

US Weekly Kickstart

Foreign investors and households will supplant corporations as largest 2020 source of US equity demand

Foreign investors were the largest net buyers of US stocks in 1Q while pensions and mutual funds were the biggest net sellers. Aggregate equity allocation fell by 6 percentage points to 40% (44th percentile) last quarter. However, we estimate that equity allocation has rebounded to 44% (80th percentile) in 2Q alongside rising stock prices, a surge in retail trading activity, and equity fund inflows. We expect the potential risk of a viral “second wave” and the fast-approaching US presidential election will limit a significant increase in equity exposures in the near term. Plummeting buybacks and record issuance will drive a 80% drop in net corporate equity demand. We expect pension funds and active mutual funds will remain net sellers.

Performance

The S&P 500 was up 3.8% this week. Info Tech was the best-performing sector (+5.0%) while Utilities was the worst-performing sector (+0.6%). We expect the S&P 500 will end 2020 at 3000 (-3.7%).

S&P 500 earnings and valuation

	Goldman Sachs Portfolio Strategy		Consensus Bottom-Up	
	2020E	2021E	2020E	2021E
EPS	\$110	\$170	\$126	\$164
Growth	(33)%	55 %	(24)%	30 %
	NTM	2021E	NTM	2021E
P/E	22.5x	18.3x	24.0x	19.0x

Source: I/B/E/S, FirstCall, Goldman Sachs Investment Research

US Portfolio Strategy recommendations

Buy Dividend Growth stocks vs. S&P 500: -16.3%

Buy Low Labor Costs stocks vs. S&P 500: -5.7%

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Conversations we are having with clients: Flow of funds forecasts

Last week, the Federal Reserve published its quarterly Financial Accounts of the United States report. This Fed publication, previously known as the Flow of Funds Accounts, analyzes holdings and flows across a number of financial assets including equities, debt, and cash. See [here](#) for full publication.

Foreign investors were the biggest buyers of US equities during the recent bear market. Foreign investors, who own 16% of the US corporate equity market, bought \$187 billion of US stocks last quarter. Foreign investor purchases of a similar magnitude occurred most recently in 2Q 2019 and 1Q 2018. Monthly Treasury TIC data show that foreign investors were net buyers of US stocks in January, February, and March. Net corporate equity demand was also positive in 1Q (+\$129 billion) as firms stepped in to repurchase shares during the initial sell-off. Pension funds (-\$119 billion) and mutual funds (-\$66 billion) were the biggest net sellers. Households (which includes hedge funds) bought just \$7 billion of US stocks during 1Q.

Aggregate equity allocation among households, mutual funds, pensions, and foreign investors fell from 46% (94th percentile) at the start of 2020 to 40% (44th percentile) at the start of 2Q. These four investor categories hold 86% of all US equities. At the same time, total cash allocation rose by around \$2 trillion to 15% of financial assets (60th percentile since 1990) from 12% (3rd percentile), driven primarily by record flows into money market funds. US money market funds have garnered over \$1 trillion of inflows YTD and currently have assets of nearly \$5 trillion. Allocation to bonds also increased to 26% from 24% last quarter.

However, the rebound in equity prices, a surge in [retail trading activity](#), and recent equity fund inflows suggest that equity allocations are nearing their pre-COVID levels. Based on changes in asset prices and fund flows, we estimate that aggregate equity allocation has rebounded to 44% (80th percentile) from 40% at the start of 2Q. Since our estimate does not fully account for the jump in retail investor activity, actual equity allocations could be even higher.

Our Sentiment Indicator also indicates that positioning is modestly above average. Our SI, which combines six weekly and three monthly indicators of stock positioning across institutional, retail, and foreign investors, stands at 0.8 standard deviations above average compared with almost 2 standard deviations above average at the February peak. Among the components of our SI, hedge fund net exposures are most elevated vs. history while net futures length remains depressed.

We believe incremental net equity demand represents only a modest upside risk to share prices in the near term. Investors have re-risked since the trough and some additional room exists for equity allocations to rise and cash allocations to decline until they reach pre-crisis levels. However, we expect the potential risk of a "second wave" and the fast-approaching US presidential election will limit a significant increase in equity exposures. Periods of elevated policy uncertainty have generally coincided with lower-than-average equity allocations during the past 30 years. We expect S&P 500 will trade in a range of 2750-3200 for the rest of 2020. Our year-end target remains 3000.

We forecast net corporate equity demand will plummet by 80% this year to \$100 billion. The two major components of net corporate equity demand are gross

buybacks and share issuance. We estimate that S&P 500 gross buybacks will [decline by 50%](#) to \$370 billion in 2020, driven primarily by a 33% fall in earnings. So far, around 100 S&P 500 firms representing 45% of 2019 buybacks have suspended buybacks this year, and YTD authorizations are down 49% year/year. Substantial declines in buybacks, which regularly occur during quarterly buyback blackout periods, usually result in [wider trading ranges](#) and increased equity market volatility.

Annual US equity issuance will total \$300 billion in 2020, the highest in at least 20 years. Equity issuance has skyrocketed to \$170 billion YTD (vs. an annual average of \$230 billion since 2009) as companies scrambled to raise cash during the economic shutdown. So far in 2Q, issuance has totaled \$130 billion, which is already the highest quarterly issuance in 20 years. In 2H, we expect issuance will slow from its current pace but remain at above average levels. On one hand, the low interest rate environment will likely continue to support debt financing, which has also [surged](#) in recent months with \$1.2 trillion of IG credit issuance and \$184 billion of HY issuance YTD. On the other hand, many companies will take advantage of elevated equity prices to recapitalize and strengthen their balance sheets. In addition, we expect IPO activity will rise given the sharp recovery in equity prices, a large pipeline of deals, and elevated political and economic uncertainty on the horizon.

Pension funds will remain net sellers of stocks (-\$200 billion in 2020). Pension funds sold \$119 billion of equities in 1Q and we estimate that they will sell an additional \$80 billion this year given the sharp outperformance of equities vs. bonds in 2Q. The Goldman Sachs Derivatives desk estimates that quarter-end rebalancing could drive \$76 billion of selling by pension funds. In 2H, our expectation of similar returns for US equities and bonds suggests that net selling of stocks by pension funds will be modest.

Reduced outflows and high cash balances suggest mutual fund selling will slow through year-end and total -\$130 billion. We expect the rotation from active to passive management will continue. Active US equity mutual fund outflows YTD total -\$128 billion compared with +\$54 billion of inflows into equity ETFs and passive mutual funds. However, active US mutual fund outflows have totaled only \$11 billion so far this quarter vs. \$117 billion of outflows in 1Q. In fact, active funds have seen *inflows* of \$2.5 billion during the past month. In addition, despite their recent decline, fund cash balances (2.6% of assets) are still higher than their pre-crisis levels (2.1%).

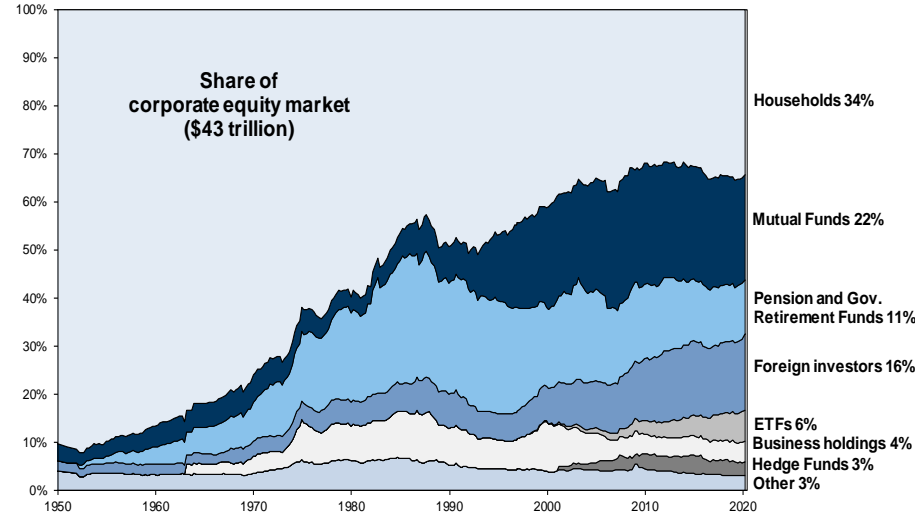
Foreign investors will continue to be net buyers of US stocks this year and will replace corporations as the largest source of equity demand (+\$300 billion). Since 1990, a weakening US dollar has been the biggest driver of foreign investor equity demand. Our FX strategists estimate that the USD may fall [by more than 20%](#) from its recent peak. However, already elevated equity allocations (86th percentile) and increased political and economic uncertainty could weigh on purchases in 2H.

We expect Households will also be net buyers in 2020 (+\$280 billion). Broker data show a surge in retail equity trading activity, and a basket of [retail favorites](#) (GSXURFAV) has outperformed both hedge fund and mutual fund favorite positions since the March 23 low. Perhaps even more than for other investor types, the pace of viral spread and path of economic normalization will be key determinants of household equity flows. In addition, political uncertainty, particularly regarding personal tax rates, represents a risk to our forecast.

Charts we are watching: Equity ownership, allocations, and flows across investor types

Exhibit 1: Ownership breakdown of the US equity market

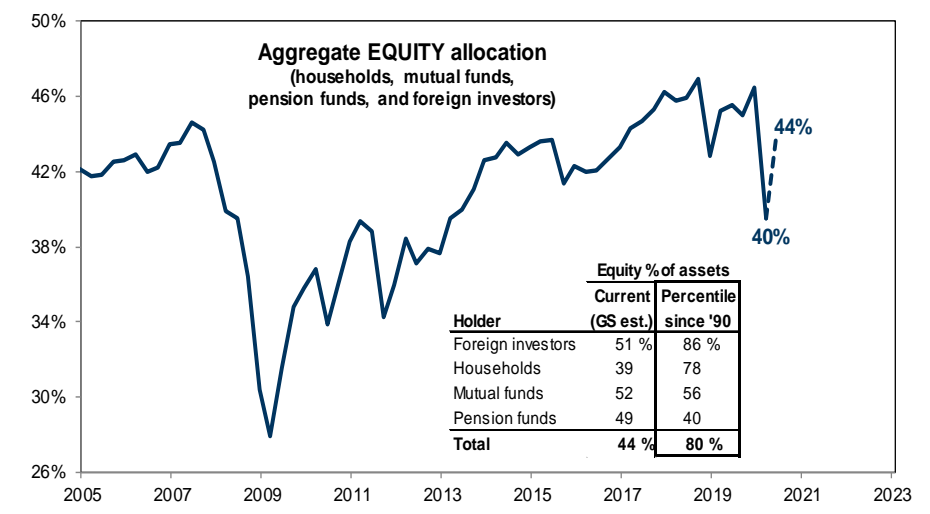
as of March 31, 2020



Source: Federal Reserve Board and Goldman Sachs Global Investment Research

Exhibit 2: Aggregate equity allocation has rebounded to the 80th percentile

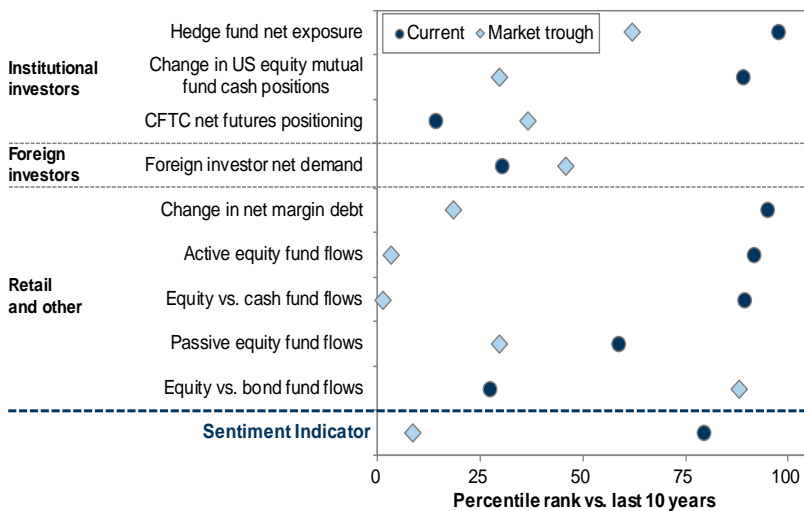
as of June 17, 2020



Source: Federal Reserve Board, FactSet, EPFR, Goldman Sachs Global Investment Research

Exhibit 3: Our Sentiment Indicator shows positioning is above average

as of June 18, 2020



Source: Goldman Sachs Prime Services, EPFR, ICI, CFTC, Goldman Sachs Global Investment Research

