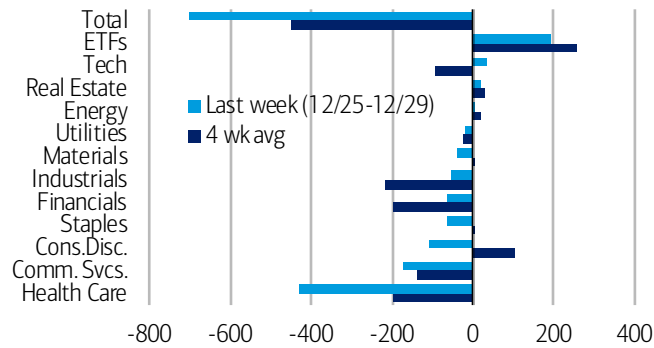
Source: BofA Securities

BofA GLOBAL RESEARCH

Sector & size flows by client type last week

Exhibit 37: Hedge Funds sold most sectors, led by Health Care

Hedge funds clients net buys by sector (\$ mn)

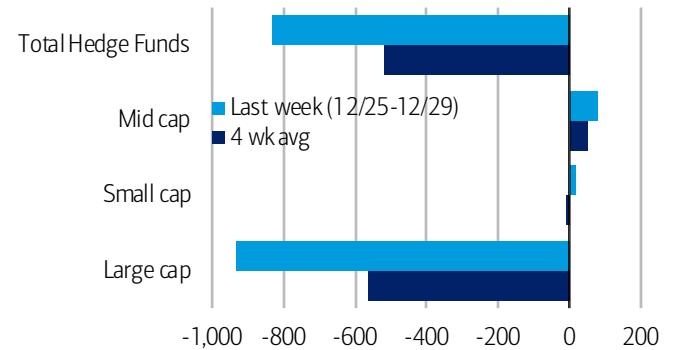


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 38: Hedge Funds were sellers of Large caps and buyers of SMID caps

Hedge fund net buys by market cap (\$ mn)

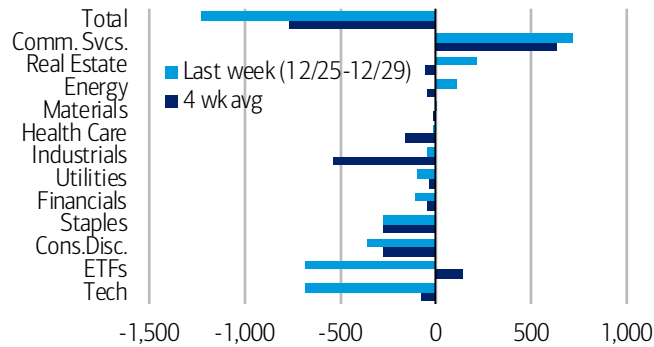


Source: BofA Securities

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Exhibit 39: Institutional bought Comm. Svcs. and sold Tech

Institutional clients net buys by sector (\$ mn)

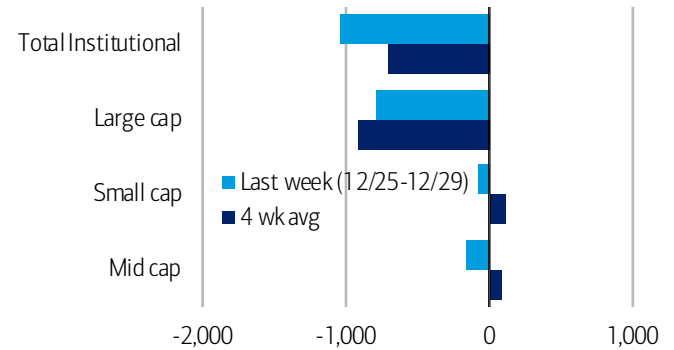


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 40: Institutional clients sold all size segments led by Large caps

Institutional clients net buys by market cap (\$ mn)

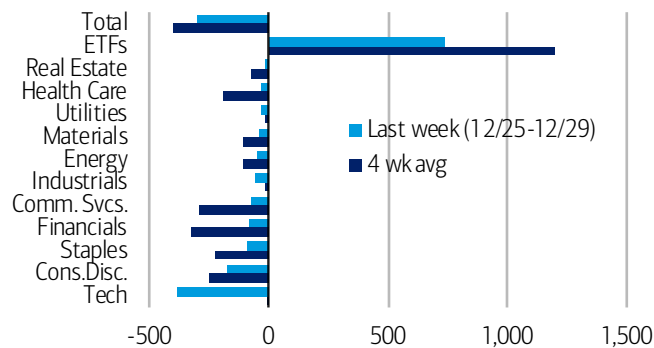


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 41: Private clients bought ETFs and sold Tech

