



Mutual Fundamentals

Keeping up with FAAMG

The strong performance of the most overweight stock positions has benefited mutual fund absolute and relative returns since the trough. The typical large-cap core, growth, and value fund has returned 3%, 23%, and -8% YTD, compared with 6%, 23%, -11% for their respective benchmarks. The share of large-cap mutual funds outperforming their benchmarks in 2020 (40%) is higher than the average during the past 10 years (31%). Our basket of the most overweight mutual fund stocks (GSTHMFOW

(<https://marquee.gs.com/s/products/MA19KCN2M5DGWBGD/summary>)) has outpaced the most underweight positions (GSTHMFUW (<https://marquee.gs.com/s/products/MAEA607NHT4Z8CSY/summary>)) by 14 percentage points since the March trough (58% vs. 44%), the strongest five-month return for the long/short pair since we initiated the baskets in 2014.

Record high index concentration and portfolio construction limitations have driven FAAMG exposure to a five-year low. The five largest stocks account for 23% of the S&P 500 and 37% of the Russell 1000 Growth index. However, many fund managers have diversification and position weight limits, which make holding the index weight in these stocks challenging. As a result, AAPL, MSFT, AMZN – which each account for 5%+ of the Russell 1000 Growth and S&P 500 indices – are the most underweight stocks across large-cap mutual funds. Unfortunately for the typical fund manager, these stocks have returned 59%, 34%, and 76% YTD, respectively. FB and GOOGL also entered the most underweight basket this quarter.

Tech represents the largest sector underweight across large-cap mutual funds for the first time since at least 2012. In addition, funds carry their largest underweight in the sector in at least the last eight years. In contrast, the overweight to Value and cyclical sectors, such as Financials, are the highest on record.

Exhibit 1: Mutual fund baskets summary

Mutual fund OVERWEIGHTS (GSTHMFOW)
Top 10 overweights: C, V, CMCSA, BAC, WFC, AIG, TGT, CB, UNH, TEL
5 most overweight new constituents: STT, BBY, CMI, EXC, CI
Mutual fund UNDERWEIGHTS (GSTHMFUW)
Top 10 underweights: AAPL, MSFT, AMZN, BRK.B, PG, XOM, JNJ, T, INTC, KO
5 most underweight new constituents: GOOGL, FB, TSLA, ACN, NVDA

Source: Goldman Sachs Global Investment Research

Key takeaways from our analysis of mutual fund positioning

Mutual Fundamentals analyzes positioning of 572 equity mutual funds with \$2.4 trillion of AUM. Our analysis includes domestic large-cap core, large-cap growth, large-cap value, and small-cap core funds. We exclude ETFs and index objective funds from our positioning analysis.

PERFORMANCE: Sector and stock allocations have supported solid mutual fund returns YTD. 40% of large-cap mutual funds have outpaced their benchmarks YTD compared with an average of 31% during the past 10 years. In fact, fund outperformance has improved since the trough despite the increased cash drag on fund returns from rising stock prices. One reason is that funds have been consistently underweight defensives, such as Utilities, which have been the biggest laggards during the rebound. The most overweight stock positions have also rallied since the trough, outperforming the S&P 500 and most underweight positions by 6 pp and 14 pp, respectively. Finally, mutual funds deployed cash into equities as cash balances returned to their pre-pandemic levels by the end of 2Q.

FLows: US equity mutual funds and ETFs have experienced \$163 billion of outflows YTD. However, the rotation away from equities towards bonds and cash has slowed in recent months alongside rising optimism around a COVID-19 vaccine and economic recovery. Consistent with prior post-correction episodes, active funds have seen much smaller outflows during the past few months than the average during the past 10 years.

FAAMG: The average large-cap mutual fund allocation to FAAMG is the lowest in five years (501 bp underweight) but exposure varies significantly across core, growth, and value funds. Growth managers are most underweight FAAMG companies whereas value funds are overweight the stocks by a combined 247 bp. A major driver of this bifurcation is the record high concentration of the Russell 1000 Growth index. AAPL, MSFT, and AMZN account for 10%, 10%, and 8% of the benchmark, respectively. Many managers face restrictions around diversification and position weights, making it challenging for them to hold the FAAMG stocks at their respective index weights. This index concentration poses an especially acute problem to growth managers, though it is increasingly affecting core managers as well. In contrast, no stock accounts for more than 3% of the Russell 1000 Value index and concentration within the index is at a 25-year low.

SECTORS: Mutual funds are underweight Information Technology by 202 bp, the largest underweight to the sector since at least 2012. However, excluding AAPL and MSFT, funds are overweight the sector by 154 bp (50th percentile allocation). Similarly, average fund exposure to Consumer Discretionary is the lowest in eight years, driven primarily by the large AMZN underweight. On the other hand, fund tilts toward cyclical sectors are at or near their highest levels since 2012. Financials exposure increased the most last quarter (+93 bp) and the sector remains the most overweight across large-cap mutual funds (196 bp).

FACTORS/THEMES: Funds are underweight Growth for the first time in at least eight years. In contrast, funds' exposure to Value and Cyclical rose during 2Q. Among industries exposed to policy risk, mutual funds are most overweight Banks and Managed Health Care. The average large-cap mutual fund remains underweight potential infrastructure beneficiaries.

STOCKS: Our Mutual Fund Overweight Positions basket (ticker: GSTHMFOW) has outperformed the most underweight positions (GSTHMFUW) by 14 pp since the trough (58% vs 44%), the strongest five-month return for the long/short pair since we initiated the baskets in 2014. Our mutual fund baskets each contain 50 Russell 1000 stocks where the average large-cap core, growth, and value mutual fund is most overweight or most underweight vs. its benchmark. Constituents with the largest overweights: C, V, CMCSA, BAC, and WFC. Constituents with the largest underweights: AAPL, MSFT, AMZN, BRK.B, and PG. Both baskets are rebalanced in this report (see Exhibits 32 and 33).

Exhibit 2: Overlap between our mutual fund and hedge fund baskets

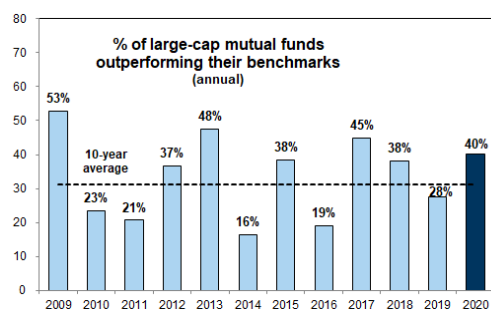
Overlap with our HEDGE FUND baskets		Overlap with our MUTUAL FUND baskets									
		Overweight					Underweight				
		Mutual Fund Overweight Positions (GSTMFW)					Mutual Fund Underweight Positions (GSTMFWU)				
Long	Hedge Fund VIP List (GSTHHVIP)	ADBE CMCSA MA	ALXN CRM NOW	C LOW V			AAPL DIS NVDA	ABBV FB TSLA	AMD GOOGL	AMZN MSFT	BRK.B NFLX
	Hedge Fund Very Important Short Positions (GSTHVISP)	BAC SCHW	BMY TGT	MS UNH			ABT GILD JNJ PG	ACN HD KO T	BA IBM NEE WMT	CCI INTC PEP XOM	DLR ITW PFE

Source: Goldman Sachs Global Investment Research

Drivers of mutual fund performance

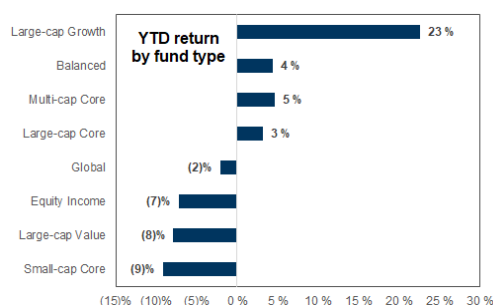
The share of large-cap mutual funds outperforming their benchmarks this year (40%) is higher than the average during the past 10 years (31%). Because mutual funds hold a share of their assets in cash, they generally lag their benchmarks when equity prices rise and vice versa. Unusually, mutual fund relative returns have improved since April despite surging stock prices. Sector tilts, stock allocations, and rising equity exposures have all contributed to above-average fund returns this year. In absolute terms, growth funds have generated the highest returns YTD (+23%). The hit rate of outperformance relative to benchmarks is highest among value managers (60%).

Exhibit 3: 40% of large-cap mutual funds have outperformed YTD
as of August 19, 2020



Source: FactSet, EPFR, Goldman Sachs Global Investment Research

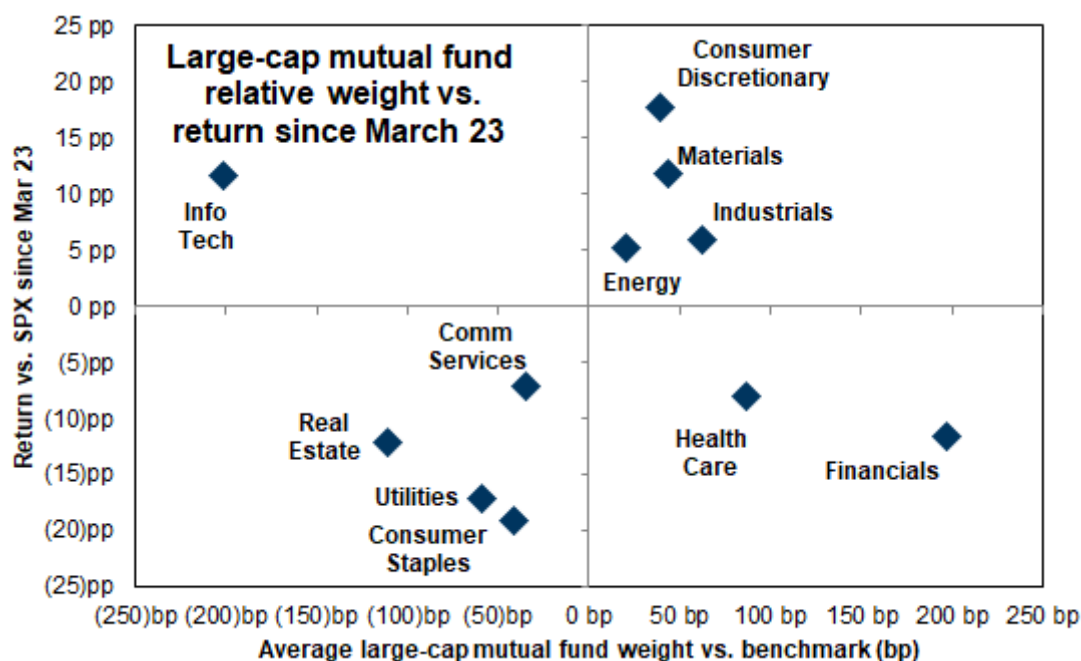
Exhibit 4: Growth funds have performed best in absolute terms
as of August 19, 2020



Source: FactSet, EPFR, Lipper, Goldman Sachs Global Investment Research

Mutual funds are underweight defensive sectors, which have lagged most since the trough. Real Estate, Utilities, and Consumer Staples have each lagged the S&P 500 by at least 10 percentage points since March 23 and funds have been consistently underweight these three sectors during the past five months. The outperformance of traditional cyclical sectors, such as Industrials and Materials, has also boosted relative fund performance. On the other hand, underweight exposure to the Info Tech sector and overweight tilts in Health Care and Financials have been headwinds to fund outperformance during the past few months.

Exhibit 5: Average mutual fund allocations vs. sector returns since the trough
holdings as of June 30, 2020; returns as of August 19, 2020

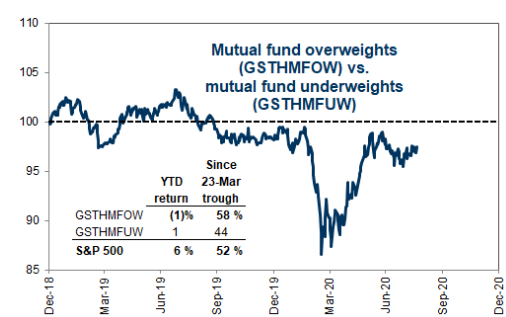


Source: FactSet, EPFR, Goldman Sachs Global Investment Research

The most overweight mutual fund stock positions have returned 58% since March 23, outperforming both the S&P 500 (+52%) and the most underweight positions (+44%). The most overweight mutual fund stocks (GSTHMFOW) lagged sharply during the sell-off as coronavirus fears peaked and fund managers cut risk. Since March, the relative performance of the most overweight vs. the most underweight (GSTHMFUW) mutual fund positions has been stronger than any other five-month period since we initiated the baskets in 2014. However, funds have been underweight FAAMG throughout 2020, which has weighed on fund performance. FAAMG has returned 44% YTD vs. 6% for the S&P 500.

Exhibit 6: Mutual fund overweights vs. underweights

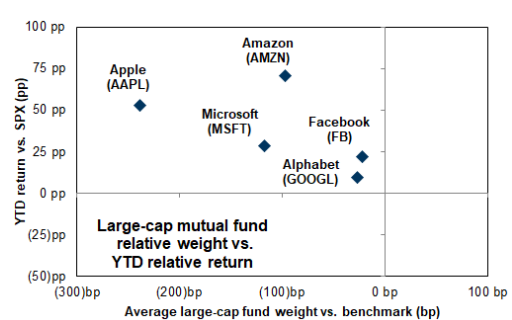
as of August 19, 2020



Source: Goldman Sachs Global Investment Research

Exhibit 7: FAAMG has weighed on mutual fund returns YTD

holdings as of June 30, 2020; returns as of August 19, 2020



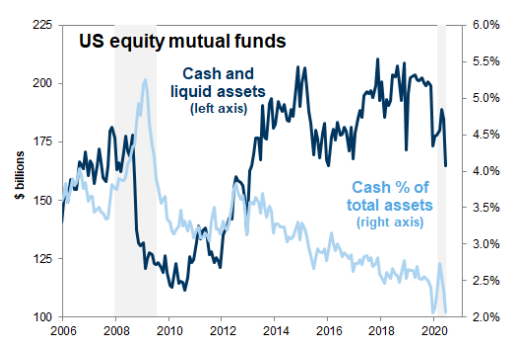
Source: FactSet, EPFR, Goldman Sachs Global Investment Research

Increased equity exposure has also benefited recent mutual fund performance.