Exhibit 4: Buyers and sellers of US stocks

as of June 19, 2020

Category	Net US equity demand (\$ billions)					
	2016	2017	2018	2019	1Q 2020	2020E
Foreign Investors	\$(186)	\$117	\$96	\$(190)	\$187	\$300
Households	(7)	133	(96)	11	7	280
Corporations	677	285	610	537	129	100
Mutual Funds	(112)	(133)	(121)	(221)	(66)	(130)
Pension Funds	(213)	(109)	(148)	(206)	(119)	(200)
Life Insurance	(25)	(6)	(45)	1	(5)	-
Other	(17)	(24)	(3)	(26)	2	-
<i>less</i>						
Foreign equities by US	22	140	194	(251)	115	250
Credit ETFs	96	124	101	157	22	100
Included among holders above are:						
Equity ETF purchases	188	347	210	\$166	\$50	150

Source: Federal Reserve Board and Goldman Sachs Global Investment Research

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Popular retail trading stocks

Exhibit 5: Constituents of the Retail Trading Favorites basket (GSXURFAV)

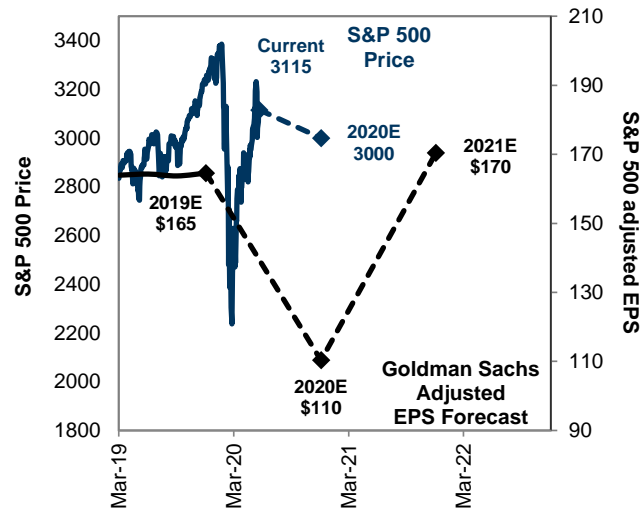
as of June 18, 2020

Company	Ticker	Industry	Mkt cap (\$bn)	YTD return	Return since 23-Mar	Cons. 2021 P/E ratio
Penn National Gaming, Inc.	PENN	Hotels Restaurants & Leisure	\$4	24 %	224 %	164.8x
Moderna, Inc.	MRNA	Biotechnology	25	232	144	120.1
Tesla Inc	TSLA	Automobiles	186	140	131	78.3
Royal Caribbean Cruises Ltd.	RCL	Hotels Restaurants & Leisure	12	(55)	111	NA
Snap, Inc. Class A	SNAP	Interactive Media & Services	32	35	106	NA
MGM Resorts International	MGM	Hotels Restaurants & Leisure	9	(44)	103	NA
Spirit Airlines, Inc.	SAVE	Airlines	2	(51)	102	15.3
Norwegian Cruise Line Holdings Ltd.	NCLH	Hotels Restaurants & Leisure	5	(67)	100	NA
GoPro, Inc. Class A	GPRO	Household Durables	1	5	95	14.0
Marathon Oil Corporation	MRO	Oil Gas & Consumable Fuels	5	(52)	94	NA
Boeing Company	BA	Aerospace & Defense	109	(41)	82	31.9
JetBlue Airways Corporation	JBLU	Airlines	3	(36)	76	27.4
NVIDIA Corporation	NVDA	Semiconductors & Semiconductor Equipment	227	57	73	37.3
Groupon, Inc.	GRPN	Internet & Direct Marketing Retail	1	(56)	68	NA
Facebook, Inc. Class A	FB	Interactive Media & Services	672	15	59	24.3
Ford Motor Company	F	Automobiles	25	(31)	58	15.7
Plug Power Inc.	PLUG	Electrical Equipment	2	71	58	NA
Apple Inc.	AAPL	Technology Hardware Storage & Peripherals	1,525	20	57	23.8
General Motors Company	GM	Automobiles	39	(25)	54	6.8
Exxon Mobil Corporation	XOM	Oil Gas & Consumable Fuels	198	(30)	52	32.7
United Airlines Holdings, Inc.	UAL	Airlines	11	(55)	50	34.7
Uber Technologies, Inc.	UBER	Road & Rail	58	12	49	NA
Zynga Inc. Class A	ZNGA	Entertainment	9	51	47	25.7
New Residential Investment Corp.	NRZ	Mortgage Real Estate Investment Trusts (REITs)	3	(52)	46	5.3
Microsoft Corporation	MSFT	Software	1,489	25	45	31.6
Amazon.com, Inc.	AMZN	Internet & Direct Marketing Retail	1,324	44	39	70.3
Bank of America Corp	BAC	Banks	217	(28)	39	11.4
Delta Air Lines, Inc.	DAL	Airlines	20	(47)	39	12.2
Walt Disney Company	DIS	Entertainment	214	(18)	38	36.9
Twitter, Inc.	TWTR	Interactive Media & Services	27	6	38	51.8
Starbucks Corporation	SBUX	Hotels Restaurants & Leisure	89	(12)	36	29.0
Advanced Micro Devices, Inc.	AMD	Semiconductors & Semiconductor Equipment	63	18	30	36.2
Alibaba Group Holding Ltd. Sponsored ADR	BABA	Internet & Direct Marketing Retail	600	5	27	20.6
Coca-Cola Company	KO	Beverages	202	(14)	26	22.4
Netflix, Inc.	NFLX	Entertainment	198	39	25	51.8
General Electric Company	GE	Industrial Conglomerates	64	(35)	19	18.7
AT&T Inc.	T	Diversified Telecommunication Services	216	(20)	15	9.2
Southwest Airlines Co.	LUV	Airlines	21	(33)	6	19.7
Fitbit, Inc. Class A	FIT	Electronic Equipment Instruments & Components	2	(6)	0	NA
MFA Financial, Inc.	MFA	Mortgage Real Estate Investment Trusts (REITs)	1	(66)	(3)	6.5
Basket median			\$29	(16)%	51 %	25.7x
S&P 500 median			22	(10)	43	18.6

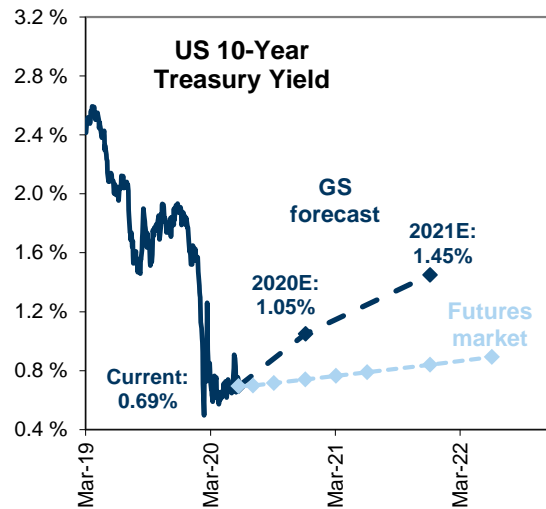
Source: Robinhood, Robintrack, FactSet, Goldman Sachs Global Investment Research.

Markets and Money Flow

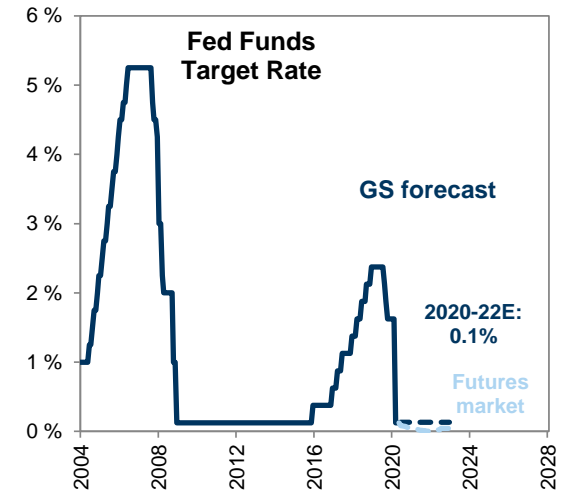
S&P 500 level and EPS



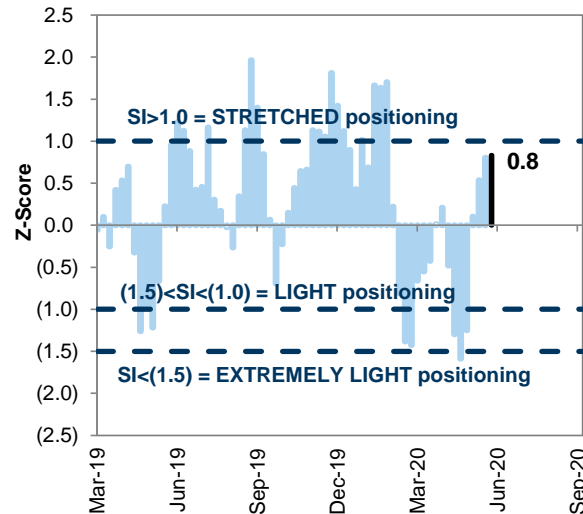
10-yr. Treasury Yields



Fed Funds Target Rate

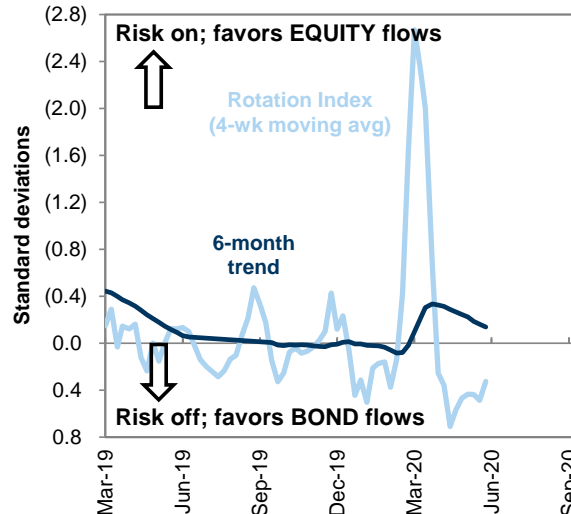


Sentiment Indicator



Note: Sentiment Indicator measures stock positioning across retail, institutional, and foreign investors versus the past 12 months. Readings below -1.0 or above +1.0 indicate extreme positions that are significant in predicting future returns.

Rotation Index



Note: Rotation Index plots the first principal component of weekly reallocation activity across equity and debt mutual fund and ETF categories as a measure of retail risk appetite.