Private clients net buys by sector (\$ mn)

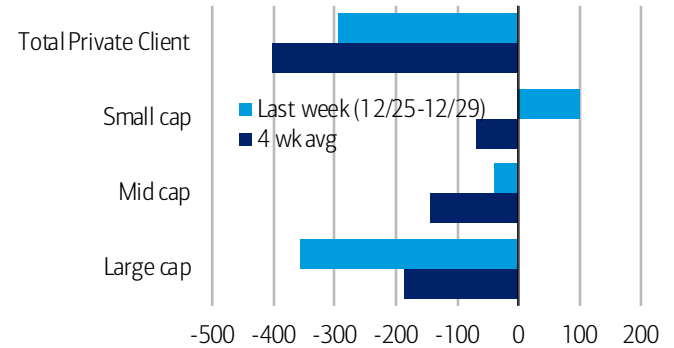


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 42: Private clients bought Small caps and sold Large caps

Private client net buys by market cap (\$ mn)



Source: BofA Securities

BofA GLOBAL RESEARCH

ETF flows: z-scores (3m and 1yr)

Exhibit 43: Weekly Client ETF Flows: z-scores as of latest week

Based on 1) current week's z-score vs. the past 3 months (3m column), and 2) current 4-week moving average z-score vs. the past year (52 weeks) of 4-week moving averages (1yr column)

	Total		Hedge Fund Clients		Institutional Clients		Private Clients	
	3m	1y	3m	1y	3m	1y	3m	1y
Total	-0.88	0.91	-0.02	0.44	-0.99	-0.06	-0.77	1.31
Asset Class								
Equity	-1.04	1.31	0.00	0.69	-1.18	1.25	-1.24	1.15
Fixed Income	0.29	-1.60	-0.09	-0.59	0.15	-2.15	0.50	0.37
Style								
Blend	-0.67	1.38	0.15	0.78	-1.07	1.31	-0.02	1.12
Growth	-0.68	0.74	-0.63	-0.23	-0.40	0.47	-0.43	0.88
Value	-2.00	0.61	-0.95	-0.15	-2.55	-0.22	-1.87	0.67
Sector								
Consumer Discretionary	-0.22	0.14	-0.25	1.82	0.08	-1.44	-0.30	0.25
Consumer Staples	1.21	-0.47	0.83	-0.76	0.89	0.15	0.11	-0.10
Energy	0.13	0.37	-0.56	0.18	0.11	1.62	-0.92	-0.19
Financial	-0.64	1.26	-0.58	-1.04	-0.28	1.77	0.42	0.19
Health Care	0.26	-1.26	-0.16	-1.12	0.39	-0.95	0.64	0.17
Industrials	0.55	-0.47	0.48	-1.05	0.28	0.31	0.13	-0.06
Technology	-0.30	0.02	-0.60	-0.94	-0.26	0.53	0.42	0.42
Materials	-0.71	-0.97	-0.63	-1.53	-0.29	-0.09	0.11	-0.48
Real Estate	0.49	0.84	0.70	0.98	-0.08	0.39	0.98	0.52
Communications	-0.93	0.06	-0.56	0.18	0.11	1.62	-0.92	-0.19
Utilities	0.23	-0.10	0.33	0.24	-0.78	-1.34	0.38	0.53
Size								
Large-cap	-0.86	1.03	0.09	0.68	-1.05	0.88	-1.03	0.91
Mid-cap	-0.73	1.75	-0.19	1.06	-0.26	1.08	-1.28	0.91
Small-cap	-1.01	1.54	0.14	-1.61	-0.77	2.68	-0.39	1.19
Broad Market	-0.95	1.46	-0.63	2.11	-1.05	0.46	-0.13	0.62

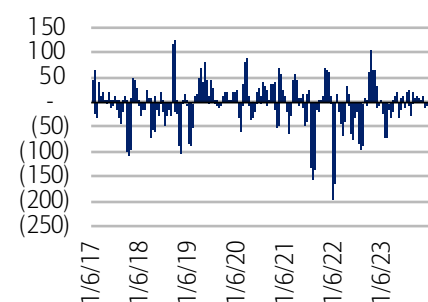
Source: BofA Securities

BofA GLOBAL RESEARCH

Equity ETF flows: 4-week average flows by sector

Exhibit 43: Disc. ETFs: flows flip negative

4 week avg, \$ mn

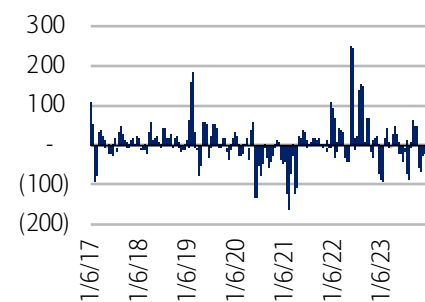


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 44: Staples ETFs: recent outflows