Mutual fund cash holdings rose from 2.1 % of assets to 2.7% of assets between January and March but fell back to their pre-pandemic level by the end of June. In dollar terms, mutual fund cash assets on June 30 (\$165 billion) were the lowest since January 2016. While still low relative to the February peak, CFTC net futures length has also spiked in recent weeks.

Exhibit 8: Mutual fund cash holdings have fallen sharply

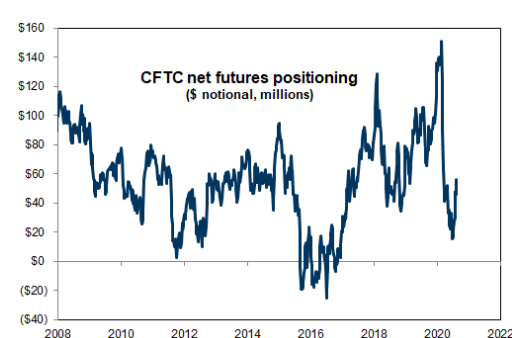
as of June 30, 2020



Source: ICI, Goldman Sachs Global Investment Research

Exhibit 9: CFTC net futures length has rebounded in recent weeks

as of August 11, 2020



Source: CFTC, Goldman Sachs Global Investment Research

We highlight four observations on 2Q 2020 mutual fund holdings. This quarter, we focus on fund allocations to FAAMG, changes in exposures to cyclicals and value, sector tilts, and allocations to industries exposed to potential policy risks.

In addition to active reallocations and changes in asset prices, shifts in mutual fund tilts during 2Q were driven by the reconstitution of the Russell indices.

FTSE Russell rebalances its entire series of Russell US indices around the end of June every year. This year, equity markets opened with the newly reconstituted Russell US indices on June 29. Our mutual fund overweight and underweight calculations are based on holdings and benchmark weights as of June 30 and therefore, reflect the post-rebalance weights within the Russell 1000 Growth and Value indices. As a result, growth and value managers that did not adjust their portfolios to reflect the reconstitution prior to the actual rebalance would show large shifts in their relative exposures, all else equal.

Exhibit 10: Sector weights in S&P 500, Russell 1000 Growth, and Russell 1000 Value: June 2019 vs. June 2020

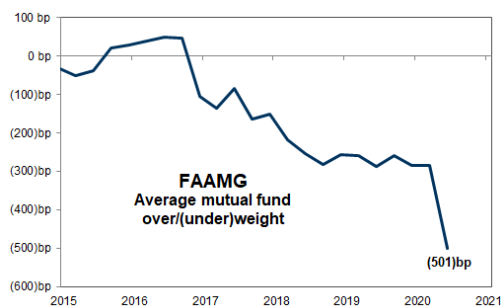
Sector	Index weight changes between 30-Jun-19 and 30-Jun-20							
	S&P 500		Russell 1000 Growth		Russell 1000 Value		Average	
	30-Jun-20	Change vs. 30-Jun-19	30-Jun-20	Change vs. 30-Jun-19	30-Jun-20	Change vs. 30-Jun-19	30-Jun-20	Change vs. 30-Jun-19
Information Technology	27%	598 bp	44%	1043 bp	10%	47 bp	27%	563 bp
Consumer Discretionary	11	68	15	25	7	187	11	93
Communication Services	11	60	11	(103)	9	224	10	60
Health Care	15	42	15	242	14	(111)	15	58
Utilities	3	(25)	0	2	6	(52)	3	(25)
Real Estate	3	(21)	2	(28)	5	(31)	3	(27)
Materials	3	(28)	1	(104)	4	45	3	(29)
Consumer Staples	7	(30)	5	(90)	8	32	7	(29)
Industrials	8	(141)	5	(690)	12	432	8	(133)
Energy	3	(223)	0	(61)	5	(372)	3	(219)
Financials	10	(299)	2	(235)	19	(401)	10	(312)

Source: FactSet, Goldman Sachs Global Investment Research

1. FAAMG

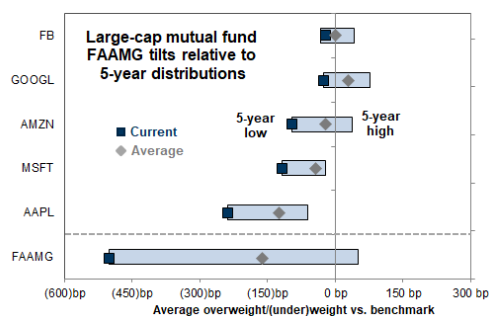
Average mutual fund exposure to FAAMG fell to 501 bp underweight, the lowest during the past five years. Each of the five FAAMG stocks are among the 20 most underweight positions across large-cap mutual funds. In fact, excluding Facebook, large-cap mutual fund relative allocation to each of the FAAMG stocks is at a five-year low.

Exhibit 11: Relative exposure to FAAMG is at a 5-year low
holdings as of June 30, 2020



Source: EPFR, FactSet, Goldman Sachs Global Investment Research

Exhibit 12: Fund allocations to FAAMG stocks vs. the past 5 years
holdings as of June 30, 2020



Source: EPFR, FactSet, Goldman Sachs Global Investment Research

However, positioning within FAAMG differs significantly across core, growth, and value managers. The average large-cap growth fund is underweight FAAMG by 1224 bp and the average large-cap core fund is underweight by 525 bp. Both core and growth funds are underweight each of the FAAMG companies. In contrast, value funds are overweight FAAMG by 247 bp, including an overweight tilt to each FAAMG stock except for GOOGL.

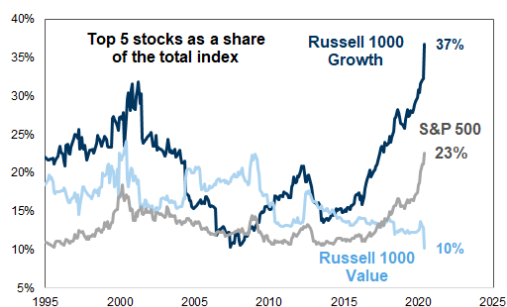
A major reason growth funds hold large underweight allocations to FAAMG companies is the combination of record high benchmark concentration and portfolio construction limitations. The largest five companies account for 37% of the Russell 1000 Growth index compared with 32% during the Tech Bubble. AAPL, MSFT, and AMZN account for 10%, 10%, and 8% of the index, respectively. However, many fund managers face diversification and position limit requirements, which make holding the index weight in these stocks challenging. Although to a lesser degree, core managers also face this conundrum since AAPL and MSFT each account for around 6% of the S&P 500 index. In contrast, Russell 1000 Value index concentration is the lowest in 25 years and no stock accounts for more than 3% of the index. As a result, value managers have more flexibility to hold overweight positions in the largest stocks within their benchmark.

Exhibit 13: Value funds are overweight FAAMG
as of June 30, 2020

Exhibit 14: Russell 1000 Growth and S&P 500 market cap concentration at record highs
as of June 30, 2020

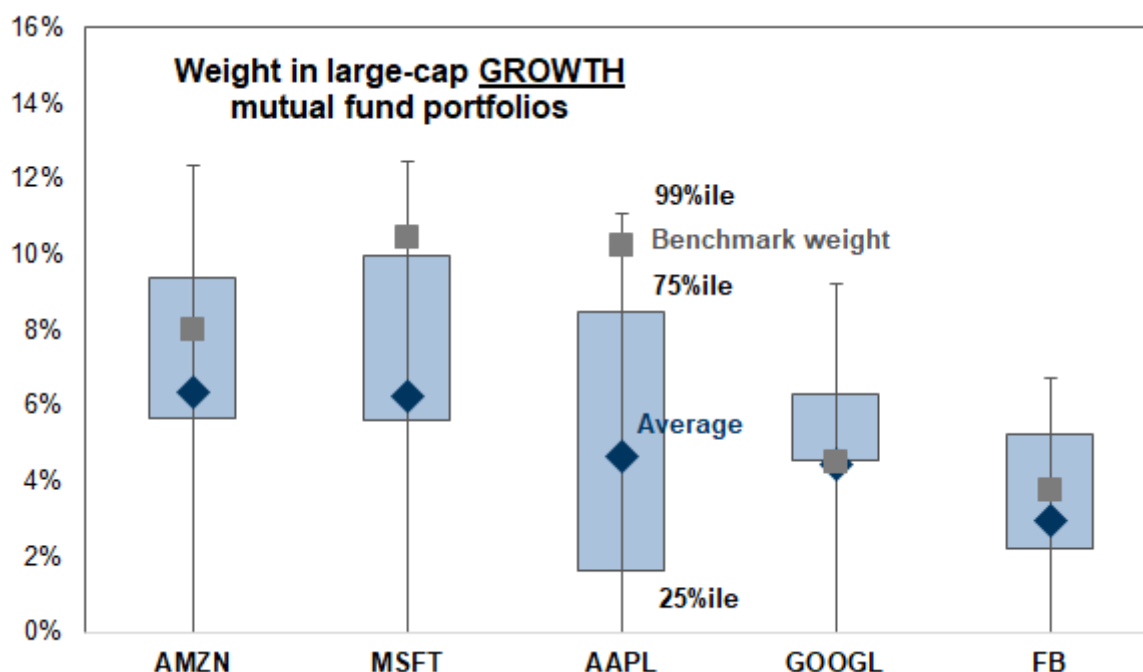
Ticker	Large-cap mutual fund average over/(under)weight			
	Core	Growth	Value	All
FB	(32)bp	(80)bp	47 bp	(22)bp
GOOGL	(35)	(7)	(37)	(26)
AMZN	(156)	(163)	29	(97)
MSFT	(79)	(417)	143	(118)
AAPL	(223)	(557)	64	(238)
FAAMG	(525)bp	(1224)bp	247 bp	(501)bp

Source: EPFR, FactSet, Goldman Sachs Global Investment Research



Source: Compustat, Goldman Sachs Global Investment Research

Exhibit 15: Distribution of FAAMG ownership among large-cap GROWTH managers as of June 30, 2020



Source: EPFR, FactSet, Goldman Sachs Global Investment Research

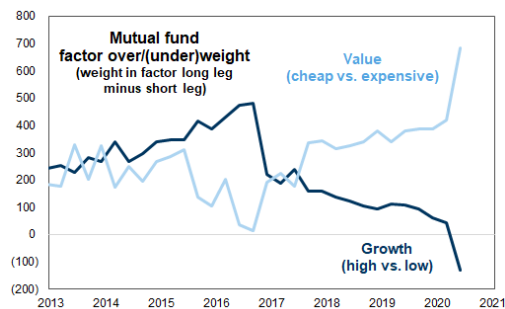
2. Factors

Mutual fund exposure to Value is the highest since at least 2012. Their overweight tilt towards cyclical stocks also increased during 2Q. In contrast, funds are underweight Growth for the first time in at least eight years. Consequently, fund performance would benefit from improved growth expectations and a sharp rotation into economically-sensitive cyclical equities. Our economists forecast above-consensus economic growth

(<https://research.gs.com/content/research/en/reports/2020/08/10/46d0c280-e83f-4ee3-91c1-8d6d5dbc6e83.pdf>) during the next 12 months.

Exhibit 16: Mutual fund exposure to Value and Growth are at historical extremes

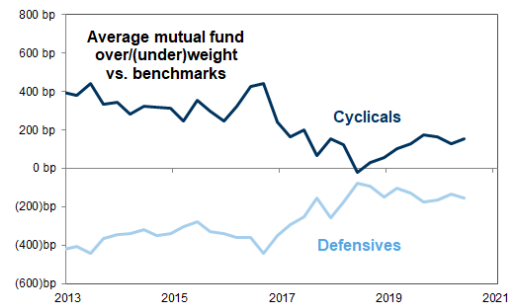
as of June 30, 2020



Source: EPFR, FactSet, Goldman Sachs Global Investment Research

Exhibit 17: Mutual fund allocation to Cyclical increased modestly during 2Q

as of June 30, 2020



Source: EPFR, FactSet, Goldman Sachs Global Investment Research

3. Sectors

Fund allocation to sectors with secular growth characteristics fell most during 2Q. The average large-cap mutual fund is underweight Info Tech by 202 bp, which is the largest underweight across all sectors. Relative fund allocation to Consumer Discretionary and Communication Services also declined last quarter while exposure to the most cyclical and most defensive sectors rose. Financials remains the most overweight sector across large-cap mutual funds (+196 bp).