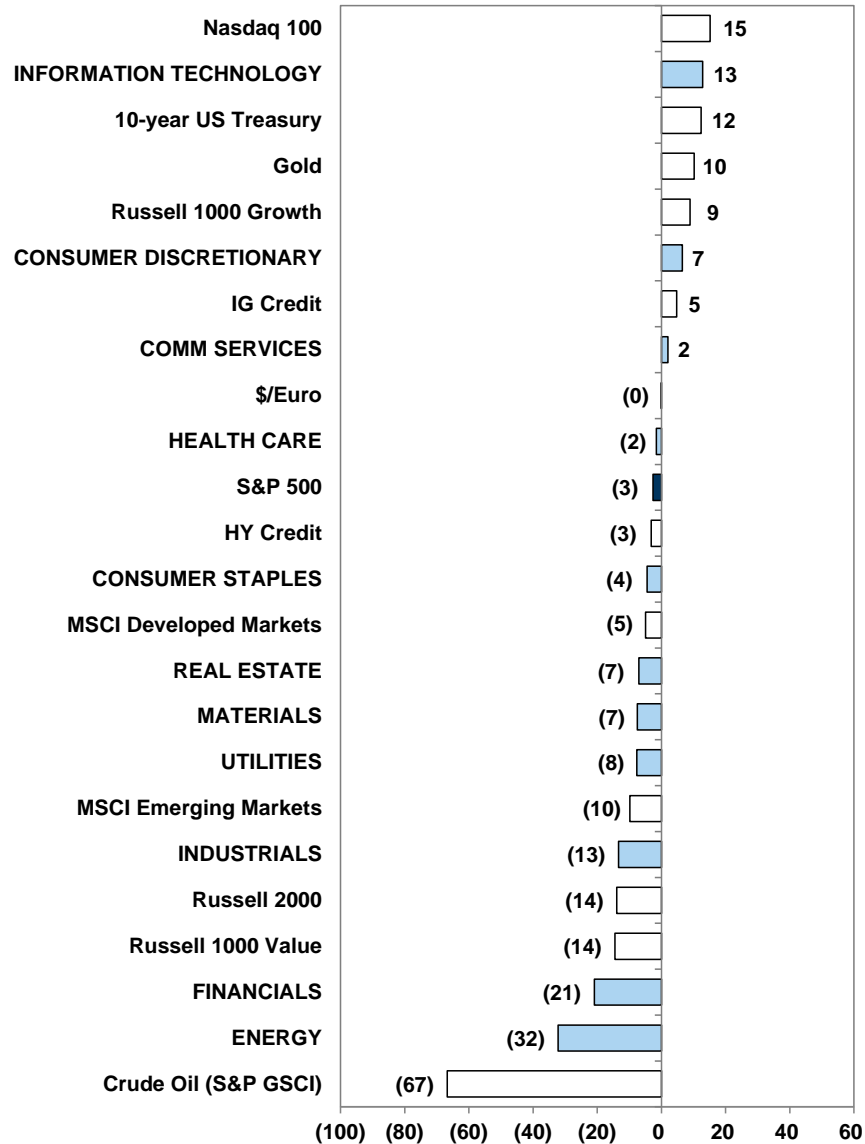
Volatility



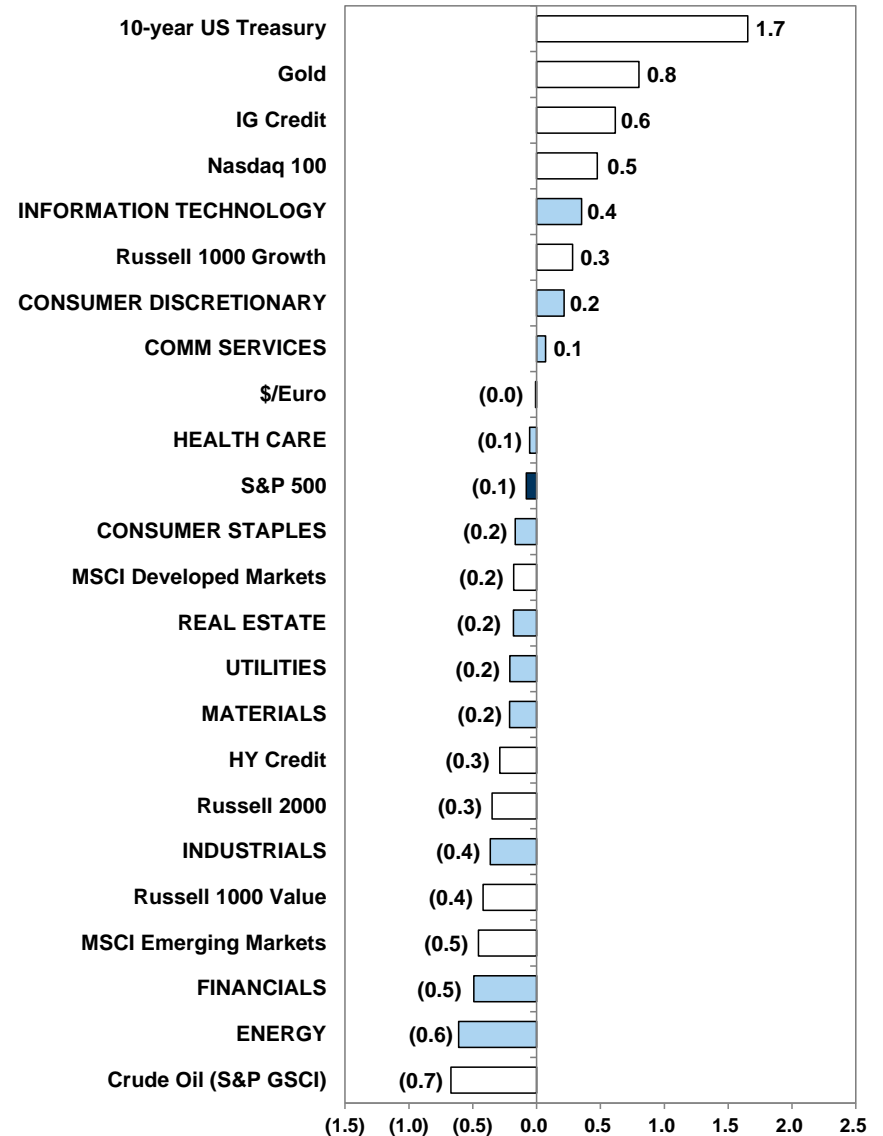
Source: Haver, EPFR, FactSet, CFTC, and Goldman Sachs Global Investment Research.

Market Performance: 2020 YTD absolute and risk-adjusted returns

Total Return



Risk Adjusted Return (Sharpe Ratio)

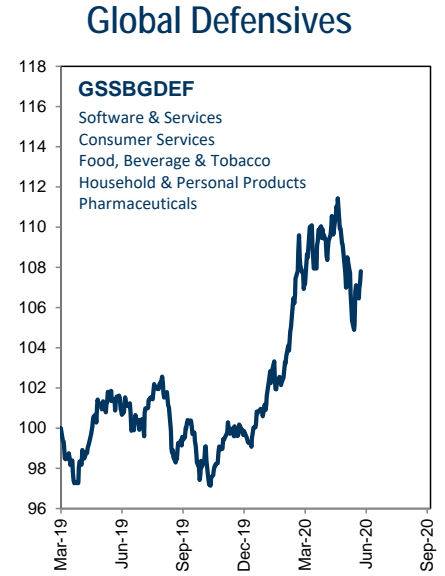
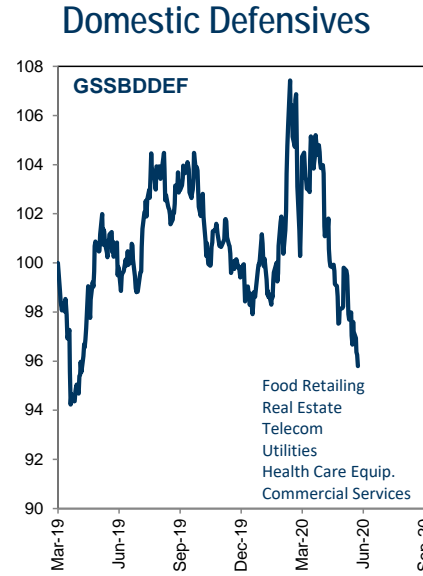
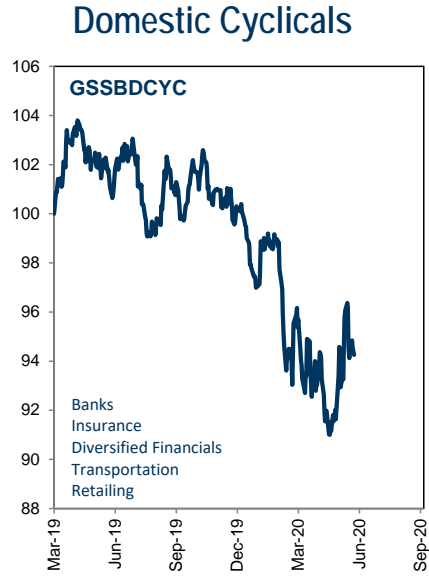
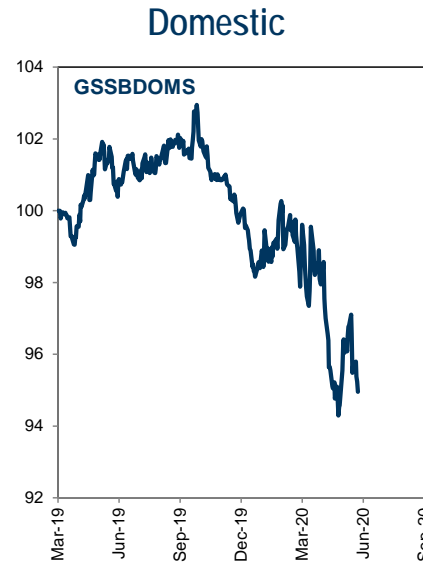
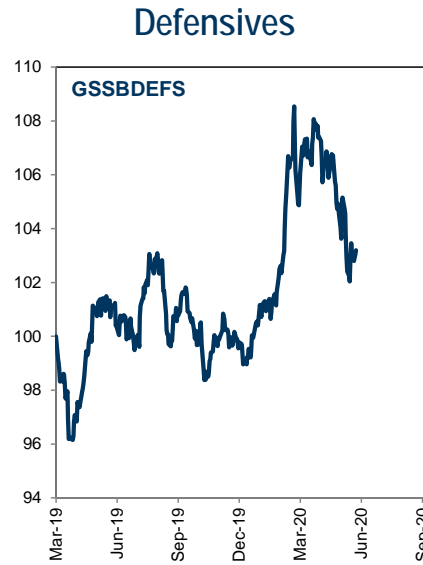


Note: Crude Oil (S&P GSCI) return represents S&P GSCI Crude Oil Index total return. Spot change equals (37)% YTD.

Source: Haver, FactSet, and Goldman Sachs Global Investment Research.

Sector Baskets – Performance Relative to S&P 500

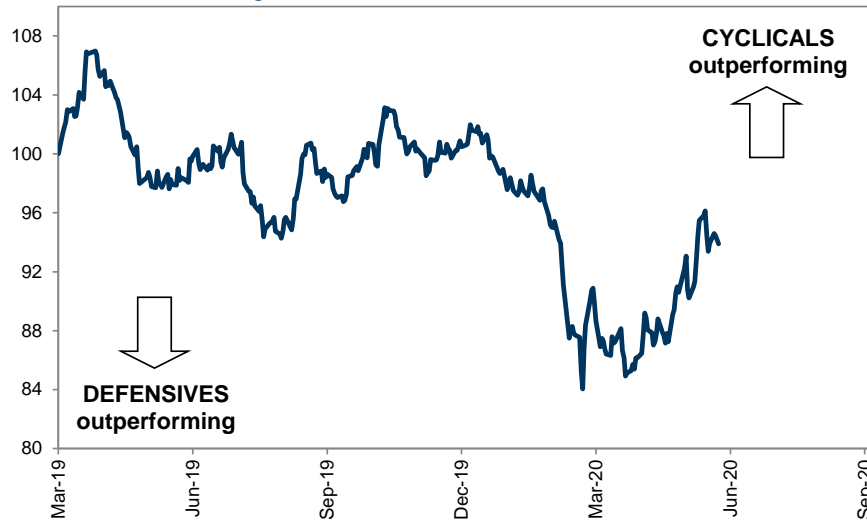
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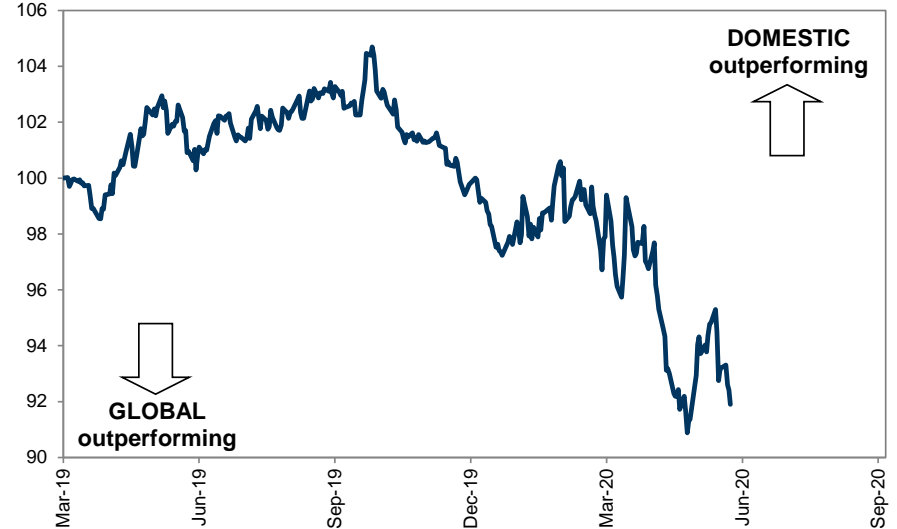
Source: FactSet and Goldman Sachs Global Investment Research.