4 week avg, \$ mn

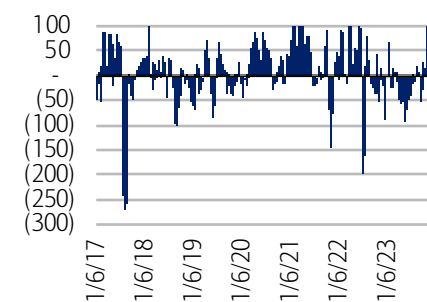


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 45: Energy ETFs: flows flip positive

4 week avg, \$ mn

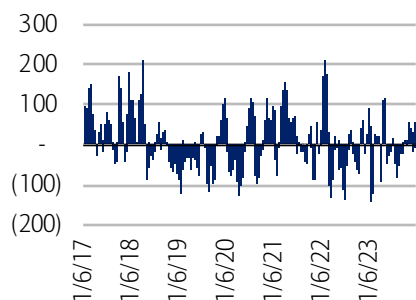


Source: BofA Securities

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Exhibit 46: Financial ETFs: recent inflows

4 week avg, \$ mn

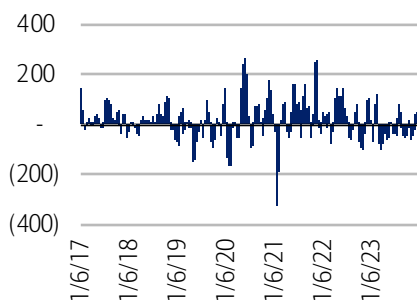


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 47: Health Care ETFs: recent outflows

4 week avg, \$ mn

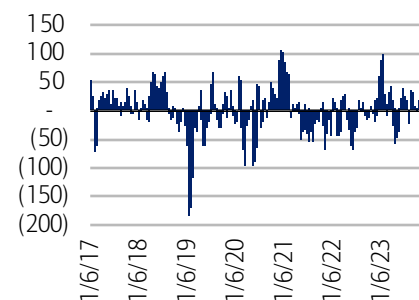


Source: BofA Securities

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Exhibit 48: Industrials ETFs: recent outflows

4 week avg, \$ mn

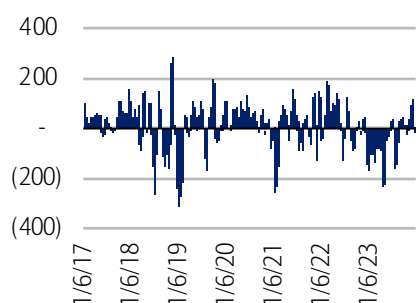


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 49: Tech ETFs: recent outflows

4 week avg, \$ mn

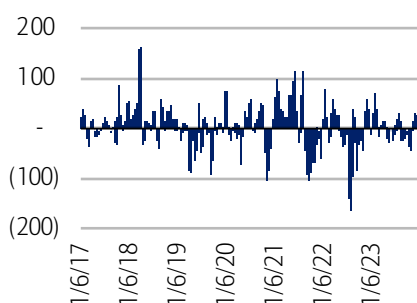


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 50: Materials ETFs: recent outflows

4 week avg, \$ mn

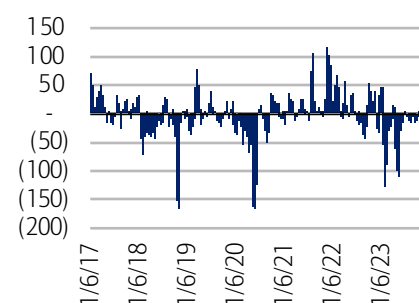


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 51: Real Estate ETFs: recent inflows

4 week avg, \$ mn

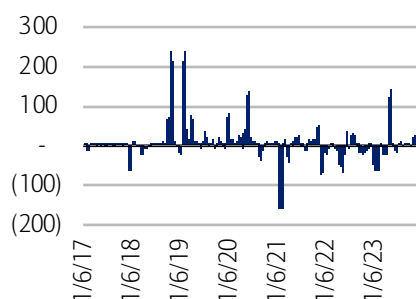


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 52: Comm. Svcs. ETFs: recent inflows