Exhibit 18: Mutual funds allocation to Tech fell most during 2Q

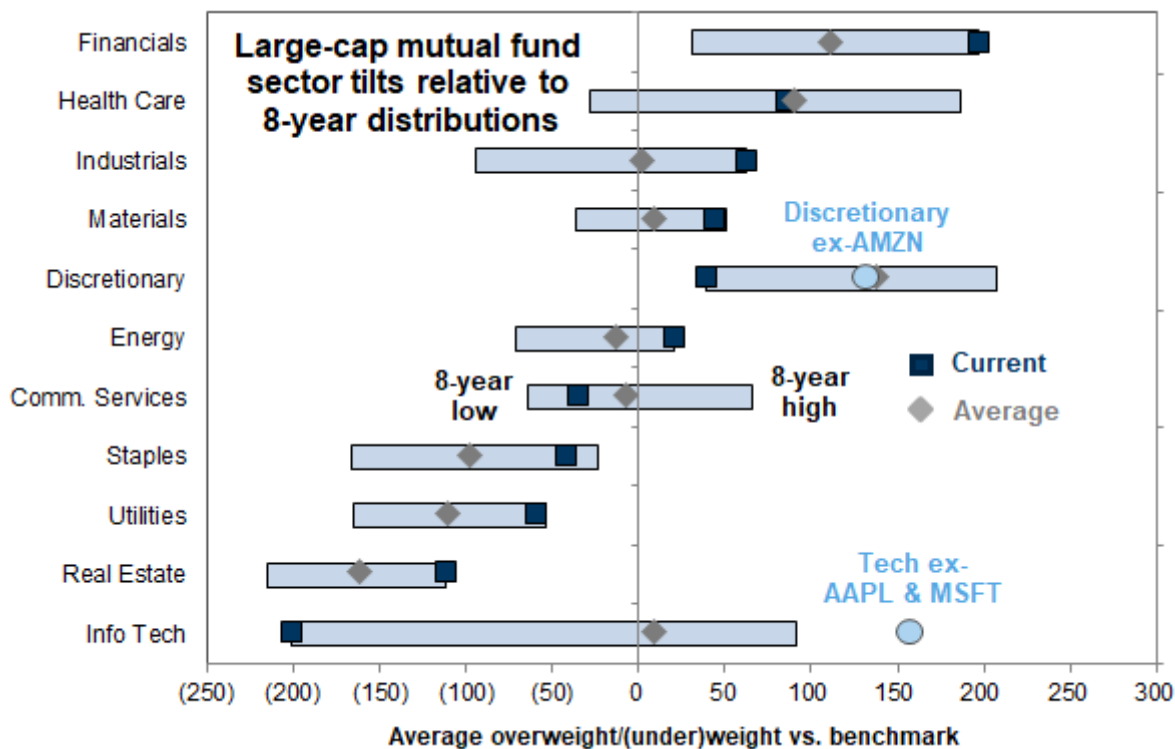
as of June 30, 2020

Large-cap mutual fund Average over/(under)weight (bp)			
Sector	Start of 2Q 2020	Start of 3Q 2020	Change
Financials	103 bp	196 bp	93 bp
Consumer Staples	(94)	(42)	52
Utilities	(104)	(59)	45
Materials	13	43	30
Energy	(5)	20	25
Industrials	47	63	16
Real Estate	(118)	(111)	7
Health Care	102	86	(16)
Communication Services	(5)	(35)	(30)
Consumer Discretionary	77	39	(38)
Information Technology	(18)	(202)	(184)

Source: FactSet, EPFR, Goldman Sachs Global Investment Research

Relative tilts to Info Tech and Consumer Discretionary are the lowest since at least 2012. However, the extreme allocations within both sectors are driven by the largest stocks. Excluding AAPL and MSFT, the average large-cap mutual fund allocation to Tech is at the 50th percentile (154 bp overweight). Excluding AMZN, fund exposure to Discretionary is at the 37th percentile (136 bp overweight). Following the increase in allocation during 2Q, relative fund exposure to cyclical sectors are at or near their 8-year highs.

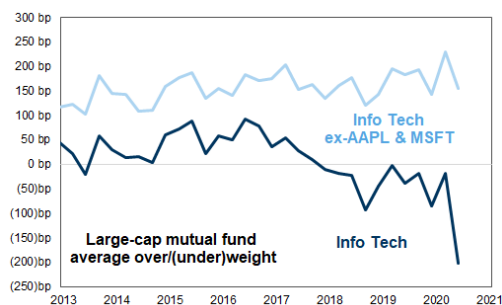
Exhibit 19: Mutual fund sector allocations vs. history
as of June 30, 2020



Source: FactSet, EPFR, Goldman Sachs Global Investment Research

Exhibit 20: Mutual funds are overweight Tech ex-AAPL and MSFT

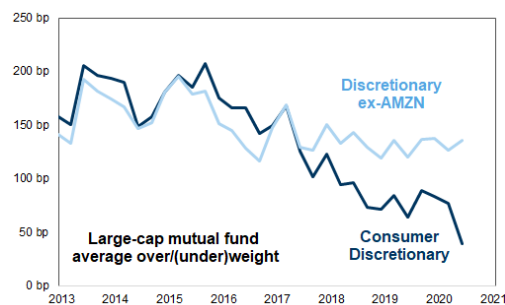
as of June 30, 2020



Source: EPFR, FactSet, Goldman Sachs Global Investment Research

Exhibit 21: Fund positioning within Consumer Discretionary with and without AMZN

as of June 30, 2020



Source: EPFR, FactSet, Goldman Sachs Global Investment Research

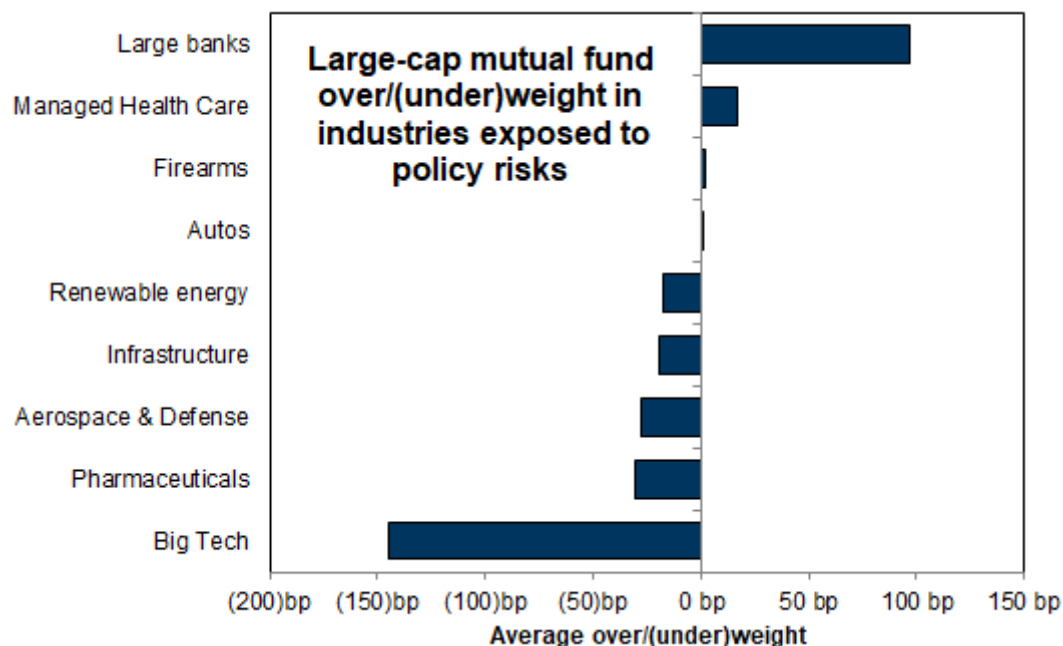
4. Policy risk

Among industries exposed to policy risk, mutual funds are most overweight Banks and Managed Health Care. The average large-cap mutual fund remains

underweight potential infrastructure beneficiaries despite support from both Democrats and Republicans. The large underweights in FAAMG mean that funds are relatively insulated from potential Tech regulation.

Exhibit 22: Mutual funds relative allocation to policy risk-exposed industries

as of June 30, 2020



Source: EPFR, FactSet, Goldman Sachs Global Investment Research

Breakdown of US fund flows

US equity mutual funds and ETFs have witnessed \$163 billion of outflows in 2020. US bond and cash funds have experienced \$184 billion and \$1 trillion in inflows YTD, respectively. During the selloff, investors rotated sharply into cash. However, cash funds have witnessed outflows of \$160 billion since the start of June as optimism around the reopening increased. While equity funds have continued to see outflows since the trough, the pace of outflows has declined and the rotation away from equities towards bonds and cash has slowed.

Exhibit 23: US fund flows by asset type

as of August 12, 2020

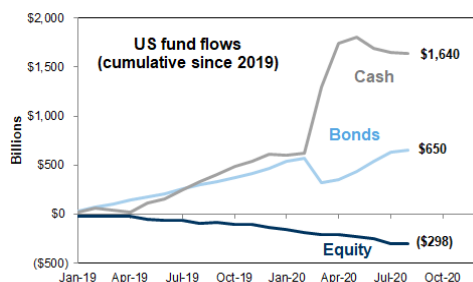
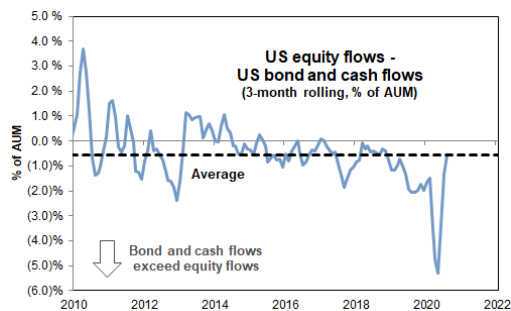


Exhibit 24: The rotation away from equities has slowed dramatically in the past 3 months

as of August 12, 2020

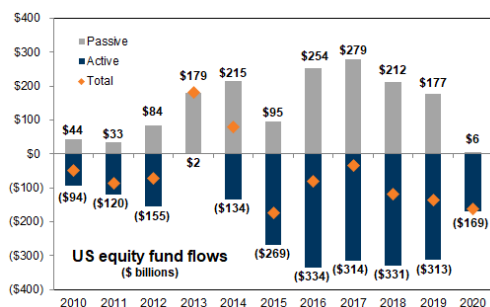
Source: EPFR, Goldman Sachs Global Investment Research



Source: EPFR, Goldman Sachs Global Investment Research

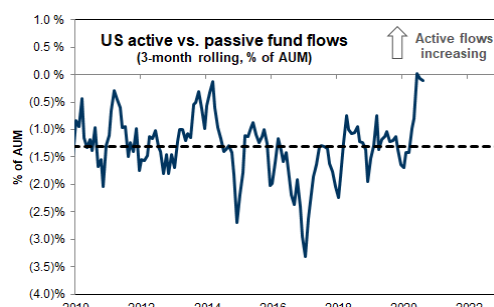
Outflows from US active funds have slowed sharply. We have previously shown that demand for active management increases in the months following a 10%+ correction (<https://research.gs.com/content/research/en/reports/2018/09/18/a24ff822-a9b8-469d-8805-f926468ccbd9.pdf>). The current episode has been consistent with history. As a share of starting AUM, outflows from US active funds since the trough have been the smallest in any 5-month period since mid-2014. Consequently, inflows into US passive mutual funds and ETFs have also decreased. Inflows into passive funds have totaled \$6 billion YTD, on pace for the smallest inflows during the past decade.

Exhibit 25: Active and passive US fund flows
as of August 12, 2020



Source: EPFR, Goldman Sachs Global Investment Research

Exhibit 26: The rotation away from active funds has slowed in 2020
as of August 12, 2020



Source: EPFR, Goldman Sachs Global Investment Research

Among US active equity mutual funds, Health Care and Technology funds have witnessed the largest inflows YTD while cyclical sector funds have seen outflows. Outflows from large-cap core funds are more than twice those from

large-cap growth funds despite similar AUM.

Exhibit 27: US active equity fund flows by sector/style as a % of AUM

as of August 12, 2020

US ACTIVE EQUITY mutual fund flows				
Sector/style	Total AUM (\$ billions)	YTD flows (\$ billions)	% of starting AUM	
Telecom	\$11	\$1	9 %	Top quartile
Technology	89	3	5	Bottom quartile
Health Care	139	3	2	
Large-cap growth	1,695	(28)	(2)	
Financials	22	(1)	(2)	
Mid-cap core	104	(2)	(2)	
Small-cap growth	208	(4)	(2)	
Small-cap value	115	(4)	(2)	
Large-cap value	967	(32)	(3)	
Real Estate	115	(4)	(3)	
Mid-cap growth	366	(12)	(4)	
Mid-cap value	148	(7)	(4)	
Large-cap core	1,482	(61)	(4)	
Utilities	26	(1)	(4)	
Small-cap core	147	(9)	(5)	
Energy	18	(2)	(6)	
Consumer goods	8	(1)	(10)	
Industrials	4	(1)	(11)	
Commodities/Materials	2	(0)	(15)	
US equity funds	\$5,711	(\$169)	(3)%	

Source: EPFR, Goldman Sachs Global Investment Research

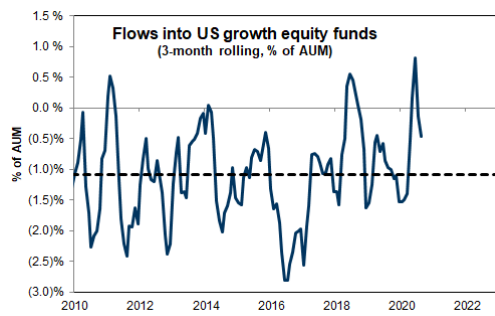
During the past three months, investors have rotated from Growth to Value equity funds. Following record inflows during the coronacrisis, Growth funds have witnessed outflows during the past three months. However, relative to AUM, recent outflows from growth funds are still much smaller than the 10-year average.