Sector Baskets Performance

Cyclicals vs. Defensives



Domestic vs. Global



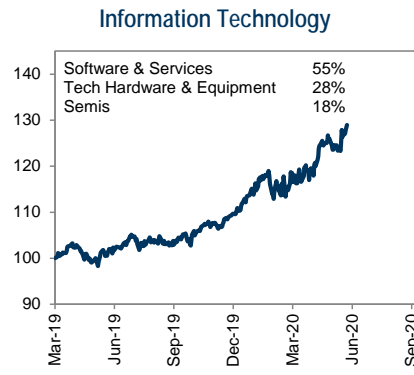
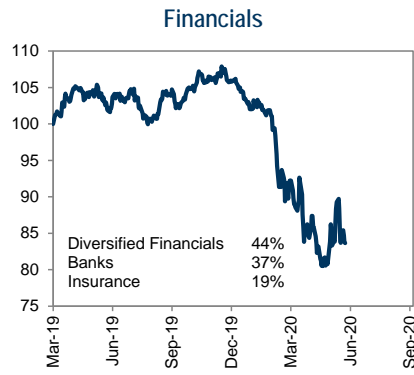
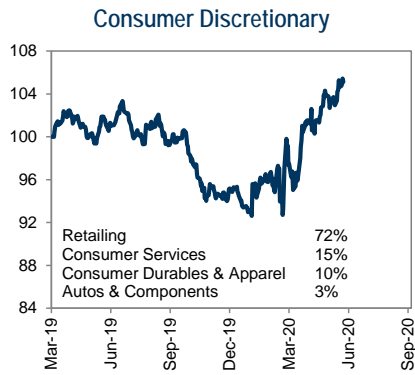
Performance and fundamentals of our sector baskets

Basket	Bloomberg Ticker <GSSBXXXX>	# of Stocks	% of S&P 500 Cap	Beta	Non-US Sales	Earnings Growth		Sales Growth		NTM P/E	LTM P/B	Div Yield	Total Return				
						2020E	2021E	2020E	2021E				1 Wk	1 Mo	3 Mo	LTM	YTD
Defensives	DEFS	217	46 %	0.8	23%	(4)%	14 %	3 %	6 %	21.7x	5.0x	2.0 %	3.5 %	3 %	22 %	11 %	0 %
Cyclicals	CYCL	283	54	1.2	35	(35)	45	(11)	11	26.5	2.8	1.7	4.2	8	39	6	(5)
Global	GLBL	278	63 %	1.1	46%	(18)%	26 %	(9)%	10 %	25.8x	4.8x	1.7 %	4.2 %	6 %	34 %	12 %	(0)%
Domestic	DOMS	222	37	0.9	16	(27)	33	2	7	21.5	2.4	2.1	3.3	6	26	3	(7)
Global Defensives	GDEF	101	30 %	0.9	45%	(4)%	17 %	(0)%	8 %	23.6x	8.0x	1.8 %	4.2 %	3 %	26 %	15 %	5 %
Global Cyclicals	GCYC	177	34	1.2	47	(29)	37	(13)	11	28.0	3.6	1.6	4.2	8	42	10	(4)
Domestic Defensives	DDEF	116	17	0.7	13	(4)	11	4	5	19.0	3.0	2.4	2.2	3	16	4	(6)
Domestic Cyclicals	DCYC	106	20	1.0	19	(43)	58	(5)	13	24.2	2.1	1.8	4.2	9	35	2	(8)
Services-providing	SERV	258	57 %	1.0	20%	(25)%	32 %	0 %	9 %	24.9x	3.3x	1.5 %	3.9 %	6 %	33 %	9 %	(1)%
Goods-producing	GOOD	242	43	1.0	45	(17)	25	(10)	9	22.9	3.9	2.3	3.7	5	28	9	(4)
S&P 500		500	100 %	1.0	30%	(24)%	30 %	(4)%	9 %	24.0x	3.5x	1.8 %	3.8 %	6 %	31 %	9 %	(3)%

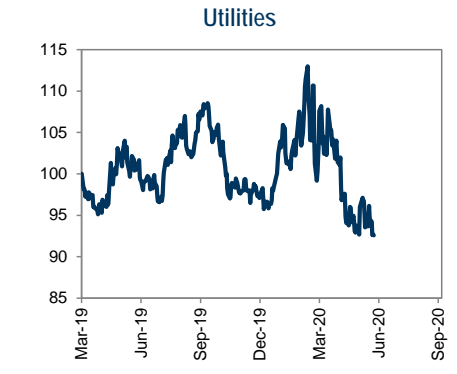
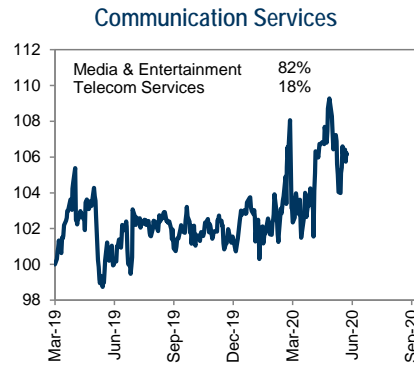
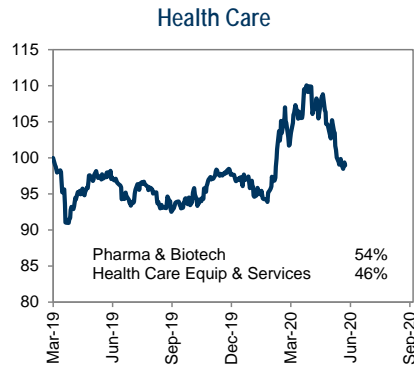
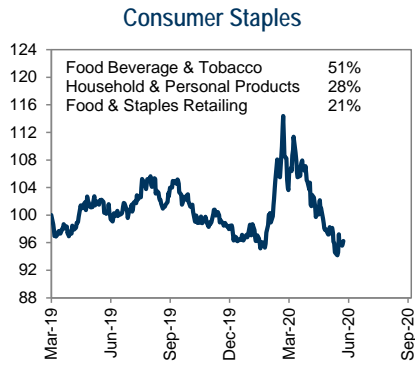
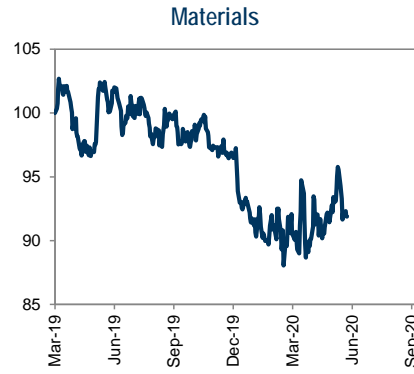
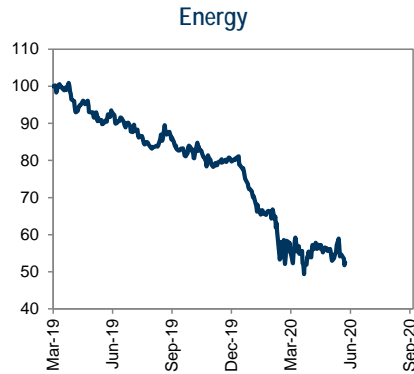
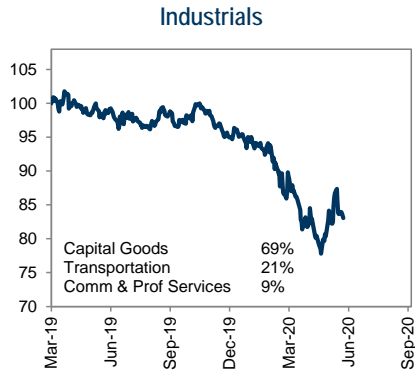
Source: FactSet and Goldman Sachs Global Investment Research.

Sectors – Relative Performance vs. S&P 500

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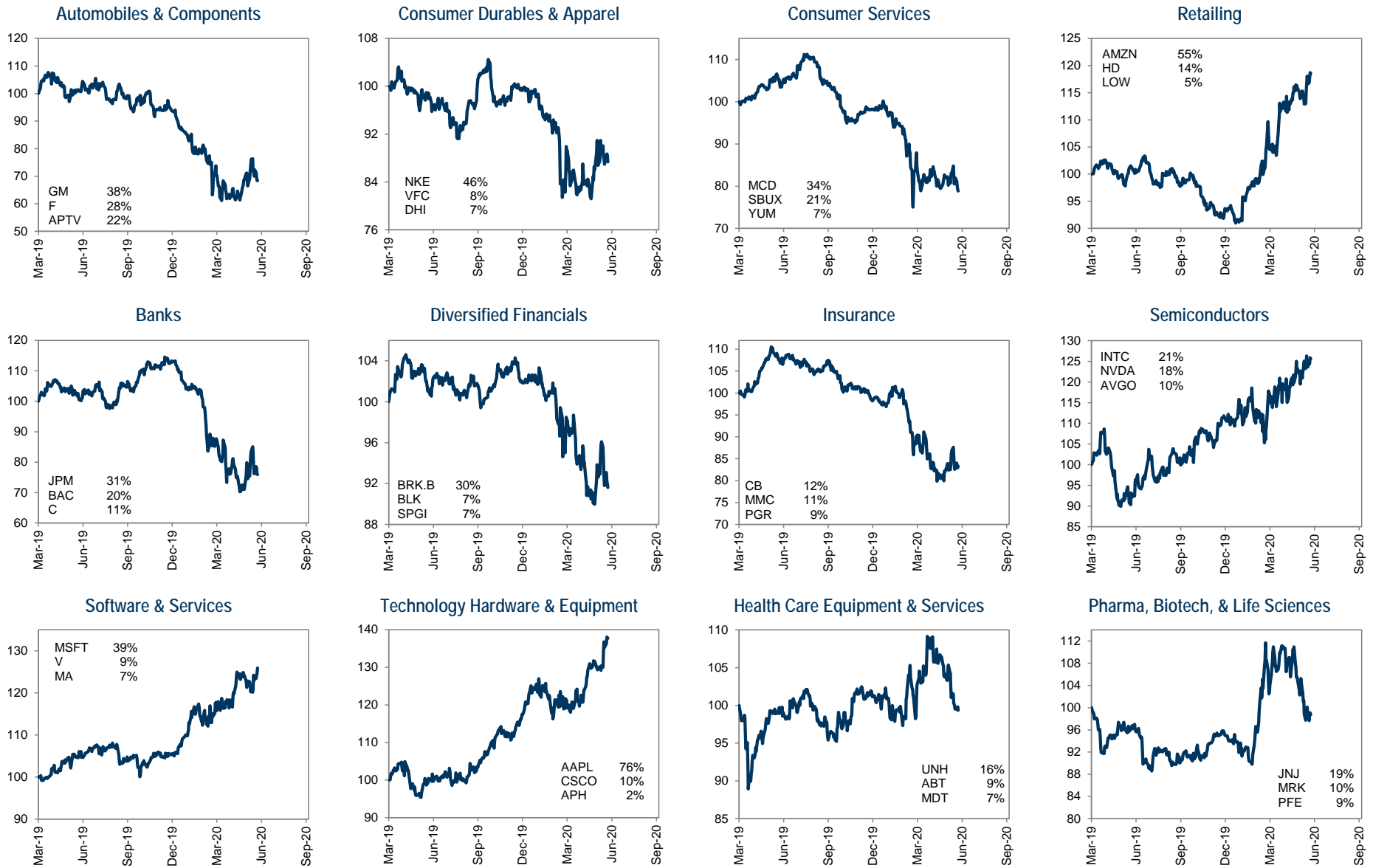


Recommended Sector Positioning			
Sectors	Goldman Sachs Weighting	S&P 500 Wgt	YTD
Info Tech	Overweight	27%	13 %
Real Estate		3	(7)
Comm Services	Neutral	11	2
Materials		3	(7)
Utilities		3	(8)
Industrials		8	(13)
Consumer Discr	Underweight	11	7
Health Care		14	(2)
Consumer Staples		7	(4)
Financials		11	(21)
Energy		3	(32)
S&P 500		100%	(3)%



Source: FactSet and Goldman Sachs Global Investment Research.