4 week avg, \$ mn

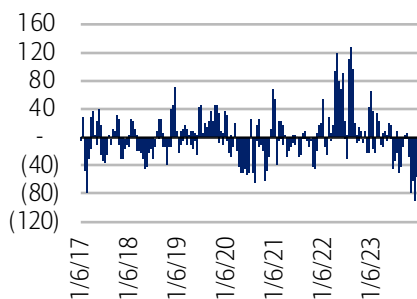


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 53: Utilities ETFs: recent outflows

4 week avg, \$ mn



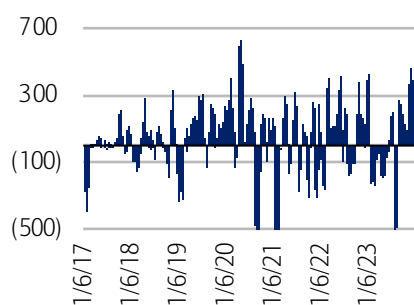
Source: BofA Securities

BofA GLOBAL RESEARCH

Equity ETFs: 4-week average flows by strategy

Exhibit 54: Growth ETFs: recent inflows

4 week avg, \$ mn

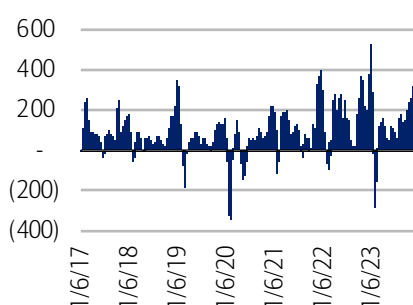


Source: BofA Securities

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Exhibit 55: Value ETFs: recent inflows

4 week avg, \$ mn

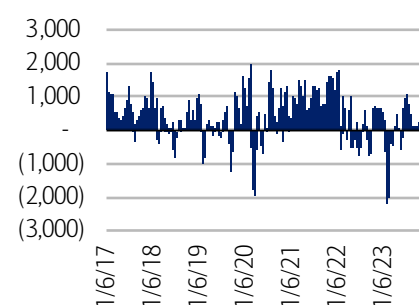


Source: BofA Securities

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Exhibit 56: Blend ETFs: recent inflows

4 week avg, \$ mn



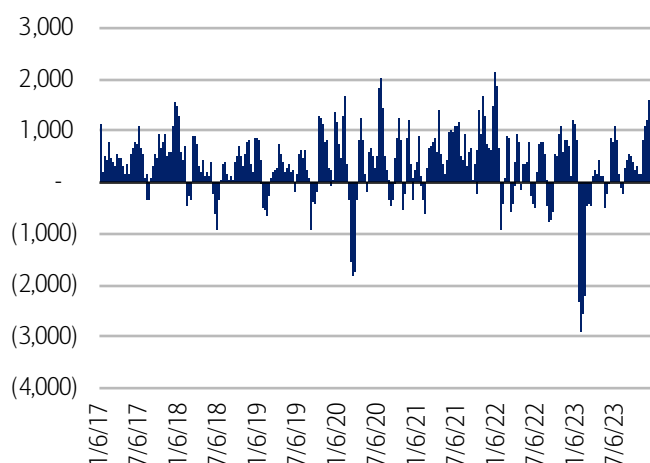
Source: BofA Securities

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Equity ETFs: 4-week average flows by market cap

Exhibit 57: Large cap ETFs: recent inflows

4 week avg, \$ mn

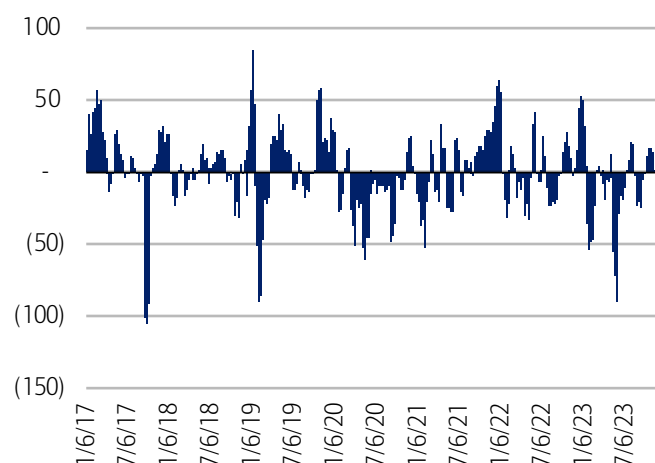


Source: BofA Securities

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Exhibit 58: Mid cap ETFs: recent inflows