Exhibit 28: Flows into US growth equity funds have recently declined

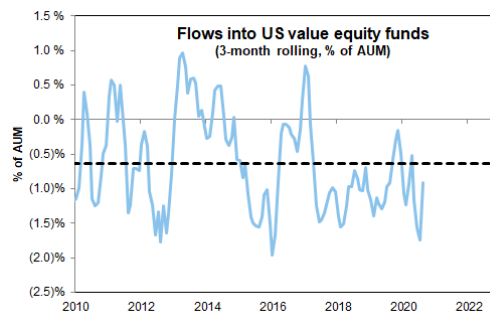
as of August 12, 2020

Exhibit 29: Value fund flows have rebounded

as of August 12, 2020



Source: EPFR, Goldman Sachs Global Investment Research



Source: EPFR, Goldman Sachs Global Investment Research

Large-cap mutual fund position baskets

We analyzed \$2.3 trillion of individual equity holdings from 503 large-cap core, growth, and value mutual funds to identify the most over- and under-weight positions of long-only investors.

Analyze GSTHMFOW

(<https://marquee.gs.com/s/products/MA19KCN2M5DGWBGD/summary>) and GSTHMFUW (<https://marquee.gs.com/s/products/MAEA607NHT4Z8CSY/summary>) with Marquee

MUTUAL FUND OVERWEIGHT POSITIONS (GSTHMFOW)

Our portfolio of favorite mutual fund positions contains 50 Russell 1000 stocks where the average large-cap core, growth, and value mutual fund is most overweight relative to a blended benchmark. The basket is equal-weighted and not sector-neutral to the Russell 1000. Mutual fund holdings range from 6 bp to 34 bp overweight (Ex. 32).

16 new constituents: *AMAT, AMP, BBY, BWA, CI, CMI, DD, ETN, EXC, GD, GM, MRK, SQ, STT, TRV, and TT*

MUTUAL FUND UNDERWEIGHT POSITIONS (GSTHMFUW)

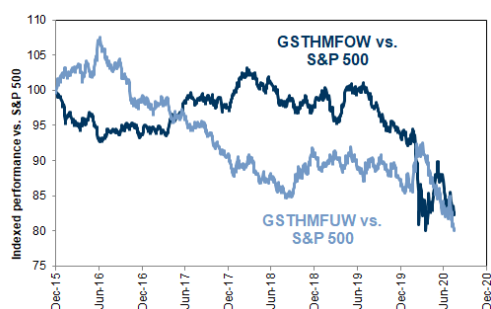
Our portfolio of out-of-favor mutual fund positions contains 50 Russell 1000 stocks where the average large-cap core, growth, and value mutual fund is most underweight relative to a blended benchmark. The basket is equal-weighted and not sector-neutral to the Russell 1000. Mutual fund holdings range from 6 bp to 238 bp underweight (Ex. 33).

10 new constituents: *ACN, D, EQIX, FB, GOOGL, LLY, NVDA, O, SBUX, and TSLA*

Investors may use this analysis to identify stock preferences across mutual funds. The relative performance of these baskets is not intended to track the performance of large-cap funds. Instead, these baskets spotlight favored/out-of-favor stocks that mutual fund managers expect to outperform/underperform. They may be used separately or together to follow mutual fund preferences or to locate contrarian opportunities. Both baskets have a large-cap bias. The overweight positions basket has a median market capitalization of \$44 billion compared with \$146 billion for the underweight positions basket and \$11 billion for the Russell 1000.

Exhibit 30: Mutual fund baskets versus S&P 500

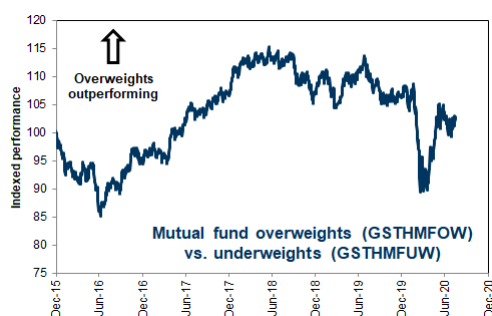
as of August 14, 2020



Source: Goldman Sachs Global Investment Research

Exhibit 31: Relative performance of mutual fund baskets

as of August 14, 2020



Source: Goldman Sachs Global Investment Research

GSTHMFOW: Mutual Fund Overweight Positions basket

Exhibit 32: Core, growth, and value mutual fund overweight positions vs. benchmarks (GSTHMFOW)

holdings as of June 30, 2020; pricing as of August 13, 2020

Company Name	Ticker	Sector	YTD return	Mkt cap (\$ bil)	Blended Weight		OVER- weight
					Average Fund	Benchmark	
Citigroup Inc.	C	Financials	(32)%	110	0.7 %	0.4 %	34 bp
Visa Inc.	V	Information Technology	6	333	1.5	1.2	30
Comcast Corp.	CMCSA	Communication Services	(2)	198	0.9	0.6	21
Bank of America Corp	BAC	Financials	(24)	229	0.9	0.7	20
Wells Fargo & Co.	WFC	Financials	(52)	103	0.5	0.4	19
American Intl Group	AIG	Financials	(39)	26	0.3	0.1	18
Target Corp.	TGT	Consumer Discretionary	6	67	0.3	0.2	12
Chubb Limited	CB	Financials	(15)	59	0.3	0.2	12
UnitedHealth Group	UNH	Health Care	10	305	1.1	1.0	11
TE Connectivity	TEL	Information Technology	1	32	0.1	0.0	11
Morgan Stanley	MS	Financials	4	82	0.3	0.2	11
Bristol-Myers Squibb	BMJ	Health Care	1	143	0.6	0.5	11
Charles Schwab	SCHW	Financials	(26)	45	0.2	0.1	10
Medtronic	MDT	Health Care	(10)	136	0.5	0.5	10
TJX Companies Inc	TJX	Consumer Discretionary	(6)	68	0.3	0.2	10
Amdocs Limited	DOX	Information Technology	(15)	8	0.1	0.0	9
Capital One Financial	COF	Financials	(33)	31	0.2	0.1	9
ServiceNow Inc.	NOW	Information Technology	55	84	0.4	0.3	9
MetLife Inc.	MET	Financials	(20)	36	0.2	0.1	8
Lowe's Companies	LOW	Consumer Discretionary	32	118	0.4	0.4	8
Electronic Arts	EA	Communication Services	32	41	0.2	0.1	8
State Street Corp.	STT	Financials	(9)	25	0.2	0.1	8
Adobe Inc.	ADBE	Information Technology	36	217	0.8	0.8	8
Cognizant Tech Solutions	CTSH	Information Technology	9	36	0.2	0.1	8
CoStar Group Inc.	CSGP	Industrials	41	31	0.1	0.1	8
Discovery Inc.	DISCA	Communication Services	(33)	10	0.1	0.0	8
Best Buy Inc.	BBY	Consumer Discretionary	25	28	0.1	0.1	8
Cummins Inc.	CMI	Industrials	19	31	0.2	0.1	8
Allstate Corp.	ALL	Financials	(13)	30	0.2	0.1	8
McKesson Corp.	MCK	Health Care	11	25	0.2	0.1	7
Exelon Corp.	EXC	Utilities	(14)	37	0.2	0.1	7
Cigna Corp.	CI	Health Care	(12)	67	0.3	0.2	7
Eaton Corp.	ETN	Industrials	10	41	0.2	0.1	7
Square Inc.	SQ	Information Technology	129	63	0.2	0.1	7
Merck & Co. Inc.	MRK	Health Care	(7)	211	0.8	0.7	7
Alexion Pharmaceuticals	ALXN	Health Care	(6)	23	0.2	0.1	7
Travelers Companies	TRV	Financials	(12)	30	0.2	0.1	7
DuPont	DD	Materials	(8)	43	0.2	0.1	7
PNC Financial Svc. Gp.	PNC	Financials	(28)	47	0.2	0.2	6
Vertex Pharmaceuticals	VRTX	Health Care	22	69	0.3	0.3	6
Stanley Black & Decker	SWK	Industrials	(3)	24	0.1	0.1	6
Applied Materials	AMAT	Information Technology	7	60	0.3	0.2	6
Mastercard Inc.	MA	Information Technology	10	324	1.0	0.9	6
Workday Inc.	WDAY	Information Technology	12	43	0.1	0.1	6
General Motors	GM	Consumer Discretionary	(24)	39	0.2	0.1	6
Trane Technologies	TT	Industrials	16	28	0.1	0.1	6
Ameriprise Financial	AMP	Financials	(3)	19	0.1	0.1	6
BorgWarner Inc.	BWA	Consumer Discretionary	(5)	8	0.1	0.0	6
salesforce.com Inc.	CRM	Information Technology	20	176	0.7	0.6	6
General Dynamics	GD	Industrials	(10)	44	0.2	0.1	6
Mutual Fund Overweight Positions Median			(3)%	44	0.2 %	0.1 %	8 bp
Russell 1000 Median			(4)	11	0.0	0.0	(0)

Note: Based on our analysis of 503 large-cap core, growth, and value mutual funds with \$2.3 trillion in equity assets.

New stocks in basket listed in bold

Blend is comprised of the equal-weighted average of the large-cap core, large-cap growth and large-cap value funds.

Source: FactSet, Goldman Sachs Global Investment Research

GSTHMFUW: Mutual Fund Underweight Positions basket

Exhibit 33: Core, growth, and value mutual fund underweight positions vs. benchmarks (GSTHMFUW)

holdings as of June 30, 2020; pricing as of August 13, 2020

Company Name	Ticker	Sector	YTD return	Mkt cap (\$ bil)	Blended Weight		UNDER- weight
					Average Fund	Benchmark	
Apple Inc.	AAPL	Information Technology	58 %	1994	3.0 %	5.3 %	(238)bp
Microsoft Corp.	MSFT	Information Technology	33	1583	4.3	5.5	(118)
Amazon.com Inc.	AMZN	Consumer Discretionary	71	1577	3.2	4.2	(97)
Berkshire Hathaway	BRK.B	Financials	(6)	515	0.8	1.3	(51)
Procter & Gamble	PG	Consumer Staples	11	336	0.6	1.1	(47)
Exxon Mobil Corp.	XOM	Energy	(35)	182	0.3	0.7	(40)
Johnson & Johnson	JNJ	Health Care	3	390	1.0	1.4	(39)
AT&T Inc.	T	Communication Services	(20)	213	0.4	0.8	(39)
Intel Corp.	INTC	Information Technology	(17)	206	0.6	0.9	(31)
Coca-Cola Co.	KO	Consumer Staples	(11)	208	0.3	0.6	(30)
Walt Disney	DIS	Communication Services	(9)	237	0.5	0.7	(27)
Alphabet Inc.	GOOGL	Communication Services	13	899	2.8	3.0	(26)
Boeing Co.	BA	Industrials	(46)	99	0.1	0.4	(26)
Netflix Inc.	NFLX	Communication Services	49	212	0.5	0.7	(25)
Abbott Laboratories	ABT	Health Care	18	179	0.3	0.6	(24)
Facebook Inc.	FB	Communication Services	27	628	1.7	2.0	(22)
Home Depot Inc.	HD	Consumer Discretionary	31	303	0.8	1.0	(21)
McDonald's Corp.	MCD	Consumer Discretionary	6	154	0.3	0.5	(20)
Costco Wholesale	COST	Consumer Staples	15	148	0.3	0.5	(20)
Walmart Inc.	WMT	Consumer Staples	12	373	0.4	0.6	(19)
PepsiCo Inc.	PEP	Consumer Staples	3	192	0.5	0.7	(18)
Linde	LIN	Materials	18	131	0.2	0.4	(16)
Tesla Inc	TSLA	Consumer Discretionary	287	302	0.2	0.4	(15)
AbbVie Inc.	ABBV	Health Care	11	167	0.5	0.6	(14)
Caterpillar Inc.	CAT	Industrials	(3)	76	0.1	0.3	(13)
International Bus. Machines	IBM	Information Technology	(3)	111	0.3	0.4	(12)
Accenture	ACN	Information Technology	11	148	0.4	0.5	(12)
3M Co.	MMM	Industrials	(4)	95	0.2	0.3	(12)
Crown Castle Intl Corp	CCI	Real Estate	17	68	0.1	0.2	(12)
Gilead Sciences	GILD	Health Care	7	85	0.2	0.4	(12)
Broadcom Inc.	AVGO	Information Technology	7	132	0.3	0.4	(11)
NVIDIA Corp.	NVDA	Information Technology	95	282	0.7	0.8	(11)
Southern Co.	SO	Utilities	(12)	58	0.1	0.2	(11)
Advanced Micro Devices	AMD	Information Technology	78	96	0.1	0.2	(11)
NextEra Energy Inc.	NEE	Utilities	19	139	0.3	0.4	(11)
Stryker Corp.	SYK	Health Care	(8)	72	0.1	0.2	(11)
Eli Lilly and	LLY	Health Care	16	144	0.4	0.5	(10)
Prologis Inc.	PLD	Real Estate	17	76	0.2	0.3	(9)
Pfizer Inc.	PFE	Health Care	0	212	0.6	0.7	(9)
Illinois Tool Works	ITW	Industrials	11	62	0.1	0.2	(9)
Starbucks Corp.	SBUX	Consumer Discretionary	(9)	92	0.2	0.3	(9)
Digital Realty Trust	DLR	Real Estate	29	41	0.1	0.1	(9)
Dominion Energy Inc	D	Utilities	(2)	67	0.2	0.2	(8)
Newmont Corp.	NEM	Materials	49	51	0.1	0.2	(7)
CSX Corp.	CSX	Industrials	3	57	0.1	0.2	(7)
CME Group Inc.	CME	Financials	(15)	61	0.1	0.2	(7)
ResMed Inc.	RMD	Health Care	15	26	0.0	0.1	(7)
Equinix Inc.	EQIX	Real Estate	33	68	0.2	0.2	(7)
Realty Income Corp.	O	Real Estate	(14)	21	0.0	0.1	(6)
WEC Energy Group Inc	WEC	Utilities	1	29	0.0	0.1	(6)
Mutual Fund Underweight Positions Median			11 %	146	0.3 %	0.5 %	(13)bp
Russell 1000 Median			(4)	11	0.0	0.0	(0)

Note: Based on our analysis of 503 large-cap core, growth, and value mutual funds with \$2.3 trillion in equity assets.