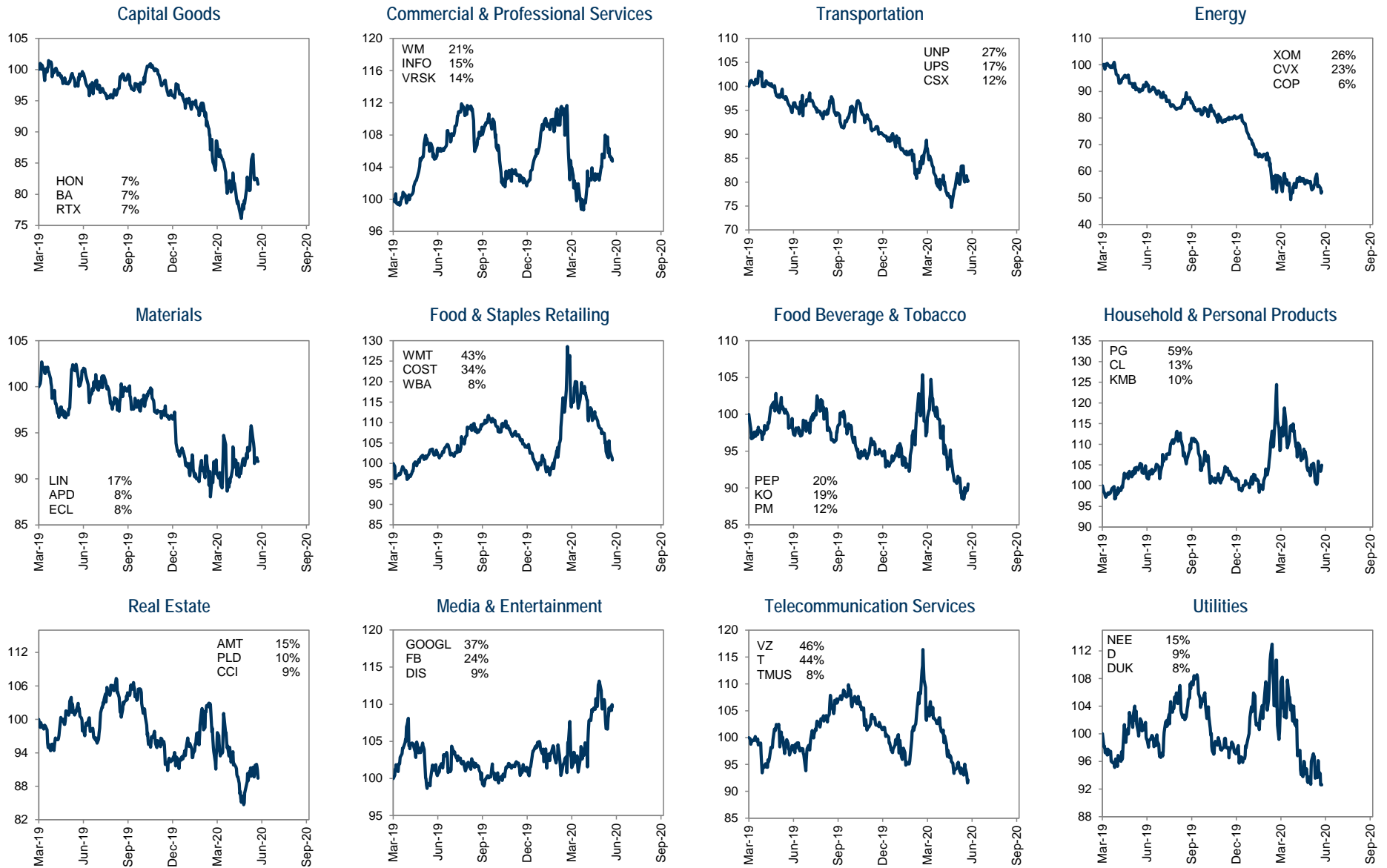
Industry Groups – Relative Performance vs. S&P 500 and 3 largest stocks



Source: FactSet, compiled by Goldman Sachs Global Investment Research.

Industry Groups – Relative Performance vs. S&P 500 and 3 largest stocks (continued)

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Source: FactSet, compiled by Goldman Sachs Global Investment Research.

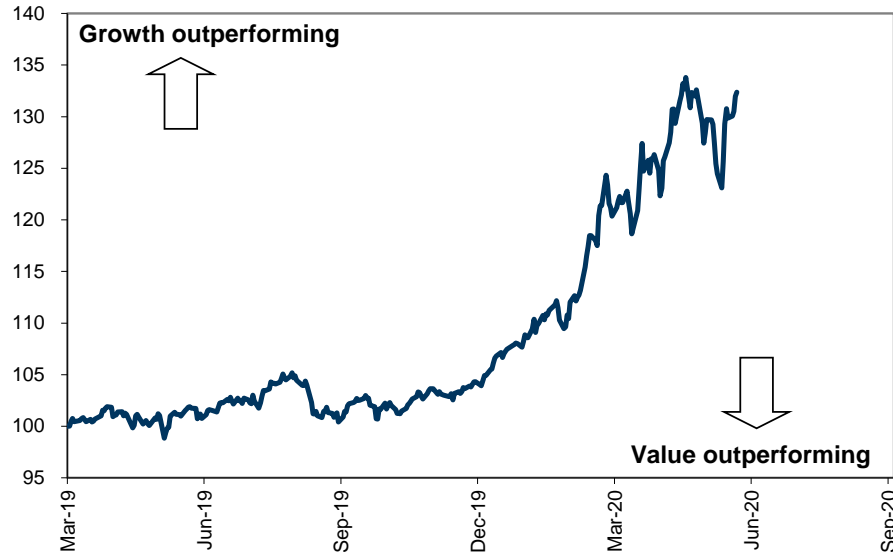
S&P 500 Sector and Industry Group Performance

S&P 500		Weight	1 Week	1 Month	3 Months	Last 12 Months	YTD		
		100 %	3.8 %	5.7 %	31 %	9 %	(3)%		
S E C T O R	Information Technology	27 %	5.0 %	7.5 %	40 %	35 %	13 %	Top quartile	
	Financials	11	4.4	9.0	27	(9)	(21)	Bottom quartile	
	Materials	3	4.4	5.9	38	0	(7)		
	Industrials	8	3.9	10.6	31	(6)	(13)		
	Real Estate	3	3.7	9.9	23	(3)	(7)		
	Consumer Discretionary	11	3.5	7.6	48	12	7		
	Energy	3	3.5	3.1	70	(31)	(32)		
	Communication Services	11	3.2	4.7	30	14	2		
	Consumer Staples	7	3.0	2.6	8	5	(4)		
	Health Care	14	3.0	(1.4)	20	11	(2)		
Utilities	3	0.6	3.6	9	1	(8)	Region	Cycle	
I N D U S T R Y G R O U P	Software & Services	15 %	5.3 %	6.2 %	38 %	28 %	15 %	Global	Defensives
	Insurance	2	5.3	9.1	31	(14)	(16)	Domestic	Cyclicals
	Transportation	2	4.9	11.5	32	(7)	(12)	Domestic	Cyclicals
	Consumer Durables & Apparel	1	4.8	10.4	46	(2)	(13)	Global	Cyclicals
	Food Beverage & Tobacco	4	4.7	4.5	14	2	(7)	Global	Defensives
	Technology Hardware & Equipment	7	4.6	9.9	39	45	12	Global	Cyclicals
	Banks	4	4.6	11.9	24	(16)	(31)	Domestic	Cyclicals
	Semiconductors & Semiconductor Equipment	5	4.5	8.1	50	43	9	Global	Cyclicals
	Materials	3	4.4	5.9	38	0	(7)	Global	Cyclicals
	Diversified Financials	5	3.9	6.7	29	(0)	(11)	Domestic	Cyclicals
	Capital Goods	6	3.8	10.9	32	(8)	(15)	Global	Cyclicals
	Real Estate	3	3.7	9.9	23	(3)	(7)	Domestic	Defensives
	Media & Entertainment	9	3.7	5.2	38	17	5	Global	Cyclicals
	Retailing	8	3.7	7.5	47	25	20	Domestic	Cyclicals
	Health Care Equipment & Services	7	3.5	(0.0)	28	9	(4)	Domestic	Defensives
	Energy	3	3.5	3.1	70	(31)	(32)	Global	Cyclicals
	Automobiles & Components	0	3.2	12.2	64	(23)	(26)	Global	Cyclicals
	Household & Personal Products	2	2.8	4.0	6	10	1	Global	Defensives
	Pharmaceuticals Biotechnology & Life Sciences	8	2.5	(2.6)	14	12	1	Global	Defensives
	Commercial & Professional Services	1	2.2	7.1	21	8	(1)	Domestic	Defensives
Consumer Services	2	2.1	5.0	49	(16)	(20)	Global	Defensives	
Telecommunication Services	2	1.1	2.8	2	3	(11)	Domestic	Defensives	
Utilities	3	0.6	3.6	9	1	(8)	Domestic	Defensives	
Food & Staples Retailing	1	(0.5)	(3.2)	(1)	7	(5)	Domestic	Defensives	

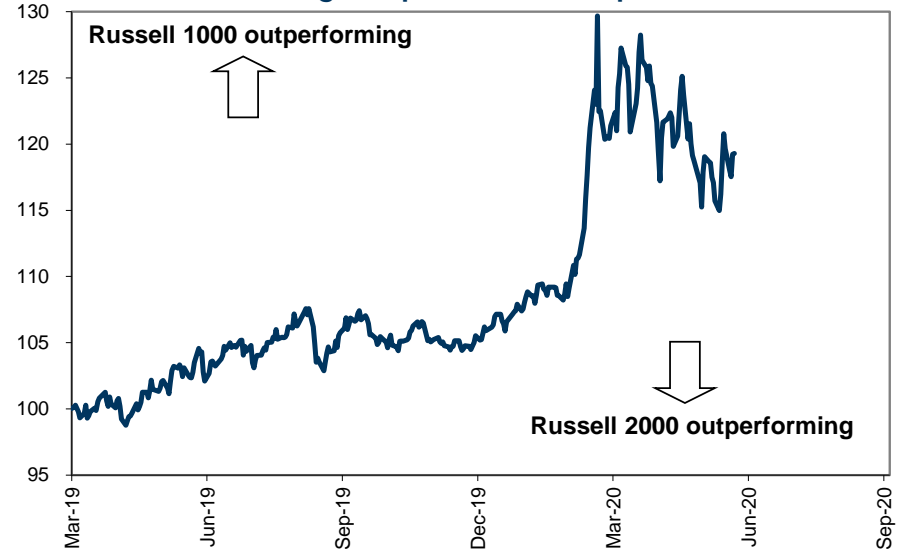
Source: FactSet and Goldman Sachs Global Investment Research.

Style and Size

Growth vs. Value



Large-cap vs. Small-cap



Sectors: Russell 1000 Growth vs. Value

Russell Sector	Weight (%)		1-Week (% Return)			YTD (% Return)		
	Growth	Value	Growth	Value	Δ (bps)	Growth	Value	Δ (bps)
Utilities	0	11	5	1	470	31	(9)	4,002
Health Care	14	14	4	2	216	3	(3)	563
Technology	42	7	5	3	174	17	(1)	1,714
Cons Discretionary	19	11	4	3	79	16	(13)	2,838
Consumer Staples	3	10	4	4	50	(6)	(5)	(104)
Financials	12	27	5	4	24	6	(23)	2,813
Industrials	9	9	4	4	2	(11)	(16)	509
Materials	2	5	4	4	(29)	(4)	(11)	768
Energy	0	7	1	4	(312)	(33)	(32)	(81)
Index	100	100	4	3	125	9	(14)	2,342

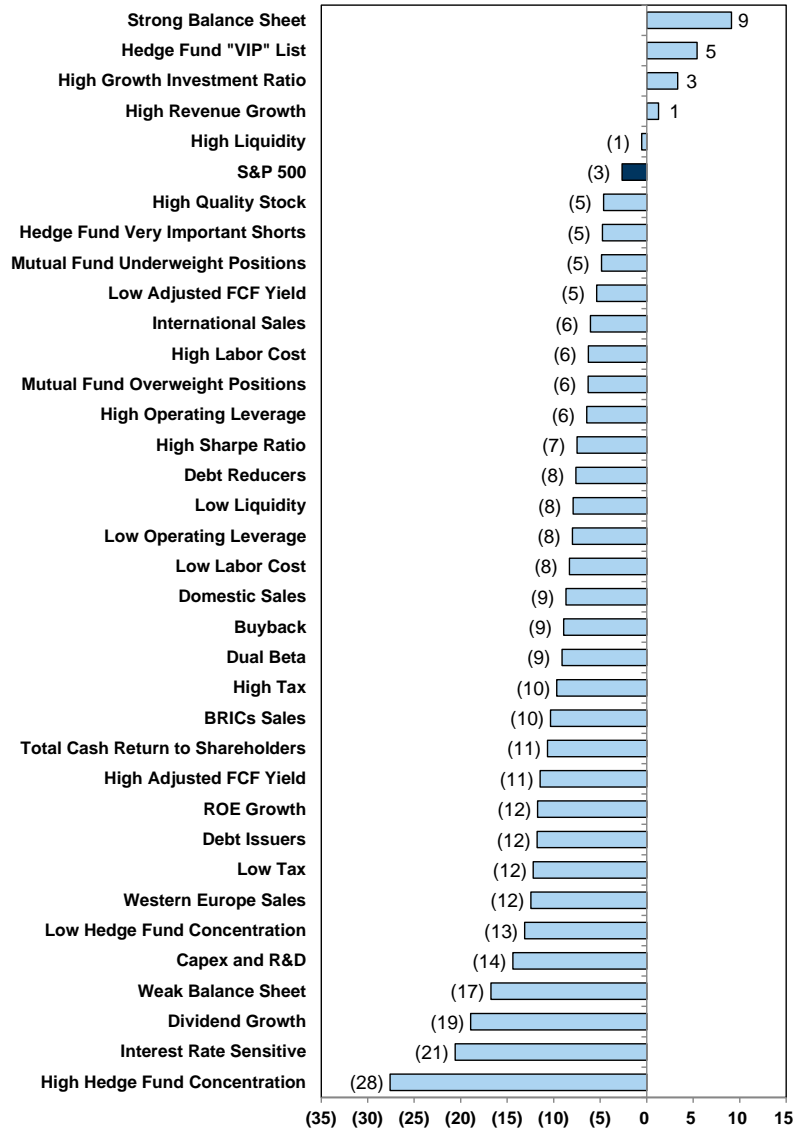
Sectors: Russell 1000 vs. Russell 2000

Russell Sector	Weight (%)		1-Week (% Return)			YTD (% Return)		
	R1000	R2000	R1000	R2000	Δ (bps)	R1000	R2000	Δ (bps)
Energy	3	2	4	3	69	(32)	(37)	455
Industrials	9	13	4	4	1	(13)	(21)	745
Technology	27	15	5	5	(18)	14	(2)	1,605
Financials	18	22	4	5	(25)	(14)	(25)	1,142
Utilities	5	4	1	2	(86)	(9)	(11)	227
Consumer Staples	6	3	4	5	(91)	(6)	(11)	557
Materials	3	6	4	6	(159)	(9)	(15)	587
Cons Discretionary	16	12	3	5	(195)	5	(15)	2,001
Health Care	14	22	3	8	(443)	0	4	(345)
Index	100	100	4	5	(131)	(2)	(14)	1,150

Source: FactSet and Goldman Sachs Global Investment Research.