4 week avg, \$ mn

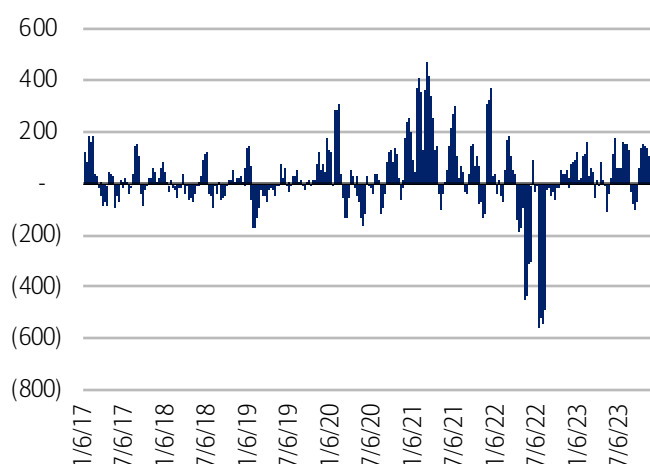


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 59: Small cap ETFs: recent inflows

4 week avg, \$ mn

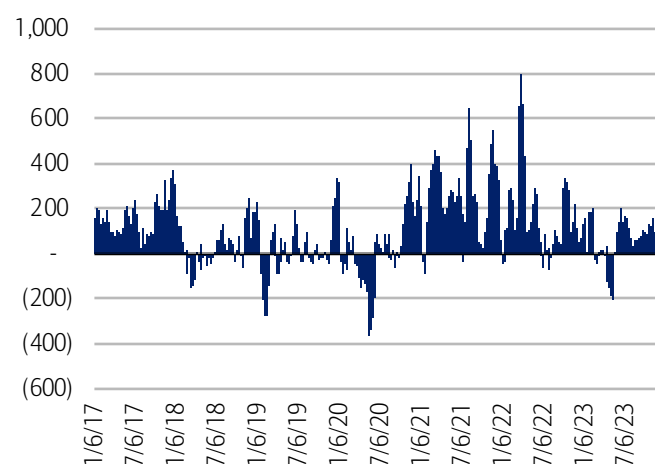


Source: BofA Securities

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Exhibit 60: Broad Market ETFs: recent inflows

4 week avg, \$ mn



Source: BofA Securities

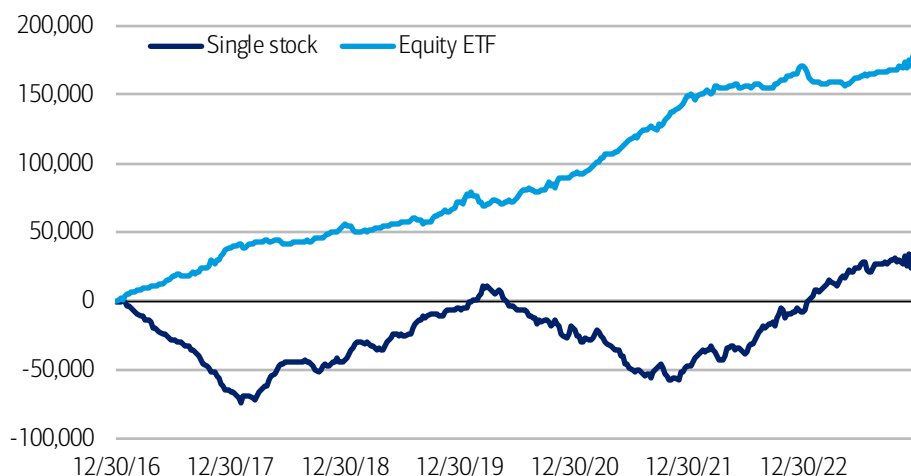
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Cumulative equity sector flows: single stock vs. ETF

Exhibit 62: ETF inflows have slowed, single stock outflows have flipped to inflows in 2023

Overall BofA client net buys (sales) of single stocks vs. equity ETFs, \$ mn

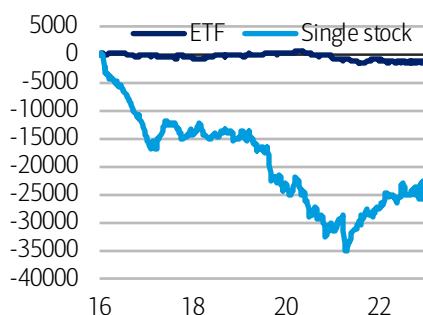


Source: BofA Securities

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Exhibit 63: Cons Disc. Single stock and ETFs recent outflows