New stocks in basket listed in bold

Blend is comprised of the equal-weighted average of the large-cap core, large-cap growth and large-cap value funds.

Source: FactSet, Goldman Sachs Global Investment Research

Sector and stock positioning summary by fund type

Exhibit 34: Summary of mutual fund sector positioning by style relative to benchmark
holdings as of June 30, 2020

Fund type	Sector allocation	Financials	Industrials	Materials	Consumer Discretionary	Health Care	Consumer Staples	Energy	Comm. Services	Utilities	Real Estate	Information Technology
Large-cap CORE	Average Fund Weight (%)	12	9	3	11	15	7	3	10	2	2	25
	Over/(Underweight) (bp)	169	90	66	53	46	42	15	(52)	(84)	(87)	(261)
Large-cap GROWTH	Average Fund Weight (%)	5	7	2	16	16	3	0	12	0	2	37
	Over/(Underweight) (bp)	252	224	106	8	98	(172)	41	89	33	(32)	(648)
Large-cap VALUE	Average Fund Weight (%)	20	11	4	8	15	8	5	8	5	3	13
	Over/(Underweight) (bp)	168	(126)	(42)	57	114	5	5	(143)	(127)	(215)	303
Small-cap CORE	Average Fund Weight (%)	15	18	4	13	17	3	2	3	2	5	18
	Over/(Underweight) (bp)	(131)	343	24	90	(345)	4	5	7	(148)	(226)	369

Note: Benchmark indices used for overweight/(underweight) calculations were as follows:

S&P 500 for large-cap core, Russell 1000 Growth for large-cap growth, Russell 1000 Value for large-cap value, Russell 2000 for small-cap core mutual funds

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 35: Summary of most overweight and most underweight mutual fund stock positions

holdings as of June 30, 2020; performance as of August 13, 2020

Large-cap core (Avg Fund: +2.2%; S&P 500: +5.7%)						Small-cap core (Avg Fund: -5.9%; Russell 2000: -4.5%)					
Overweight			Underweight			Overweight			Underweight		
Ticker	Avg OW	YTD	Ticker	Avg UW	YTD	Ticker	Avg OW	YTD	Ticker	Avg UW	YTD
BAC	25 bp	(24)%	AAPL	(223)bp	58 %	PLUS	18 bp	(9)%	NVAX	(24)bp	3249 %
V	23	6	AMZN	(156)	71	MEDP	18	53	MYOK	(22)	39
WFC	22	(52)	MSFT	(79)	33	ADUS	17	0	MRTX	(21)	7
CMCSA	19	(2)	BRK.B	(49)	(6)	EBS	17	150	WMGI	(20)	(1)
MO	17	(11)	T	(49)	(20)	UCTT	16	19	IIVI	(20)	48
GE	16	(41)	PYPL	(39)	78	ECPG	15	25	INO	(20)	336
C	16	(32)	GOOGL	(35)	13	NSIT	13	(23)	HR	(19)	(15)
UNH	15	10	NFLX	(35)	49	CRMT	13	(12)	BL	(19)	45
MKC	15	20	FB	(32)	27	HUBG	12	3	ADC	(18)	(5)
APD	15	24	JNJ	(31)	3	FIX	12	8	RARE	(18)	101

Large-cap growth (Avg Fund: +19.6%; R1000 Growth: +21.5%)						Large-cap value (Avg Fund: -8.3%; R1000 Value: -9.8%)					
Overweight			Underweight			Overweight			Underweight		
Ticker	Avg OW	YTD	Ticker	Avg UW	YTD	Ticker	Avg OW	YTD	Ticker	Avg UW	YTD
V	41 bp	6 %	AAPL	(557)bp	58 %	MRK	94 bp	(7)%	BRK.B	(122)bp	(6)%
NOW	40	55	MSFT	(417)	33	C	81	(32)	XOM	(104)	(35)
CRM	34	20	AMZN	(163)	71	ORCL	64	3	DIS	(89)	(9)
ADBE	33	36	ABBV	(84)	11	ABBV	48	11	INTC	(73)	(17)
ROP	32	28	MRK	(84)	(7)	AIG	44	(39)	T	(71)	(20)
ZTS	27	21	FB	(80)	27	UNH	40	10	JNJ	(71)	3
EA	26	32	PEP	(66)	3	AVGO	38	7	DHR	(63)	35
ECL	26	2	PG	(65)	11	WFC	33	(52)	LIN	(62)	18
PYPL	25	78	KO	(60)	(11)	CB	32	(15)	BA	(61)	(46)
FISV	23	(14)	AMGN	(57)	1	UPS	27	39	PG	(53)	11

Source: FactSet, Goldman Sachs Global Investment Research

LARGE-CAP CORE – 187 mutual funds, \$708 billion AUM

Performance: We analyze 187 large-cap core funds with \$708 billion of assets under management. The top three funds represent 44% of AUM and the next 10 represent 22% of AUM. 30% of funds have outperformed the S&P 500 YTD, above the 10-year average of 27%. The average fund returned 2.2% YTD versus 5.7% for the S&P 500 index (Exhibit 36).

Flows: Large-cap core mutual funds reported net outflows of \$42 billion in 1H 2020 compared with net outflows of \$80 billion during full-year 2019.

Positioning (Sector/Industry):

The average large-cap core mutual fund raised its relative allocation most to **Consumer Staples** during 2Q20 (+41 bp to 42 bp overweight). Within Consumer Staples, **Household Products** (+17 bp) and **Tobacco** (+12 bp) experienced the largest increases in fund exposure.

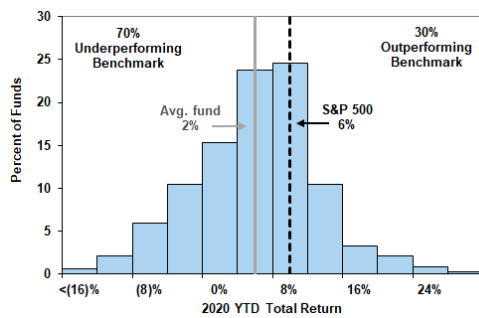
Large-cap core managers are 261 bp underweight **Information Technology**, the most underweight of any sector and largest underweight to the sector since at least 2012. Funds rotated away from **Software** (-31 bp) and **Tech Hardware** (-8 bp), leaving both industries at their most underweight levels since at least 2012 (53 bp and 228 bp underweight, respectively).

Positioning (Stock):

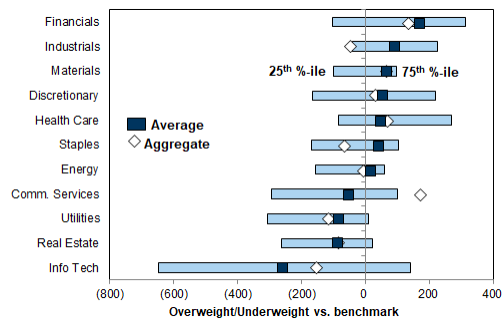
AMZN (-36 bp), **GOOGL** (-24 bp), **AAPL** (-13 bp) and **MSFT** (-10 bp) are among the stocks that experienced the largest declines in core fund positioning during 2Q and all are among the most underweight stocks across core managers. Funds also decreased their allocation to **FB** by 5 bp, keeping the stock among the 10 most underweight fund positions.

Exhibit 36: Return distribution of large-cap core funds
as of August 13, 2020

Exhibit 37: Current sector over/underweight by funds
holdings as of June 30, 2020



Source: FactSet, Goldman Sachs Global Investment Research



Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 38: Sector weightings of LARGE-CAP CORE mutual funds compared with the S&P 500 index

holdings as of June 30, 2020

	Financials	Industrials	Materials	Consumer Discretionary	Health Care	Consumer Staples	Energy	Comm. Services	Utilities	Real Estate	Information Technology
S&P 500 Weight (%)	10.1	8.0	2.5	10.8	14.6	7.0	2.8	10.8	3.1	2.8	27.5
YTD Return (%)	(17)	(4)	3	21	6	3	(36)	9	(4)	(6)	25
Average Fund Weight (%)	11.8	8.9	3.2	11.4	15.1	7.4	3.0	10.3	2.2	2.0	24.9
Over/(Underweight) (bp)	169 ▼	90 ▼	66 ▲	53 ▲	46 ▼	42 ▲	15 ▲	(52) ▼	(84) ▲	(87) ▼	(261) ▼
Previous quarter (bp)	186	101	47	36	84	1	(8)	(31)	(96)	(85)	(238)
Aggregate Fund Weight (%)	11.4	7.5	3.2	11.1	15.3	6.3	2.8	12.5	1.9	2.0	25.9
Over/(Underweight) (bp)	136 ▲	(48) ▼	66 ▲	30 ▼	70 ▼	(66) ▲	(7) ▲	172 ▲	(116) ▲	(83) ▲	(154) ▼
Previous quarter (bp)	118	34	10	31	182	(162)	(20)	129	(172)	(107)	(44)

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 39: Large-cap core most overweight stocks

holdings as of June 30, 2020

OVERWEIGHT				
Name	Ticker	Sector	Weight	
			Average Index	Dif
Bank of America Corp	BAC	Financials	1.0 % 0.7 %	25 bp
Visa Inc.	V	Info Tech	1.5 1.3	23
Wells Fargo & Co.	WFC	Financials	0.6 0.4	22
Comcast Corp.	CMCSA	Comm. Services	0.9 0.7	19
Altria Group Inc	MO	Staples	0.5 0.3	17
General Electric	GE	Industrials	0.4 0.2	16
Citigroup Inc.	C	Financials	0.6 0.4	16
UnitedHealth Group	UNH	Health Care	1.2 1.1	15
McCormick & Co.	MKC	Staples	0.2 0.1	15
Air Products and Chemicals	APD	Materials	0.4 0.2	15
Top 10 overweight positions			7.2 % 5.4 %	182 bp

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 40: Large-cap core most underweight stocks

holdings as of June 30, 2020

UNDERWEIGHT				
Name	Ticker	Sector	Weight	
			Average Index	Dif
Apple Inc.	AAPL	Info Tech	3.6 % 5.8 %	(223)bp
Amazon.com Inc.	AMZN	Discretionary	2.9 4.5	(156)
Microsoft Corp.	MSFT	Info Tech	5.2 6.0	(79)
Berkshire Hathaway	BRKB	Financials	0.9 1.4	(49)
AT&T Inc.	T	Comm. Services	0.4 0.8	(49)
PayPal Holdings Inc	PYPL	Info Tech	0.4 0.8	(39)
Alphabet Inc.	GOOGL	Comm. Services	2.9 3.3	(35)
Netflix Inc.	NFLX	Comm. Services	0.4 0.8	(35)
Facebook Inc.	FB	Comm. Services	1.8 2.1	(32)
Johnson & Johnson	JNJ	Health Care	1.1 1.4	(31)
Top 10 underweight positions			19.7 % 26.9 %	(728)bp

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 41: Largest increase in position vs. benchmark

Exhibit 42: Largest decrease in position vs. benchmark

large-cap core holdings as of June 30, 2020

INCREASES in position					
Name	Ticker	Sector	Average over/underweight		
			Current	Last Qtr	Chg
Intel Corp.	INTC	Info Tech	(31)bp	(44)bp	13 bp
AT&T Inc.	T	Comm. Services	(49)	(61)	12
Procter & Gamble	PG	Staples	(24)	(34)	10
Visa Inc.	V	Info Tech	23	13	10
Philip Morris Intl	PM	Staples	(8)	(17)	9
Chevron Corp.	CVX	Energy	(13)	(20)	7
Workday Inc.	WDAY	Info Tech	13	6	7
General Dynamics	GD	Industrials	4	(3)	7
Southern Co.	SO	Utilities	(13)	(19)	6
Air Products and Chemicals	APD	Materials	15	9	6
Top 10 Increases			(84)bp	(170)bp	87 bp

Source: FactSet, Goldman Sachs Global Investment Research

large-cap core holdings as of June 30, 2020

DECREASES in position					
Name	Ticker	Sector	Average over/underweight		
			Current	Last Qtr	Chg
Alnylam Pharmaceuticals	ALNY	Health Care	2 bp	48 bp	(46)bp
Amazon.com Inc.	AMZN	Discretionary	(156)	(120)	(36)
Alphabet Inc.	GOOGL	Comm. Services	(35)	(11)	(24)
Alibaba Grp Hldg (ADR)	BABA	Discretionary	16	32	(16)
PayPal Holdings Inc	PYPL	Info Tech	(39)	(23)	(16)
Medtronic	MDT	Health Care	1	16	(15)
Apple Inc.	AAPL	Info Tech	(223)	(209)	(13)
General Electric	GE	Industrials	16	27	(11)
Adobe Inc.	ADBE	Info Tech	(13)	(3)	(10)
Microsoft Corp.	MSFT	Info Tech	(79)	(69)	(10)
Top 10 Decreases			(510)bp	(313)bp	(196)bp

Source: FactSet, Goldman Sachs Global Investment Research

LARGE-CAP GROWTH – 164 mutual funds, \$1.05 trillion AUM

Performance: We analyze 164 large-cap growth funds with \$1.05 trillion of assets under management. The top three funds represent 34% of AUM and the next 10 represent 29% of AUM. 36% of funds have outperformed the Russell 1000 Growth YTD, above the 10-year average of 32%. The average fund has returned 19.6% YTD versus 21.5% for the Russell 1000 Growth index (Exhibit 43).