US Portfolio Strategy Baskets are available on GS [Marquee](#) platform

YTD Performance



	Ticker	Total Return			P/E	P/B	Div	
		1 wk	1 mo	YTD	NTM	LTM	Yield	
Macroeconomic	Dual Beta	GSTHBETA	5.0 %	10 %	(9)%	22x	2.6x	1.0 %
	Interest Rate Sensitive	GSTHUSTY	3.9	9	(21)	14	1.6	1.6
	High Tax	GSTHHTAX	3.8	6	(10)	24	3.8	1.4
	Low Tax	GSTHLTAX	4.5	9	(12)	20	2.9	1.4
	High Labor Cost	GSTHHLAB	3.4	4	(6)	21	4.2	0.9
	Low Labor Cost	GSTHLLAB	4.3	9	(8)	16	3.0	1.6
Geographic Sales	Domestic Sales	GSTHAINT	3.3 %	4 %	(9)%	20x	2.9x	1.7 %
	International Sales	GSTHINTL	4.5	7	(6)	24	4.7	1.5
	BRICs Sales	GSTHBRIC	4.4	9	(10)	26	3.6	1.0
	Western Europe Sales	GSTHWEUR	4.1	8	(12)	22	2.5	0.8
Fundamental	High Revenue Growth	GSTHREVG	5.4 %	8 %	1 %	33x	5.7x	0.0 %
	High Operating Leverage	GSTHOPHI	4.2	8	(6)	25	3.8	0.0
	Low Operating Leverage	GSTHOPLO	3.7	7	(8)	23	4.7	1.5
	ROE Growth	GSTHGROE	3.6	5	(12)	24	3.8	1.3
	High Quality Stock	GSTHQUAL	3.4	4	(5)	28	6.1	0.6
	High Adjusted FCF Yield	GSTHHACF	3.9	8	(11)	13	2.8	2.1
	Low Adjusted FCF Yield	GSTHLACF	4.6	6	(5)	36	4.4	0.0
	Strong Balance Sheet	GSTHSBAL	3.7	6	9	34	9.1	0.1
	Weak Balance Sheet	GSTHWBAL	4.4	8	(17)	14	1.4	1.4
Uses of Cash	Capex and R&D	GSTHCAPX	4.4 %	10 %	(14)%	14x	2.0x	0.4 %
	Total Cash Return to Shareholders	GSTHCASH	3.7	8	(11)	14	3.1	2.8
	Buyback	GSTHREPO	4.0	8	(9)	15	3.6	1.9
	Dividend Growth	GSTHDIVG	3.5	6	(19)	14	2.6	3.8
	High Growth Investment Ratio	GSTHHGIR	4.3	8	3	24	5.5	1.4
	Debt Issuers	GSTHDISS	5.2	8	(12)	22	4.2	1.6
Debt Reducers	GSTHDRED	3.5	7	(8)	15	2.0	1.8	
Risk & Liquidity	High Sharpe Ratio	GSTHSHRP	4.6 %	7 %	(7)%	18x	2.4x	1.6 %
	High Liquidity	GSTHLLIQ	3.7	4	(1)	25	5.8	2.2
	Low Liquidity	GSTHLLIQ	6.6	13	(8)	15	1.3	0.0
Hedge Funds & Mutual Funds	Hedge Fund "VIP" List	GSTHHVIP	5.3 %	7 %	5 %	29x	4.8x	0.0 %
	Hedge Fund Very Important Shorts	GSTHVISP	3.1	3	(5)	21	5.8	2.6
	High Hedge Fund Concentration	GSTHHFHI	3.7	7	(28)	18	2.2	0.0
	Low Hedge Fund Concentration	GSTHHFSL	4.6	8	(13)	24	4.1	2.7
	Mutual Fund Overweight Positions	GSTHMFOV	4.6	8	(6)	22	3.9	1.2
	Mutual Fund Underweight Positions	GSTHMFUW	2.9	4	(5)	24	4.0	2.6
S&P 500 Average					28	5.9	2.1	
S&P 500 Median					21	3.1	1.8	

For details and constituents of our baskets see [Anatomy of our US Portfolio Strategy Thematic and Sector Baskets](#), February 5, 2020.

Source: FactSet and Goldman Sachs Global Investment Research.

US Portfolio Strategy Baskets – Relative performance vs. S&P 500

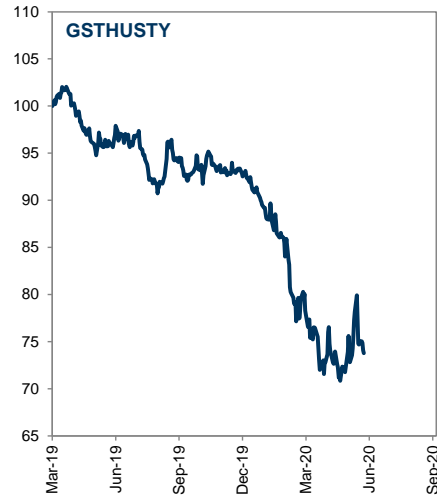
Macroeconomics

Geographic Sales

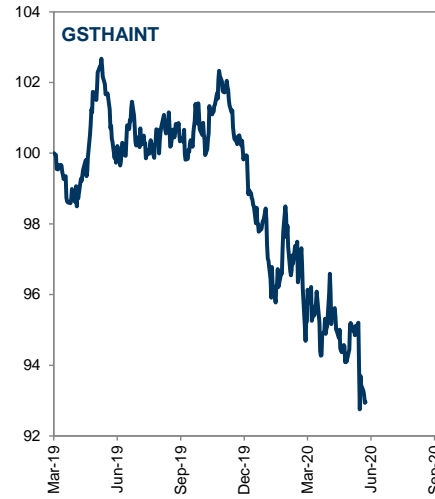
Dual Beta



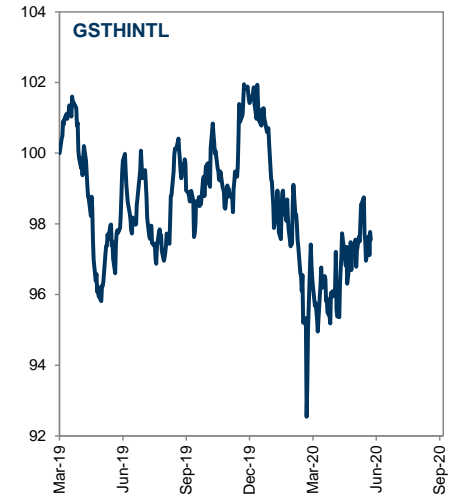
Interest Rate Sensitive



US Sales



International Sales



High vs. Low Labor Cost



High vs. Low Tax Rate



BRICs Sales



Western Europe Sales



Source: FactSet and Goldman Sachs Global Investment Research.

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US Portfolio Strategy Baskets – Relative performance vs. S&P 500 (continued)

Fundamentals

Risk & Liquidity

Revenue Growth



High vs. Low Operating Leverage



ROE Growth



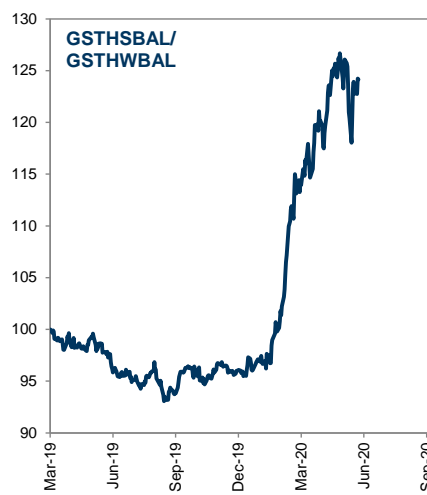
High Sharpe Ratio



High Quality



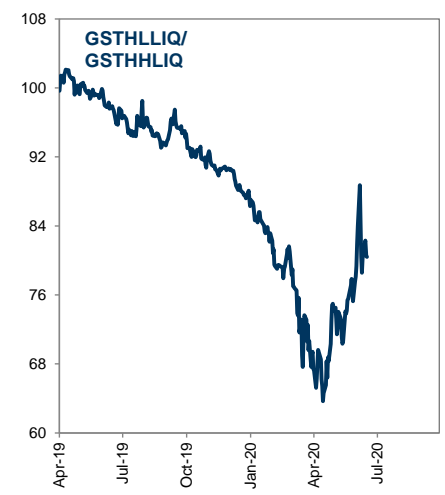
Strong vs. Weak Balance Sheet



High vs. Low Adjusted FCF



Low vs. High Liquidity



Source: FactSet and Goldman Sachs Global Investment Research.

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US Portfolio Strategy Baskets – Relative performance vs. S&P 500 (continued)

Uses of Cash

Capex and R&D



High Growth Investment Ratio



Debt Reducers vs. Issuers



Total Cash Return



Buybacks



Dividend Growth



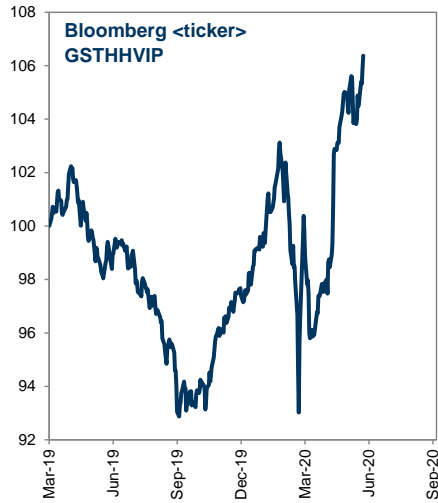
Source: FactSet and Goldman Sachs Global Investment Research.

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US Portfolio Strategy Baskets – Relative performance vs. S&P 500 (continued)

Hedge Fund Ownership

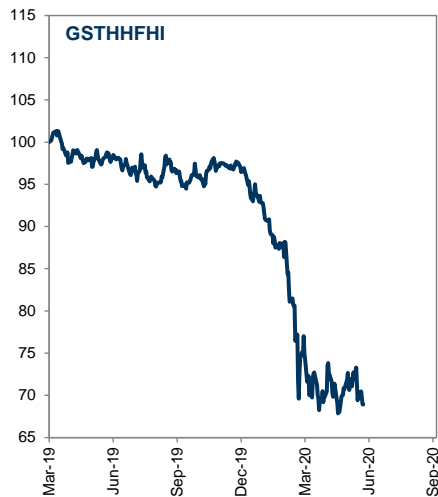
Hedge Fund VIP



Short Positions



High Concentration



Low Concentration

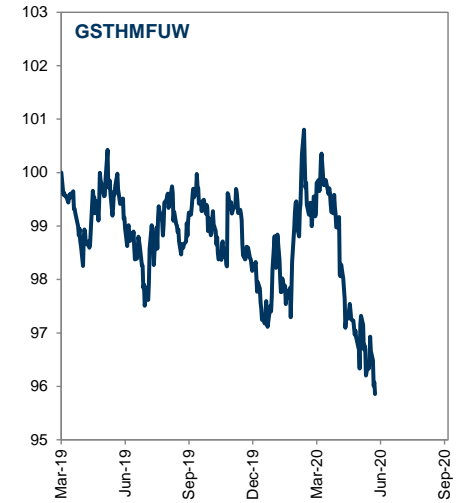


Mutual Fund Ownership

Overweight Positions



Underweight Positions



Source: FactSet and Goldman Sachs Global Investment Research.