Cumulative flows 2017-now, \$mn

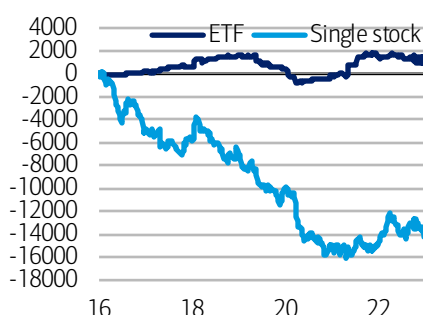


Source: BofA Securities

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Exhibit 64: Staples: Single stock recent outflows and ETF flows flip positive

Cumulative flows 2017-now, \$mn

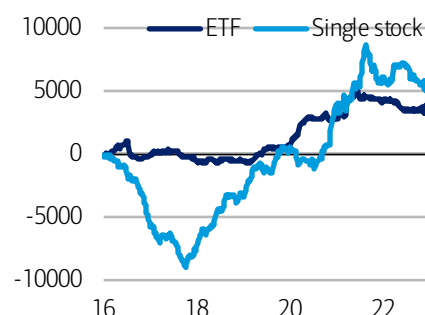


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 65: Energy: Single stock and ETFs recent inflows

Cumulative flows 2017-now, \$mn

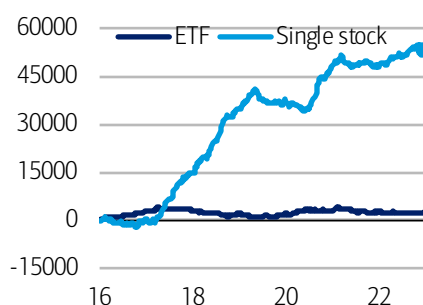


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 66: Financials: Single stock recent outflows and ETF flows flip negative

Cumulative flows 2017-now, \$mn

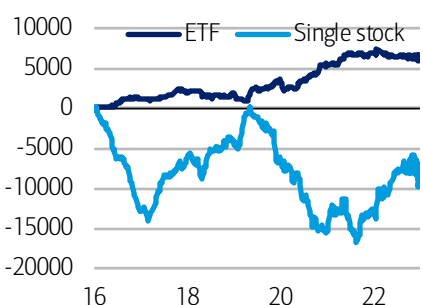


Source: BofA Securities

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Exhibit 67: Health Care: Single stock flows flip negative and ETFs flows flip positive

Cumulative flows 2017-now, \$mn

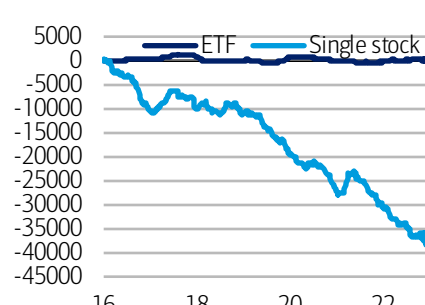


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 68: Industrials: Single stock recent outflows and ETF flows flip negative

Cumulative flows 2017-now, \$mn

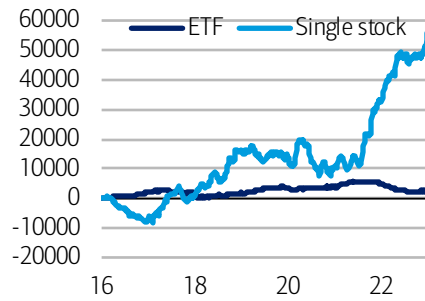


Source: BofA Securities

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Exhibit 69: Tech: Single stock recent inflows and ETF recent outflows

Cumulative flows 2017-now, \$mn

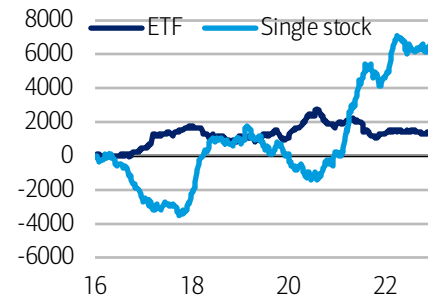


Source: BofA Securities

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Exhibit 70: Materials: Single stock and ETF recent outflows

Cumulative flows 2017-now, \$mn

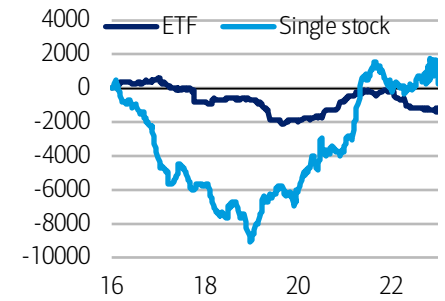


Source: BofA Securities

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Exhibit 71: Real Estate: Single stock and ETFs flows flip positive