Flows: Large-cap growth mutual funds reported net outflows of \$26 billion in 1H 2020 compared with net outflows of \$74 billion during full-year 2019.

Positioning (Sector/Industry):

The average large-cap growth fund is more exposed to cyclical sectors now than it was at the start of 2Q. Exposure to **Industrials** and **Materials** rose by 282 bp and 58 bp last quarter, respectively, and funds are overweight both sectors relative to the Russell 1000 Growth Index. In addition, **Financials** remains the most overweight sector (252 bp).

Also consistent with this cyclical tilt, allocations to **Information Technology** (-263 bp), **Health Care** (-60 bp) and **Consumer Staples** (-38 bp) decreased most during 2Q. Similar to core managers, growth fund relative exposure declined within **Software** (-249 bp to 352 bp underweight) and **Tech Hardware** (-164 bp to 540 bp

underweight), leaving both industries at the most underweight levels since at least 2012. Info Tech as a sector also sits at the most underweight level since 2012 (648 bp UW).

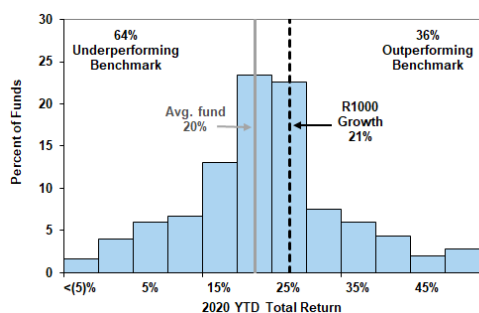
Positioning (Stock)

Despite its underweight relative allocation to Software, the average large-cap growth fund is most overweight **V** (41 bp OW), **NOW** (40 bp OW), **CRM** (34 bp OW), and **ADBE** (33 bp OW).

With their 10%, 10% and 8% respective weightings in the Russell 1000 Growth Index, **AAPL** (557 bp UW), **MSFT** (417 bp UW), and **AMZN** (163 bp UW) are the most underweight stocks among growth managers.

Exhibit 43: Return distribution of large-cap growth funds

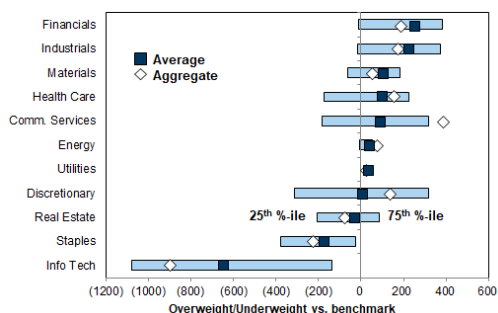
as of August 13, 2020



Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 44: Current sector over/underweight by funds

holdings as of June 30, 2020



Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 45: Sector weightings of LARGE-CAP GROWTH mutual funds compared with the Russell 1000 Growth index

holdings as of June 30, 2020

	Financials	Industrials	Materials	Health Care	Comm. Services	Energy	Utilities	Consumer Discretionary	Real Estate	Consumer Staples	Information Technology
R1000 Growth Weight (%)	2.1	4.6	0.8	15.0	10.9	0.1	0.0	15.4	2.1	4.8	43.9
Average Fund Weight (%)	4.6	6.9	1.9	16.0	11.8	0.5	0.3	15.5	1.7	3.1	37.4
Over/(Underweight) (bp)	252 ▲	224 ▲	106 ▲	98 ▼	89 ▲	41 ▲	33 ▼	8 ▼	(32) ▲	(172) ▼	(648) ▼
Previous quarter (bp)	236	(58)	48	157	85	31	38	46	(67)	(134)	(384)
Aggregate Fund Weight (%)	4.0	6.4	1.3	16.5	14.8	0.9	0.3	16.8	1.3	2.6	34.9
Over/(Underweight) (bp)	189 ▲	174 ▲	52 ▲	154 ▼	387 ▲	78 ▲	27 ▼	136 ▲	(76) ▲	(225) ▼	(897) ▼
Previous quarter (bp)	152	(98)	11	225	376	68	37	120	(109)	(164)	(619)

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 46: Large-cap growth most overweight stocks

holdings as of June 30, 2020

OVERWEIGHT					
Name	Ticker	Sector	Weight		
			Average	Index	Dif
Visa Inc.	V	Info Tech	2.6 %	2.2 %	41 bp
ServiceNow Inc.	NOW	Info Tech	0.9	0.5	40
salesforce.com Inc.	CRM	Info Tech	1.4	1.0	34
Adobe Inc.	ADBE	Info Tech	1.8	1.4	33
Roper Technologies	ROP	Industrials	0.4	0.0	32
Zoetis Inc.	ZTS	Health Care	0.7	0.4	27
Electronic Arts	EA	Comm. Svcs.	0.3	0.0	26
Ecolab Inc.	ECL	Materials	0.3	0.1	26
PayPal Holdings Inc.	PYPL	Info Tech	1.6	1.4	25
Fiserv Inc.	FISV	Info Tech	0.3	0.1	23
Top 10 overweight positions			10.4 %	7.3 %	308 bp

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 47: Large-cap growth most underweight stocks

holdings as of June 30, 2020

UNDERWEIGHT					
Name	Ticker	Sector	Weight		
			Average	Index	Dif
Apple Inc.	AAPL	Info Tech	4.6 %	10.2 %	(557)bp
Microsoft Corp.	MSFT	Info Tech	6.3	10.4	(417)
Amazon.com Inc.	AMZN	Discretionary	6.4	8.0	(163)
AbbVie Inc.	ABBV	Health Care	0.3	1.1	(84)
Merck & Co. Inc.	MRK	Health Care	0.3	1.2	(84)
Facebook Inc.	FB	Comm. Svcs	2.9	3.7	(80)
PepsiCo Inc.	PEP	Staples	0.3	0.9	(66)
Procter & Gamble	PG	Staples	0.2	0.9	(65)
Coca-Cola Co.	KO	Staples	0.1	0.7	(60)
Amgen Inc.	AMGN	Health Care	0.4	0.9	(57)
Top 10 underweight positions			21.8 %	38.1 %	(1633)bp

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 48: Largest increase in position vs. benchmark

large-cap growth holdings as of June 30, 2020

INCREASES in position					
Name	Ticker	Sector	Average over/underweight		
			Current	Last Qtr	Chg
Union Pacific	UNP	Industrials	(3)bp	(35)bp	32 bp
Fiserv Inc.	FISV	Info Tech	23	(5)	28
Alphabet Inc.	GOOGL	Comm. Svcs.	(7)	(35)	28
Texas Instruments	TXN	Info Tech	(5)	(32)	27
Ecolab Inc.	ECL	Materials	26	2	24
Stryker Corp.	SYK	Health Care	9	(15)	23
Merck & Co. Inc.	MRK	Health Care	(84)	(103)	19
S&P Global Inc.	SPGI	Financials	16	(3)	19
Waste Mgmt	WM	Industrials	9	(9)	18
UnitedHealth	UNH	Health Care	(21)	(38)	17
Top 10 Increases			(36)bp	(273)bp	237 bp

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 49: Largest decrease in position vs. benchmark

large-cap growth holdings as of June 30, 2020

DECREASES in position					
Name	Ticker	Sector	Average over/underweight		
			Current	Last Qtr	Chg
Apple Inc.	AAPL	Info Tech	(557)bp	(383)bp	(174)bp
Microsoft Corp.	MSFT	Info Tech	(417)	(301)	(117)
Amazon.com Inc.	AMZN	Discretionary	(163)	(52)	(111)
Procter & Gamble	PG	Staples	(65)	10	(75)
Facebook Inc.	FB	Comm. Svcs.	(80)	(18)	(62)
Tesla Inc.	TSLA	Discretionary	(54)	(14)	(40)
Mastercard Inc.	MA	Info Tech	(1)	33	(34)
Adobe Inc.	ADBE	Info Tech	33	60	(26)
Uber	UBER	Industrials	9	33	(24)
Visa Inc.	V	Info Tech	41	64	(24)
Top 10 Decreases			(1255)bp	(569)bp	(687)bp

Source: FactSet, Goldman Sachs Global Investment Research

LARGE-CAP VALUE – 152 mutual funds, \$586 billion AUM

Performance: We analyze 152 large-cap value funds with \$586 billion of assets under management. The top three funds represent 41 % of AUM and the next 10 represent 32% of AUM. 60% of funds have outperformed the Russell 1000 Value

YTD, above the 10-year average of 34%. The average fund fell 8.3% YTD versus a 9.8% decline for the Russell 1000 Value index (Exhibit 50) .

Flows: Large-cap value mutual funds reported net outflows of \$20 billion in 1H 2020 compared with net outflows of \$46 billion during full-year 2019.

Positioning (Sector/Industry):

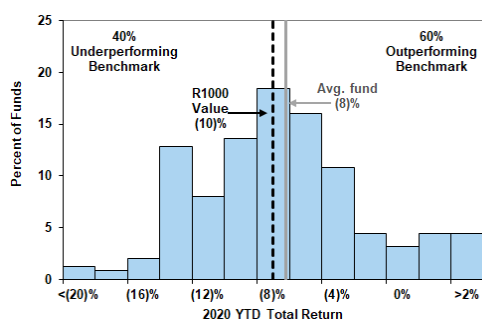
For the average large-cap value fund, relative allocations to **Financials** (+281 bp), **Consumer Staples** (+153 bp) and **Utilities** (+128 bp) increased most last quarter. Within Financials, exposure to **Banks** rose by 112 bp – the largest quarterly increase during the past five years.

Allocations decreased most in **Information Technology** (-265 bp), **Industrials** (-224 bp) and **Consumer Discretionary** (-93 bp). While core and growth funds posted record **Software** underweights, value managers are overweight the industry by 213 bp. Elsewhere in Info Tech, allocations to both **IT Services** and **Communications Equipment** declined by 129 bp, the largest decrease in exposure for each industry since at least 2012. Within Industrials, allocations decreased in **Aerospace & Defense** (-87 bp) and **Machinery** (-30 bp)–the opposite of the activity seen from growth managers.

Positioning (Stock):

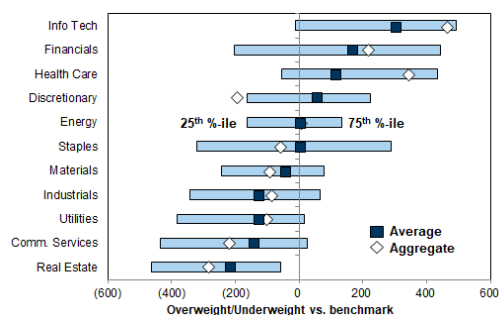
While **BRK.B** is the most underweight stock for the average large-cap value fund (122 bp underweight), it also experienced the greatest increase in exposure in 2Q of any stock (+97 bp). **MRK** is the most overweight stock among value funds, with the average fund holding over 5x the index weight (1.1 % average holding vs. a 0.2 % Russell 1000 Value index weight).

Exhibit 50: Return distribution of large-cap value funds
as of August 13, 2020



Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 51: Current sector over/underweight by funds
holdings as of June 30, 2020



Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 52: Sector weightings of LARGE-CAP VALUE mutual funds compared with the Russell 1000 Value index

holdings as of June 30, 2020

	Information Technology	Financials	Health Care	Consumer Discretionary	Energy	Consumer Staples	Materials	Industrials	Utilities	Comm. Services	Real Estate
R1000 Value Weight (%)	10.2	18.5	14.1	7.0	5.3	8.1	4.5	12.3	5.9	9.3	4.7
Average Fund Weight (%)	13.3	20.2	15.2	7.5	5.3	8.2	4.1	11.1	4.6	7.9	2.6
Over/(Underweight) (bp)	303 ▼	168 ▲	114 ▲	57 ▼	5 ▲	5 ▲	(42) ▲	(126) ▼	(127) ▲	(143) ▼	(215) ▼
Previous quarter (bp)	568	(113)	66	150	(37)	(148)	(56)	98	(256)	(70)	(203)
Aggregate Fund Weight (%)	14.9	20.7	17.5	5.0	5.4	7.6	3.6	11.5	4.9	7.1	1.9
Over/(Underweight) (bp)	464 ▼	216 ▲	343 ▲	(193) ▼	8 ▲	(57) ▲	(91) ▲	(87) ▼	(102) ▲	(219) ▼	(283) ▲
Previous quarter (bp)	702	(144)	320	32	(71)	(175)	(112)	191	(297)	(161)	(286)

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 53: Large-cap value most overweight stocks

holdings as of June 30, 2020

OVERWEIGHT					
Name	Ticker	Sector	Weight		
			Average	Index	Dif
Merck & Co. Inc.	MRK	Health Care	1.1 %	0.2 %	94 bp
Citigroup Inc.	C	Financials	1.6	0.8	81
Oracle Corp.	ORCL	Info Tech	0.7	0.1	64
AbbVie Inc.	ABBV	Health Care	0.6	0.1	48
American Intl Group	AIG	Financials	0.6	0.2	44
UnitedHealth Group	UNH	Health Care	0.7	0.3	40
Broadcom Inc.	AVGO	Info Tech	0.4	0.0	38
Wells Fargo & Co.	WFC	Financials	1.0	0.7	33
Chubb Limited	CB	Financials	0.7	0.4	32
United Parcel Service	UPS	Industrials	0.5	0.2	27
Top 10 overweight positions			8.0 %	2.9 %	502 bp