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S&P 500 Earnings, Sales and Revisions

GS Top-down EPS & Consensus Bottom-Up

2019A	Adjusted EPS GS Top-Down					Adjusted EPS Consensus Bottom-Up				
	Contribution		EPS growth			Contribution		EPS growth		
	2020E	2021E	2020E	2021E		2020E	2021E	2020E	2021E	
Consumer Discretionary	\$13	\$3	\$13	(78)%	374 %	\$5	\$12	(59)%	124 %	
Industrials	15	6	15	(61)	149	8	14	(46)	76	
Materials	4	2	4	(51)	95	3	4	(20)	30	
Financials	30	17	29	(45)	70	19	26	(38)	39	
Information Technology	32	24	35	(25)	49	31	37	(2)	17	
Communication Services	17	14	19	(17)	34	14	17	(20)	25	
Real Estate	4	3	4	(32)	30	4	5	(2)	8	
Health Care	27	26	30	(1)	14	26	30	(4)	17	
Consumer Staples	11	11	12	1	10	10	11	(4)	9	
Utilities	5	5	5	1	6	5	6	4	5	
S&P 500 ex-Energy	158	111	166	(30)	50	126	162	(20)	28	
Energy	6	(1)	4	(108)	NM	0	2	(107)	NM	
S&P 500 EPS	\$165	\$110	\$170	(33)%	55 %	\$126	\$164	(24)%	30 %	

Earnings & Sales Revisions (Consensus)

	EPS REVISIONS				SALES REVISIONS			
	1 month		3 month		1 month		3 month	
	20E	21E	20E	21E	20E	21E	20E	21E
Consumer Staples	0.0 %	(0.0)%	(6.6)%	(5.5)%	0.1 %	(0.1)%	(1.9)%	(2.3)%
Utilities	(0.1)	0.1	(1.7)	(0.6)	NM	NM	NM	NM
Information Technology	(0.3)	(0.2)	(7.8)	(7.1)	(0.2)	(0.2)	(4.5)	(4.4)
Financials	(0.7)	0.1	(39.3)	(19.7)	NM	NM	NM	NM
Materials	(0.9)	(0.8)	(22.5)	(14.6)	(0.2)	(0.2)	(9.0)	(6.7)
Health Care	(1.0)	(0.7)	(7.5)	(2.8)	(0.1)	(0.1)	(1.5)	(0.3)
Communication Services	(1.5)	(0.9)	(19.3)	(13.1)	(0.0)	(0.2)	(8.1)	(5.2)
S&P 500	(1.6)	(0.6)	(25.2)	(14.0)	0.1	(0.1)	(7.9)	(5.5)
S&P 500 ex. Energy	(1.6)	(0.6)	(22.4)	(12.3)	(0.0)	(0.1)	(6.4)	(4.4)
Real Estate	(2.2)	(1.3)	(12.5)	(9.3)	NM	NM	NM	NM
Industrials	(6.6)	(1.8)	(46.2)	(24.3)	(0.2)	(0.1)	(15.2)	(11.5)
Consumer Discretionary	(10.2)	(1.8)	(54.7)	(23.4)	0.4	0.2	(9.9)	(4.8)
Energy	NM	1.1	(118.2)	(66.4)	0.7	(0.5)	(22.2)	(16.2)

Earnings Growth (consensus bottom-up)

	2020 Earnings Per Share Growth				Annual	
	1QE	2QE	3QE	4QE	2020E	2021E
Utilities	6 %	2 %	1 %	7 %	4 %	5 %
Information Technology	6	(9)	(5)	1	(2)	17
Real Estate	3	(4)	(3)	(5)	(2)	8
Consumer Staples	7	(16)	(5)	0	(4)	9
Health Care	3	(18)	(6)	6	(4)	17
Materials	4	(38)	(25)	(10)	(20)	30
Communication Services	(10)	(33)	(20)	(16)	(20)	25
S&P 500 ex. Energy	(14)	(37)	(20)	(10)	(20)	28
S&P 500	(15)	(42)	(24)	(13)	(24)	30
Financials	(41)	(47)	(34)	(29)	(38)	39
Industrials	(32)	(81)	(51)	(20)	(46)	76
Consumer Discretionary	(60)	(108)	(45)	(20)	(59)	124
Energy	(31)	(151)	(120)	(104)	(107)	NM

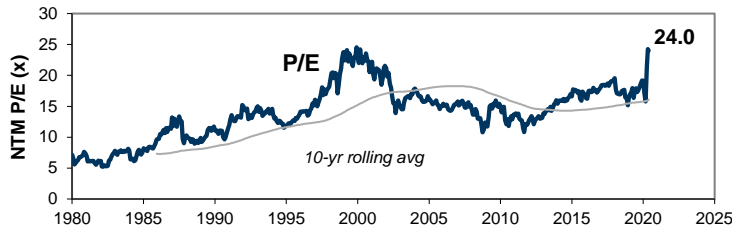
Sales Growth (consensus bottom-up)

	2020E Sales Per Share Growth				Annual	
	1QE	2QE	3QE	4QE	2020E	2021E
Health Care	7 %	(3)%	3 %	6 %	4 %	7 %
Communication Services	11	(3)	1	4	4	10
Consumer Staples	9	(0)	1	2	3	3
Information Technology	8	0	0	2	3	8
S&P 500 ex. Energy	4	(10)	(3)	1	(2)	8
S&P 500	3	(13)	(6)	(2)	(4)	9
Consumer Discretionary	(1)	(20)	(7)	(1)	(6)	13
Materials	(0)	(18)	(11)	(6)	(9)	7
Industrials	(7)	(28)	(18)	(10)	(16)	11
Energy	(9)	(41)	(31)	(23)	(27)	14

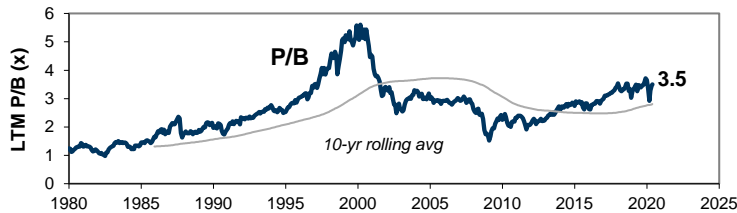
Source: FirstCall, I/B/E/S, FactSet, and Goldman Sachs Global Investment Research.

Valuation: Absolute and Relative

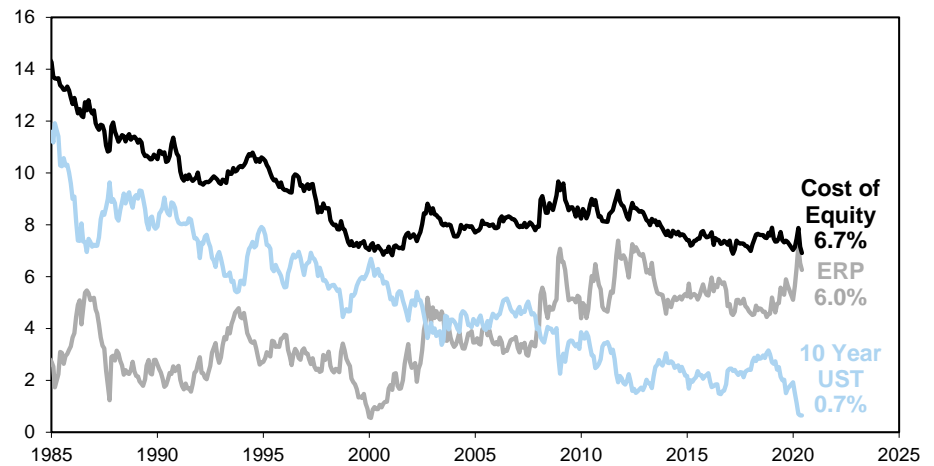
S&P 500 NTM P/E



S&P 500 LTM P/B



S&P 500 Cost of Equity = ERP + 10-yr UST



We estimate the equity risk premium (ERP) using our DDM framework to model expected future cash flows.
We solve for the cost of equity that implies the market is at 'fair value' and then deduct the 10-year US treasury.

Current aggregate valuation metrics - absolute

	EV/ Sales	EV/ EBITDA	Price/ Book	FCF Yield	PEG Ratio	NTM P/E
S&P 500	2.6x	13.5x	3.5x	4.1 %	2.2x	24.0x
Financials	NM	NM	1.2	NM	1.6	16.1
Health Care	2.0	14.0	4.7	5.2	1.7	17.2
Utilities	NM	11.6	2.1	(2.4)	3.8	18.2
Real Estate	NM	NM	3.5	NM	2.4	20.2
Cons Staples	1.7	13.5	5.8	4.9	3.8	20.8
Materials	2.3	11.1	2.3	4.1	1.7	23.5
Comm Services	3.5	10.7	3.4	4.6	2.2	23.9
Info Tech	5.7	17.8	8.9	4.1	2.0	26.1
Industrials	2.0	12.2	4.5	4.0	3.6	29.5
Cons Discr	2.3	16.2	9.0	2.9	3.1	50.1
Energy	1.1	7.5	1.1	5.3	NM	NM

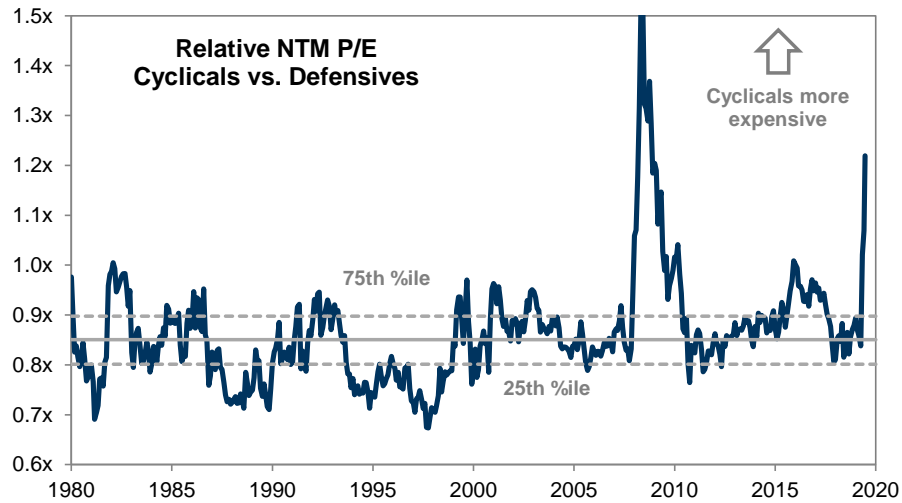
Current relative valuation vs. historical average (Z-score)

	10-year						30-year	
	EV/ Sales	EV/ EBITDA	Price/ Book	FCF Yield	PEG Ratio	P/E	Median Z-Score	Median Z-Score
S&P 500	1.8	1.5	1.6	1.0	3.7	3.4	1.7	1.9
Energy	(2.3)	(0.9)	(2.1)	(2.1)	NM	NM	(2.1)	(2.0)
Materials	(2.2)	(2.1)	(2.0)	(1.2)	(2.1)	(1.6)	(2.0)	(0.6)
Real Estate	NM	NM	(0.7)	NM	(1.7)	(1.9)	(1.7)	(0.7)
Financials	NM	NM	(3.2)	NM	(1.0)	(1.6)	(1.6)	(1.1)
Cons Staples	(1.3)	(1.9)	(0.3)	(1.8)	0.0	(3.9)	(1.5)	(1.2)
Comm Services	(1.4)	(1.9)	(1.3)	0.3	0.2	(2.0)	(1.4)	(0.7)
Utilities	NM	(1.1)	(1.1)	1.8	(1.7)	(3.2)	(1.1)	(0.2)
Health Care	(1.3)	(0.2)	0.7	0.1	(2.4)	(2.6)	(0.8)	(1.1)
Industrials	(2.0)	(1.0)	(0.6)	0.2	2.4	3.4	(0.2)	0.7
Cons Discr	0.9	1.6	2.9	1.2	3.6	7.4	2.3	1.8
Info Tech	2.9	2.8	3.0	2.0	0.0	1.3	2.4	0.5

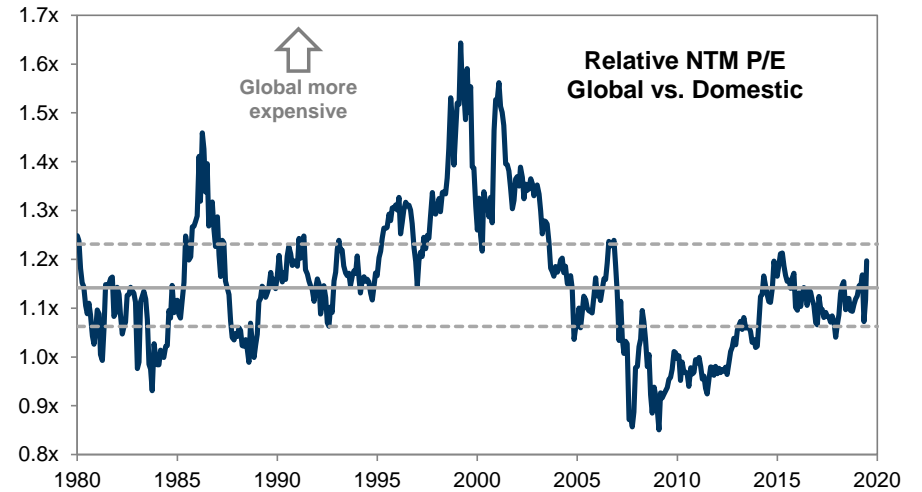
Source: FactSet, I/B/E/S, FirstCall, and Goldman Sachs Global Investment Research.