Cumulative flows 2017-now, \$mn

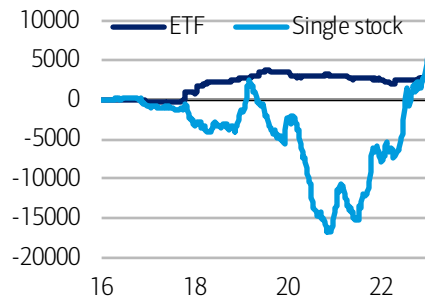


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 72: Comm. Svcs.: Single stocks recent inflows and ETF flows flip negative

Cumulative flows 2017-now, \$mn

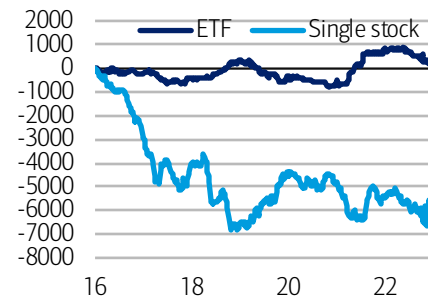


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 73: Utilities: Single stock and ETF recent outflows

Cumulative flows 2017-now, \$mn



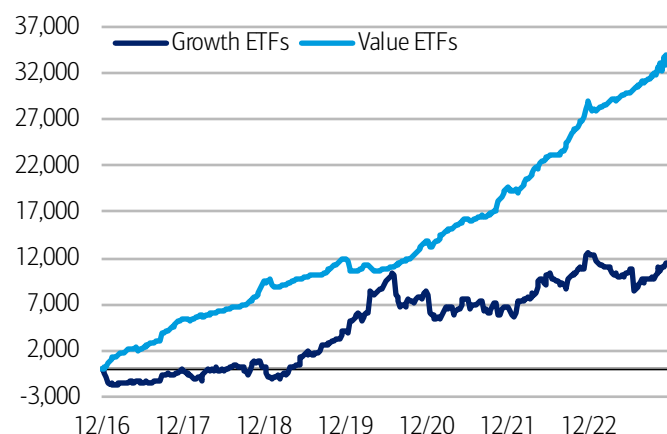
Source: BofA Securities

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Cumulative Equity ETF flows by Size and Style

Exhibit 74: Value ETF flows outpacing Growth ETF flows

Growth ETF vs. Value ETF cumulative net buys, 2017-now (\$ mn)

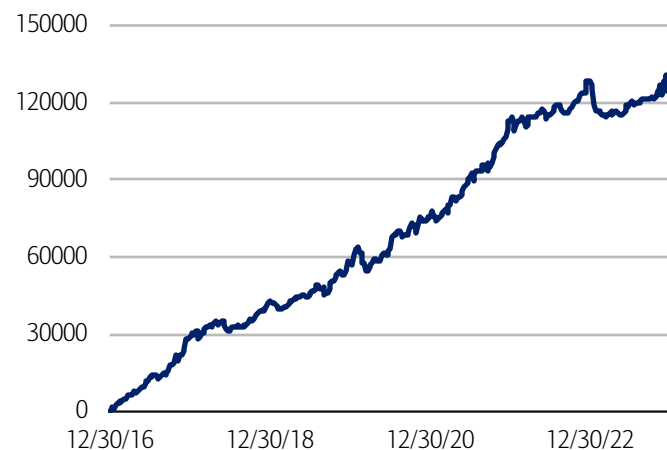


Source: BofA Securities

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Exhibit 76: Trend of persistent inflows into Large Cap ETFs has faltered/seen mixed trends recently

Large Cap ETF cumulative net buys, 2017-now (\$ mn)



Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 75: Blend ETFs generally seeing inflows recently

Blend ETF cumulative net buys, 2017-now (\$ mn)



Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 77: Mid Cap ETFs: recent buying after selling spate

Mid Cap ETF cumulative net buys, 2017-now (\$ mn)



Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 78: Recent inflows into small cap ETFs

Small Cap ETF cumulative net buys, 2017-now (\$ mn)



Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 79: Broad Market ETFs seeing continued inflows

Broad Market ETF cumulative net buys, \$ mn



Source: BofA Securities

BofA GLOBAL RESEARCH

BofA Equity Client Flow Trends Methodology

This product seeks to answer the questions of:

- 1) What sectors are being bought or sold by BofA clients?
- 2) What market cap size segments are being bought or sold?
- 3) What type of client is buying or selling?