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 54: Large-cap value most underweight stocks

holdings as of June 30, 2020

UNDERWEIGHT					
Name	Ticker	Sector	Weight		
			Average	Index	Dif
Berkshire Hathaway	BRK.B	Financials	1.2 %	2.5 %	(122)bp
Exxon Mobil Corp.	XOM	Energy	0.3	1.3	(104)
Walt Disney	DIS	Comm. Svcs.	0.5	1.4	(89)
Intel Corp.	INTC	Info Tech	1.1	1.8	(73)
AT&T Inc.	T	Comm. Svcs.	0.8	1.5	(71)
Johnson & Johnson	JNJ	Health Care	1.6	2.3	(71)
Danaher Corp.	DHR	Health Care	0.2	0.8	(63)
Linde	LIN	Materials	0.2	0.8	(62)
Boeing Co.	BA	Industrials	0.1	0.7	(61)
Procter & Gamble	PG	Staples	0.6	1.1	(53)
Top 10 underweight positions			6.5 %	14.2 %	(769)bp

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 55: Largest increase in position vs. benchmark

large-cap value holdings as of June 30, 2020

Exhibit 56: Largest decrease in position vs. benchmark

large-cap value holdings as of June 30, 2020

INCREASES in position					
Name	Ticker	Sector	Average over/underweight		
			Current	Last Qtr	Chg
Berkshire Hathaway	BRKB	Financials	(122)bp	(220)bp	97 bp
Procter & Gamble	PG	Staples	(53)	(148)	95
Intel Corp.	INTC	Info Tech	(73)	(121)	48
JPMorgan Chase	JPM	Financials	(36)	(82)	46
Pfizer Inc.	PFE	Health Care	(15)	(57)	42
AT&T Inc.	T	Comm. Svcs.	(71)	(106)	35
Johnson & Johnson	JNJ	Health Care	(71)	(100)	29
Raytheon Tech.	RTX	Industrials	(8)	(37)	29
Bank of America	BAC	Financials	20	(7)	27
Citigroup Inc.	C	Financials	81	55	26
Top 10 Increases			(348)bp	(823)bp	475 bp

Source: FactSet, Goldman Sachs Global Investment Research

DECREASES in position					
Name	Ticker	Sector	Average over/underweight		
			Current	Last Qtr	Chg
Comcast Corp.	CMCSA	Comm. Svcs.	18 bp	71 bp	(53)bp
Int'l Business Machines	IBM	Info Tech	(31)	1	(32)
Fidelity National Info Svc.	FIS	Info Tech	(43)	(17)	(26)
Honeywell Intl	HON	Industrials	(31)	(5)	(26)
T-Mobile US Inc.	TMUS	Comm. Svcs.	(26)	(4)	(22)
Electronic Arts	EA	Comm. Svcs.	(14)	6	(19)
Waste Management	WM	Industrials	(18)	1	(19)
Centene Corp.	CNC	Health Care	(4)	14	(18)
PepsiCo Inc.	PEP	Staples	21	38	(17)
American Express	AXP	Financials	(0)	16	(16)
Top 10 Decreases			(128)bp	122 bp	(250)bp

Source: FactSet, Goldman Sachs Global Investment Research

SMALL-CAP CORE – 69 mutual funds, \$45 billion AUM

Performance: We analyze 69 small-cap core funds with \$45 billion of assets under management. The top three funds represent 44% of AUM and the next 10 represent 30% of AUM. 39% of funds have outperformed the Russell 2000 YTD, below with the 10-year average of 41%. The average fund fell 5.9% YTD accompanied by a drop of 4.5% for the Russell 2000 index (Exhibit 57).

Flows: Small-cap core mutual funds reported net outflows of \$6 billion in 1H 2020 compared with net outflows of \$13 billion during full-year 2019.

Positioning (Sector/Industry):

On average, small-cap core fund defensive exposure rose in 2Q, as relative allocations increased most in **Health Care** (+238 bp), **Information Technology** (+135 bp) and **Utilities** (+52 bp). Consistent with this defensive tilt, allocations decreased most in **Financials** (-124 bp), **Materials** (-84 bp), and **Industrials** (-77 bp).

Funds remain most overweight Info Tech (369 bp overweight), in particular **Semiconductors** (130 bp OW) and **IT Services** (118 bp OW). On net, small-cap core funds are most underweight **Health Care** (345 bp UW), especially **Biotech** (558 bp UW) and **Pharmaceuticals** (52 bp UW).

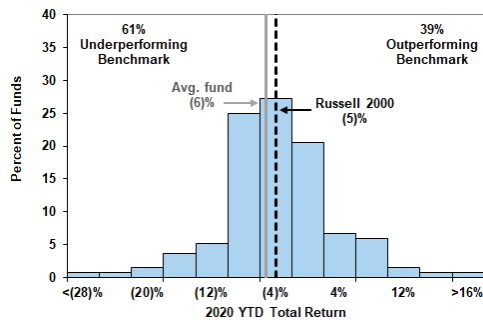
Positioning (Stock):

Small-cap core managers are most underweight few of the high-flying and volatile COVID vaccine and therapeutics stocks, such as **NVAX** (24 bp UW), **MYOK** (22 bp UW), and **INO** (20 bp UW). Despite being underweight the sector as a whole, three

of the top four single stock overweights come from Health Care: **MEDP** (18 bp OW), **ADUS** (17 bp OW), and **EBS** (17 bp OW).

Exhibit 57: Return distribution of small-cap core funds

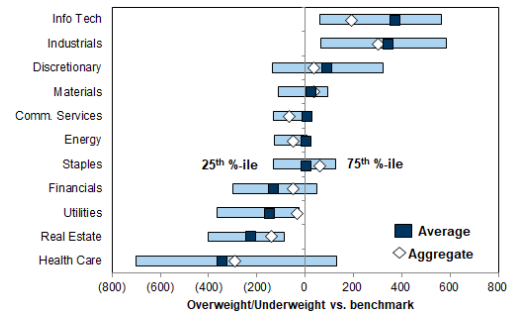
as of August 13, 2020



Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 58: Current sector over/underweight by funds

holdings as of June 30, 2020



Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 59: Sector weightings of SMALL-CAP CORE mutual funds compared with the Russell 2000 index

holdings as of June 30, 2020

	Information Technology	Consumer Discretionary	Consumer Staples	Comm. Services	Energy	Financials	Health Care	Industrials	Materials	Real Estate	Utilities
Russell 2000 Weight (%)	13.9	14.5	11.8	4.0	2.5	2.3	3.3	16.5	3.8	7.1	20.6
Average Fund Weight (%)	17.5	18.0	12.7	4.3	2.6	2.3	3.4	15.2	2.3	4.8	17.2
Over/(Underweight) (bp)	369 ▲	343 ▼	90 ▼	24 ▼	7 ▼	5 ▼	4 ▲	(131) ▼	(148) ▲	(226) ▼	(345) ▲
Previous quarter (bp)	234	420	162	108	59	40	(18)	(7)	(200)	(222)	(583)
Aggregate Fund Weight (%)	15.8	17.5	12.2	4.4	1.9	1.7	4.0	16.0	3.4	5.7	17.7
Over/(Underweight) (bp)	190 ▲	299 ▼	36 ▼	38 ▼	(67) ▼	(52) ▼	62 ▲	(50) ▼	(33) ▲	(139) ▲	(291) ▲
Previous quarter (bp)	175	478	67	189	(26)	(3)	12	93	(146)	(180)	(662)

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 60: Small-cap core most overweight stocks

holdings as of June 30, 2020

Exhibit 61: Small-cap core most underweight stocks

holdings as of June 30, 2020

OVERWEIGHT					
Name	Ticker	Sector	Weight		
			Average	Index	Dif
ePlus inc.	PLUS	Info Tech	0.2 %	0.1 %	18 bp
Medpace Holdings	MEDP	Health Care	0.3	0.1	18
Addus HomeCare	ADUS	Health Care	0.2	0.1	17
Emergent BioSolutions	EBS	Health Care	0.4	0.2	17
Ultra Clean Holdings	UCTT	Info Tech	0.2	0.1	16
Encore Capital Group	ECPG	Financials	0.2	0.1	15
Insight Enterprises	NSIT	Info Tech	0.2	0.1	13
America's Car-Mart	CRMT	Discretionary	0.2	0.0	13
Hub Group Inc.	HUBG	Industrials	0.2	0.1	12
Comfort Systems USA	FIX	Industrials	0.2	0.1	12
Top 10 overweight positions			2.4 %	0.9 %	152 bp

Source: FactSet, Goldman Sachs Global Investment Research

UNDERWEIGHT					
Name	Ticker	Sector	Weight		
			Average	Index	Dif
Novavax Inc.	NVAX	Health Care	0.0 %	0.3 %	(24)bp
MyoKardia Inc.	MYOK	Health Care	0.1	0.3	(22)
Mirati Therapeutics	MRTX	Health Care	0.0	0.2	(21)
Wright Medical Group	WMGI	Health Care	0.0	0.2	(20)
II-VI Inc.	IMI	Info Tech	0.0	0.2	(20)
Inovio Pharmaceuticals	INO	Health Care	0.0	0.2	(20)
Healthcare Realty Trust	HR	Real Estate	0.0	0.2	(19)
BlackLine Inc.	BL	Info Tech	0.0	0.2	(19)
Agree Realty Corp.	ADC	Real Estate	0.0	0.2	(18)
Ultragenyx Pharmaceutical	RARE	Health Care	0.1	0.3	(18)
Top 10 underweight positions			0.3 %	2.4 %	(202)bp

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 62: Largest increase in position vs. benchmark

small-cap core holdings as of June 30, 2020

INCREASES in position					
Name	Ticker	Sector	Average over/underweight		
			Current	Last Qtr	Chg
NorthWestern Corp.	NWE	Utilities	(2)bp	(12)bp	10 bp
Selective Insurance Group	SIGI	Financials	(3)	(13)	10
Ultra Clean Holdings	UCTT	Info Tech	16	7	8
ManTech Intl	MANT	Info Tech	6	(2)	8
LHC Group Inc.	LHCG	Health Care	(3)	(11)	8
Medpace Holdings	MEDP	Health Care	18	11	7
K12 Inc.	LRN	Discretionary	12	6	6
J2 Global Inc.	JCOM	Info Tech	8	2	6
Onto Innovation	ONTO	Info Tech	5	(1)	6
NeoPhotonics Corp.	NPTN	Info Tech	10	5	6
Top 10 Increases			65 bp	(9)bp	74 bp

Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 63: Largest decrease in position vs. benchmark

small-cap core holdings as of June 30, 2020

DECREASES in position					
Name	Ticker	Sector	Average over/underweight		
			Current	Last Qtr	Chg
Cabot Microelectronics	CCMP	Info Tech	3 bp	18 bp	(14)bp
Methode Electronics	MEI	Info Tech	4	16	(13)
Forward Air Corp.	FWRD	Industrials	1	11	(10)
Horizon Therapeutics	HZNP	Health Care	12	22	(9)
Essent Group Ltd.	ESNT	Financials	(4)	5	(9)
KB Home	KBH	Discretionary	(6)	3	(9)
Encompass Health	EHC	Health Care	14	21	(6)
Brooks Automation	BRKS	Info Tech	(1)	6	(6)
Qualys Inc.	QLYS	Info Tech	(10)	(4)	(6)
Lithia Motors Inc.	LAD	Discretionary	(8)	(2)	(6)
Top 10 Decreases			6 bp	96 bp	(89)bp

Source: FactSet, Goldman Sachs Global Investment Research

Appendix

Exhibit 64: Top 50 domestic large-cap core, growth, and value and small-cap core mutual funds by AUM

holdings as of June 30, 2020; pricing as of August 13, 2020; excludes ETFs and index objective funds