This product, which we plan to publish weekly, provides an aggregated view of BofA client trading flows into US stocks executed by the cash equities business of the firm. By aggregating flows across many execution platforms and trading desks, the goal of this product is to provide an overview of what sectors and market caps are being bought or sold, and what type of client is buying or selling. This product is not meant to be predictive of the market, but aims to provide a holistic view of BofA client trading flows by client type, sector and market cap.

The trading flow is for US stocks only and is shown here as “net buys,” defined as the dollar amount of buy orders less sell orders. Since this product is meant to provide client action context of recent market and sector performance based on client trading flows, we capture the data as “net buys” rather than trading volume. The order flow shown here represents all US single stock and ETF trades executed by the firm within the cash equity business, excluding OTC and Pink Sheets. Order flow on derivatives such as options, futures and swaps is not included. We show the data on both a weekly basis and as a four-week moving average basis to capture trends. The weekly data, while being timelier, can be influenced by block trades and is therefore more volatile. We believe the four-week moving average is better reflective of trends. Our interpretation of the data is based purely on aggregated trading flows and does not reflect any portfolio positions.

The four client types we include are: (1) hedge funds; (2) institutional clients; (3) private clients; and (4) corporates. All clients that are not hedge funds, corporates or private clients are categorized as institutional clients, and include mutual funds, pension funds, insurance companies, investment counselors, banks, broker dealers, etc.

Market cap size segments are small (<\$2bn), mid (\$2-10bn) and large (>\$10bn). The sectors included are the 11 GICS sectors, as well as ETFs. Beginning 8/31/16, Real Estate is broken out from Financials as the 11th GICS sector. Data from 10/1/18 onward



reflect the new Communication Services sector, while data prior to 10/1/18 reflect the former Telecom sector. We treat all historical net buy ETF flows as if they reflect net buys of US equities. The ETF data primarily consists of US equity ETFs, but may include flows into asset classes such as gold, other commodities and international stocks/bonds traded via US-based ETFs. In addition, net buys of ETFs may include a small amount of purchases of short fund or "bearish" ETFs. However, we believe our aggregate measures for overall US equity flows, as well as size segments and client types, still represent client actions. We began including more granularity on ETF flows as discussed in more detail below in September 2017, with data based on January 2017-present.

The first section of this report shows overall flows into US equities, with weekly charts and tables displaying the breakdown of flows by client type, sector, and market cap. The second section provides more detail on flows by client type, showing the breakdown of each client category's flows by sector and size. The weekly data we publish encompasses flows for the Monday through Friday of the prior week.

We have decided to no longer produce exhibits showing a breakout of pension fund flows (a subset of the Institutional client grouping) or sector-/size-segment level granularity on the corporate client buyback flow contained in prior issues of this product.

Color on ETF flows: We began publishing exhibits on ETF flow granularity in the September 5, 2017 edition of this report. In order to provide more color on ETF flows, based on data available back to January 2017, we began classifying ETF net buys manually by ticker based on Bloomberg Fund Classifications to aggregate each week's ETF net buys by asset class focus (Equity, Fixed Income, Commodity, Alternative, Mixed Allocation, Specialty), by sector (based on the 11 equity sectors), by strategy (Growth, Value, Blend), and by market capitalization (Large, Mid, Small, Broad Market). Note that net buys of ETFs by our clients presented throughout this report do not include creation of new ETF shares by BofA—these flows would show up as single stock net buys (sales) in the underlying sectors of the stocks that comprise the ETF. Market capitalization categorizations of ETFs by Bloomberg are based on the benchmark tracked/replicated; the prospectus may also be considered. Bloomberg may also overrule the classification of the benchmark (for example, by tagging an ETF tracking the S&P 500 as large cap even though the benchmark is multi-cap). Broad market ETFs invest in large, mid or small cap companies. Market cap classifications of ETFs by Bloomberg used in page 4 of this report may differ from the overall market cap categorizations of single stocks/ETFs by Unity in the remainder of this report.

A note on the BofA equity client flow data: Total net buys of US equities (Exhibit 5 on page 2) encompass the total trading flows we have described above. This includes a small portion of "unknown" trades, which result when the client, sector, or market cap is unable to be categorized. These "unknowns" are excluded from Sector, Client and Market Cap breakouts on pages 3-7. Hence, the overall net buys from Exhibit 5 will not exactly match the totals on these pages. **Sector, client and market cap unknowns each represent less than 4% of trading volumes on average over our data history.**

Disclosures

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R1}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R1} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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