Fund name	Type	Ticker	Equity holdings (\$ billions)	Return	
				YTD	2019
The Growth Fund of America	Large-cap Growth	AGTHX	\$206	16 %	28 %
Fidelity Contra Fund	Large-cap Core	FCNTX	121	20	30
Washington Mutual Invs Fund	Large-cap Value	AWSHX	118	(3)	26
Fundamental Investors	Large-cap Core	ANCFX	99	1	28
American Funds Investment Co	Large-cap Core	AIVSX	95	3	25
T. Rowe Price Blue Chip Growth Fund	Large-cap Growth	TRBCX	79	21	30
AMCAP Fund	Large-cap Growth	AMCPX	70	8	26
Vanguard PRIMECAP Fund	Large-cap Core	VPMAX	61	1	28
Dodge & Cox Stock Fund	Large-cap Value	DODGX	60	(9)	25
American Mutual Fund	Large-cap Value	AMRMX	60	(2)	22
T. Rowe Price Growth Stock Fund	Large-cap Growth	PRGFX	59	19	31
Fidelity Growth Co Fund	Large-cap Growth	FDGRX	50	39	38
MFS Value Fund	Large-cap Value	MEIIX	46	(7)	30
Vanguard Windsor II Fund	Large-cap Value	VWNAX	41	(2)	29
Vanguard Dividend Growth Fund	Large-cap Value	VDIGX	40	2	31
Harbor Capital Appreciation Fund	Large-cap Growth	HACAX	35	31	33
Strategic Advisers Fidelity U.S. Total Stock Fund	Large-cap Core	FCTDX	35	6	30
Fidelity Blue Chip Growth Fund	Large-cap Growth	FBGRX	35	33	33
Vanguard Equity Income Fund	Large-cap Value	VEIRX	34	(7)	25
Vanguard U.S. Growth Fund	Large-cap Growth	VWUAX	33	33	34
MFS Growth Fund	Large-cap Growth	MFEKX	32	20	38
JPMorgan Equity Income Fund	Large-cap Value	OIEJX	30	(7)	27
Strategic Advisers Core Fund	Large-cap Core	FCSAX	28	5	32
DFA U.S. Core Equity 2 Portfolio	Large-cap Core	DFQTX	25	(0)	29
DFA U.S. Core Equity 1 Portfolio	Large-cap Core	DFEOX	24	1	30
Fidelity Advisor New Insights Fund	Large-cap Growth	FINSX	24	12	29
JPMorgan Large Cap Growth Fund	Large-cap Growth	JLGMX	23	36	39
Fidelity OTC Pt	Large-cap Growth	FOCPX	22	26	39
Edgewood Growth Fund	Large-cap Growth	EGFIX	22	23	34
Columbia Dividend Income Fund	Large-cap Value	GSFTX	21	(2)	28
Fidelity Magellan	Large-cap Growth	FMAGX	19	17	31
Parnassus Core Equity Fund	Large-cap Core	PRBLX	19	7	31
T. Rowe Price Large-Cap Growth Fund	Large-cap Growth	TRLGX	18	21	28
Franklin Growth Fund	Large-cap Growth	FKGRX	17	14	32
ClearBridge Large Cap Growth Fund	Large-cap Growth	SBLYX	17	18	32
Vanguard Windsor Fund	Large-cap Value	VWNEX	17	(10)	31
BlackRock Eq Dividend	Large-cap Value	MADVX	16	(8)	28
Janus Henderson Research Fund	Large-cap Growth	JNRFX	16	18	35
Janus Henderson Forty Fund	Large-cap Growth	JFRDX	16	22	37
Invesco Diversified Dividend Fund	Large-cap Value	LCEFX	15	(9)	25
Franklin Dynatech Fund	Large-cap Growth	FKDNX	15	32	36
JPMorgan U.S. Equity Fund	Large-cap Core	JUEMX	15	12	32
T. Rowe Price Dividend Growth Fund	Large-cap Core	PRDGX	15	3	31
T. Rowe Price Equity Income Fund	Large-cap Value	PRFDX	15	(12)	27
American Century Ultra Investor	Large-cap Growth	TWCUX	15	29	35
Akre Focus	Large-cap Growth	AKRIX	14	15	35
Fidelity Contrafund	Large-cap Core	FLCNX	14	19	31
DFA U.S. Small Cap Portfolio	Small-cap Core	DFSTX	14	(8)	21
Bridge Builder Large Cap Growth Fund	Large-cap Growth	BBGLX	13	18	33
MainStay Large Cap Growth Fund	Large-cap Growth	MLAIX	13	22	34

Source: EPFR, FactSet, Goldman Sachs Global Investment Research

Exhibit 65: Comparative sector composition of major US equity market indices as of June 30, 2020

Russell 1000 Growth (\$14.6 Trillion)		S&P 500 (\$25.6 Trillion)		Russell 1000 Value (\$14.1 Trillion)		Russell 2000 (\$1.8 Trillion)	
Sectors							
Name	Weight	Name	Weight	Name	Weight	Name	Weight
Information Technology	43.9%	Information Technology	27.5%	Financials	18.5%	Health Care	20.6%
Consumer Discretionary	15.4	Health Care	14.6	Health Care	14.1	Financials	16.5
Health Care	15.0	Consumer Discretionary	10.8	Industrials	12.3	Industrials	14.5
Communication Services	10.9	Communication Services	10.8	Information Technology	10.2	Information Technology	13.9
Consumer Staples	4.8	Financials	10.1	Communication Services	9.3	Consumer Discretionary	11.8
Industrials	4.6	Industrials	8.0	Consumer Staples	8.1	Real Estate	7.1
Financials	2.1	Consumer Staples	7.0	Consumer Discretionary	7.0	Materials	4.0
Real Estate	2.1	Utilities	3.1	Utilities	5.9	Utilities	3.8
Materials	0.8	Real Estate	2.8	Energy	5.3	Consumer Staples	3.3
Unknown	0.2	Energy	2.8	Real Estate	4.7	Communication Services	2.5
Energy	0.1	Materials	2.5	Materials	4.5	Energy	2.3
100.0%		100.0%		100.0%		100.0%	
Largest Industries							
Software	18.9%	Software	9.4%	Banks	7.1%	Biotechnology	10.9%
Technology Hardware Storage & Peripherals	10.3	Technology Hardware Storage & Peripherals	6.1	Oil Gas & Consumable Fuels	4.9	Banks	8.5
Internet & Direct Marketing Retail	8.8	IT Services	5.7	Pharmaceuticals	4.7	Equity Real Estate Investment Trusts (REITs)	6.3
IT Services	8.7	Interactive Media & Services	5.5	Equity Real Estate Investment Trusts (REITs)	4.6	Software	5.5
Interactive Media & Services	8.3	Internet & Direct Marketing Retail	4.9	Health Care Equipment & Supplies	4.3	Health Care Equipment & Supplies	3.6
Semiconductors & Semiconductor Equipment	5.5	Semiconductors & Semiconductor Equipment	4.8	Capital Markets	4.1	Machinery	3.6
Biotechnology	4.2	Pharmaceuticals	4.3	Semiconductors & Semiconductor Equipment	3.7	Semiconductors & Semiconductor Equipment	2.8
Pharmaceuticals	3.3	Health Care Equipment & Supplies	3.8	Electric Utilities	3.6	Hotels Restaurants & Leisure	2.7
Health Care Equipment & Supplies	2.9	Banks	3.6	Insurance	3.5	Insurance	2.5
Specialty Retail	2.8	Health Care Providers & Services	2.8	Diversified Telecommunication Services	3.3	Specialty Retail	2.4
73.7%		50.9%		43.8%		49.0%	
Largest Companies							
Microsoft Corp. (MSFT)	10.4%	Microsoft Corp. (MSFT)	6.0%	Berkshire Hathaway (BRK.B)	2.5%	Deckers Outdoor (DECK)	0.3%
Apple Inc. (AAPL)	10.2	Apple Inc. (AAPL)	5.8	Johnson & Johnson (JNJ)	2.3	LHC Group Inc. (LHCG)	0.3
Amazon.com Inc. (AMZN)	8.0	Amazon.com Inc. (AMZN)	4.5	JPMorgan Chase (JPM)	2.0	BJ's Wholesale Club (BJ)	0.3
Alphabet Inc. (GOOGL)	4.5	Alphabet Inc. (GOOGL)	3.3	Intel Corp. (INTC)	1.8	Churchill Downs (CHDN)	0.3
Facebook Inc. (FB)	3.7	Facebook Inc. (FB)	2.1	Verizon Communications (VZ)	1.6	Novavax Inc. (NVAX)	0.3
Visa Inc. (V)	2.2	Johnson & Johnson (JNJ)	1.4	AT&T Inc. (T)	1.5	MyoKardia Inc. (MYOK)	0.3
Mastercard Inc. (MA)	1.8	Berkshire Hathaway (BRK.B)	1.4	Walt Disney (DIS)	1.4	Helen of Troy Limited (HELE)	0.3
UnitedHealth Group (UNH)	1.6	Visa Inc. (V)	1.3	Cisco Systems Inc. (CSCO)	1.4	SiteOne Landscape Supply (SITE)	0.3
NVIDIA Corp. (NVDA)	1.5	Procter & Gamble (PG)	1.2	Exxon Mobil Corp. (XOM)	1.3	EastGroup Properties (EGP)	0.3
Adobe Inc. (ADBE)	1.4	JPMorgan Chase (JPM)	1.1	Alphabet Inc. (GOOGL)	1.3	Ultragenyx Pharmaceutical (RARE)	0.3
PayPal Holdings Inc (PYPL)	1.4	UnitedHealth Group (UNH)	1.1	Bank of America Corp (BAC)	1.3	STAG Industrial (STAG)	0.2
Netflix Inc. (NFLX)	1.3	Home Depot Inc. (HD)	1.1	Pfizer Inc. (PFE)	1.3	Silicon Laboratories (SLAB)	0.2
Merck & Co. Inc. (MRK)	1.2	Mastercard Inc. (MA)	1.0	Comcast Corp. (CMCSA)	1.3	Arrowhead Pharmaceuticals (ARWR)	0.2
AbbVie Inc. (ABBV)	1.1	Intel Corp. (INTC)	1.0	Walmart Inc. (WMT)	1.2	MAXIMUS Inc. (MMS)	0.2
Tesla Inc (TSLA)	1.1	NVIDIA Corp. (NVDA)	0.9	Chevron Corp. (CVX)	1.2	Tetra Tech Inc. (TTEK)	0.2
salesforce.com Inc. (CRM)	1.0	Verizon Communications (VZ)	0.9	Procter & Gamble (PG)	1.1	Q2 Holdings Inc. (Q2TVO)	0.2
Amgen Inc. (AMGN)	0.9	AT&T Inc. (T)	0.8	Home Depot Inc. (HD)	1.0	II-VI Inc. (IVI)	0.2
Eli Lilly and (LLY)	0.9	Adobe Inc. (ADBE)	0.8	Medtronic (MDT)	0.9	Blueprint Medicines (BPMC)	0.2
Accenture (ACN)	0.9	PayPal Holdings Inc (PYPL)	0.8	McDonald's Corp. (MCD)	0.8	Mirati Therapeutics (MRTX)	0.2
PepsiCo Inc. (PEP)	0.9	Walt Disney (DIS)	0.8	NextEra Energy Inc. (NEE)	0.8	RH (RH)	0.2
56.3%		37.3%		28.0%		5.2%	

Source: FactSet, Goldman Sachs Global Investment Research

Investors should consider this report as only a single factor in making their investment decision. For Reg AC certification and other important disclosures, see the Disclosure Appendix, or go to www.gs.com/research/hedge.html (<https://www.gs.com/research/hedge.html>).

All Tags

- Mutual Fundamentals (/content/...
- Portfolio Strategy Research (/co...
- United States (/content/researc...
- Americas (/content/research/reg...
- Arjun Menon, CFA (/content/res...

FOLLOW

Arjun Menon, CFA (/content/research/authors/c14cbd89-4000-441e-b2da-11061ed6a862.html)
+1 212 902-9693

arjun.menon@gs.com
Goldman Sachs & Co. LLC

David J. Kostin (/content/research/authors/f5643e66-c1ae-11d5-8ba1-d5767450fa6b.html)
+1 212 902-6781
david.kostin@gs.com
Goldman Sachs & Co. LLC

Ben Snider (/content/research/authors/fcad423c-7101-11e0-a6fd-00215acdb578.html)
+1 212 357-1744
ben.snider@gs.com
Goldman Sachs & Co. LLC

Ryan Hammond (/content/research/authors/2717583c-907c-4b1a-93e9-e2a734db33b0.html)
+1 212 902-5625
ryan.hammond@gs.com
Goldman Sachs & Co. LLC

Cole Hunter, CFA (/content/research/authors/5dfd8224-9471-433f-aa22-449b26e41abf.html)
+1 212 357-9860
cole.p.hunter@gs.com
Goldman Sachs & Co. LLC

Jamie Yang (/content/research/authors/d492aaec-85e0-4e3d-a159-2a13767360a7.html)
+1 212 357-5913
jamie.yang@gs.com
Goldman Sachs & Co. LLC

Cormac Conners (/content/research/authors/e0e59777-ebdf-47a6-9291-aac1b13286a5.html)
+1 212 902-0024
cormac.x.conners@gs.com
Goldman Sachs & Co. LLC

Gallery

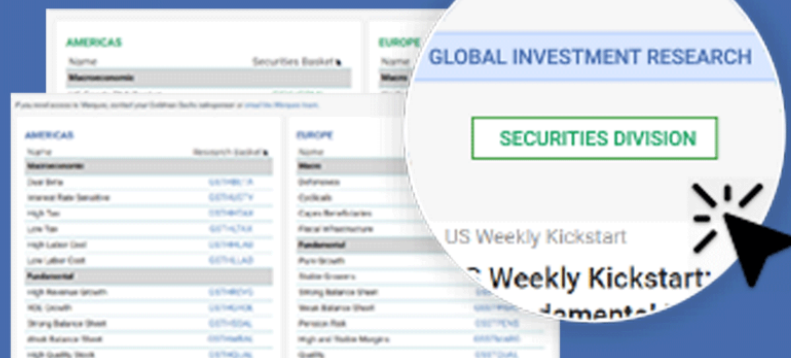
Mutual fund OVERWEIGHTS (GSTHMFOW)
Top 10 overweight: C, V, CMCSA, BAC, WFC, AIG, TGT, CB, UNH, TEL
<i>5 most overweight new constituents:</i> STT, BBY, CMI, EXC, CI
Mutual fund UNDERWEIGHTS (GSTHMFUW)
Top 10 underweights: AAPL, MSFT, AMZN, BRK.B, PG, XOM, JNJ, T, INTC, KO
<i>5 most underweight new constituents:</i> GOOGL, FB, TSLA, ACN, NVDA

View all **65** exhibits

Tags

[FOLLOW](#)

EQUITY BASKETS

[EXPLORE >](#)

(<https://research.gs.com/content/research/subjects/4ecb688e-540e-11e0-a339-00215acdb578.html>)

Also read:-

A Snapshot of Healthcare Positioning: Mutual Fund and Hedge Fund HC Holdings Entering 3Q20

(<https://research.gs.com/content/research/en/reports/2020/08/21/b4d70cf5-46ff-491c-94cc-b1ddd6580113.html>)

August 21, 2020