Valuation: Sector baskets

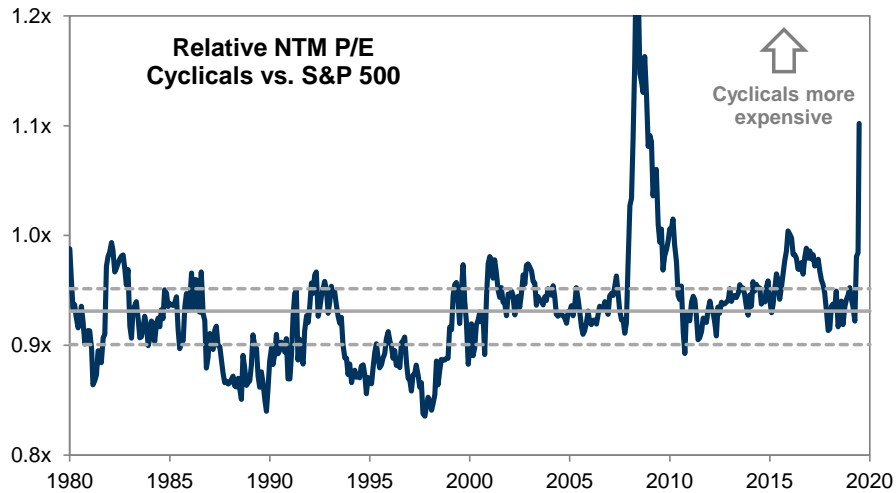
Valuation of Cyclical vs. Defensives



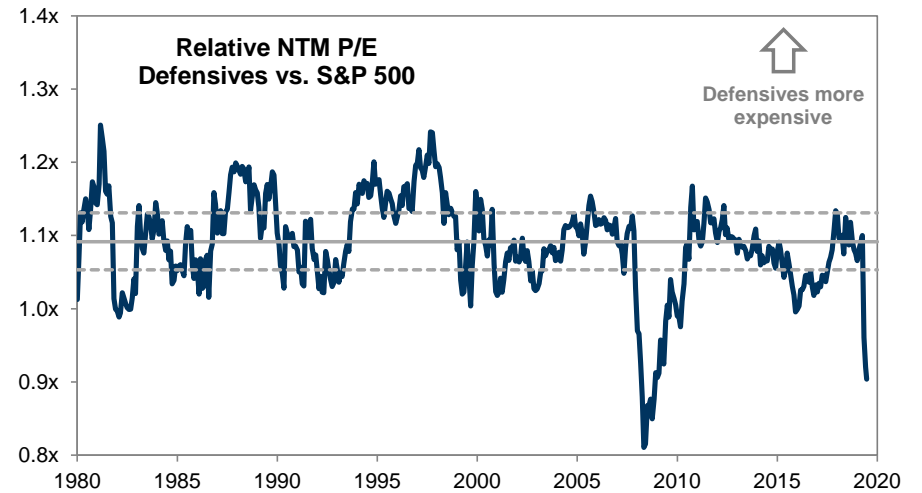
Global vs. Domestic



Cyclicals vs. S&P 500



Defensives vs. S&P 500

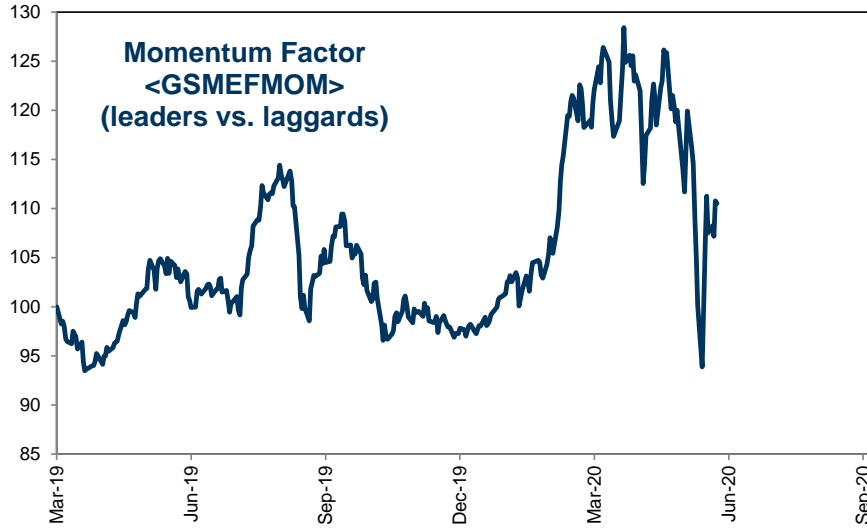


Source: Compustat, FactSet, I/B/E/S, and Goldman Sachs Global Investment Research.

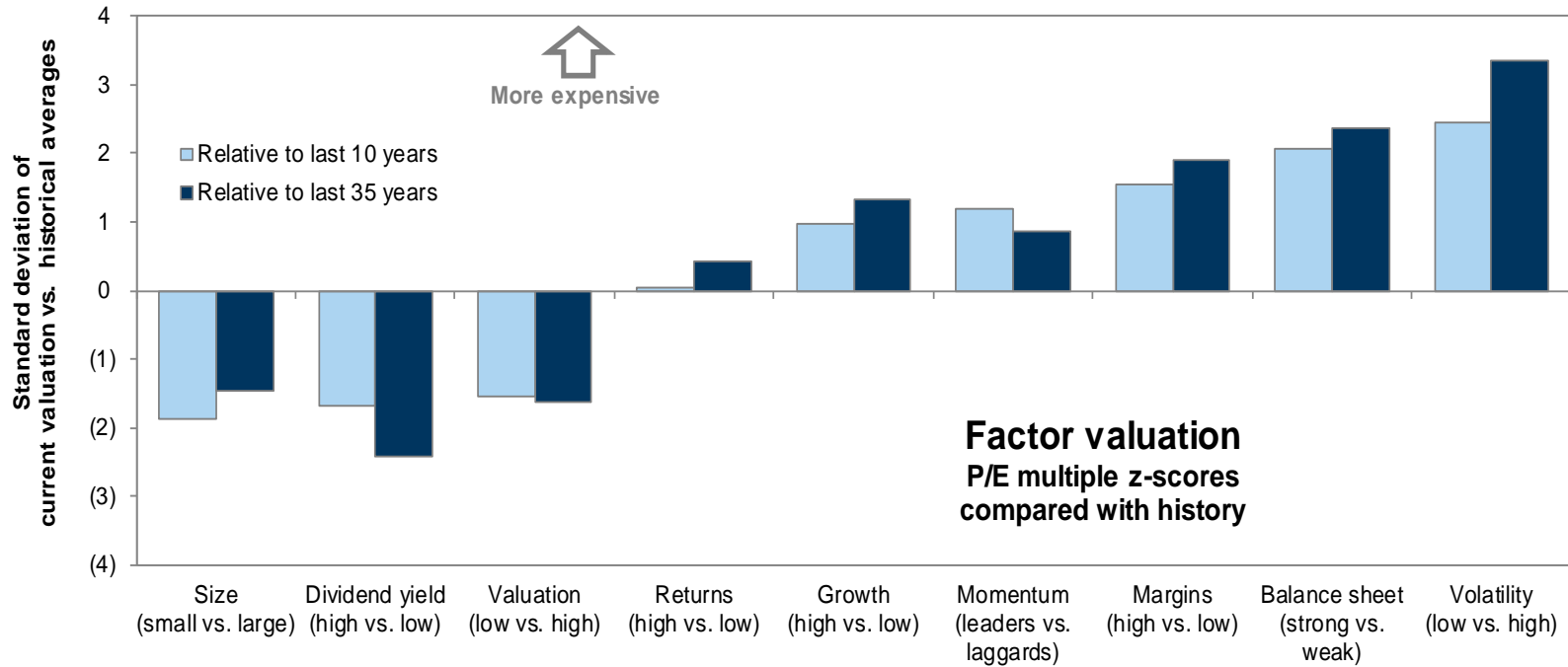
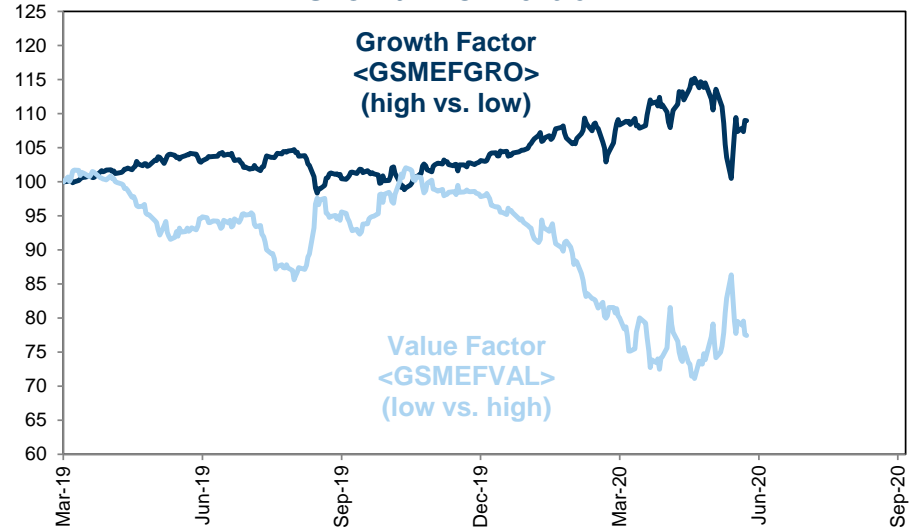
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Factors: Performance and Valuation

Momentum



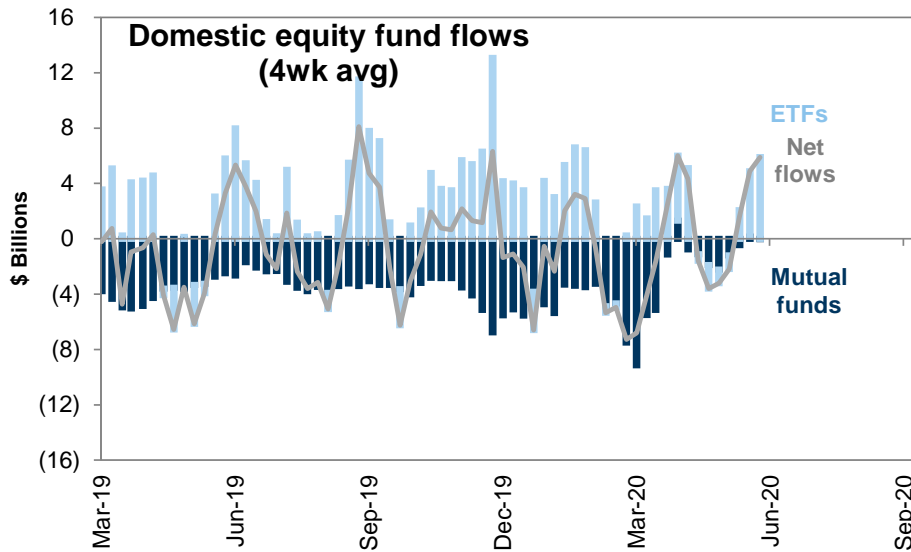
Growth vs. Value



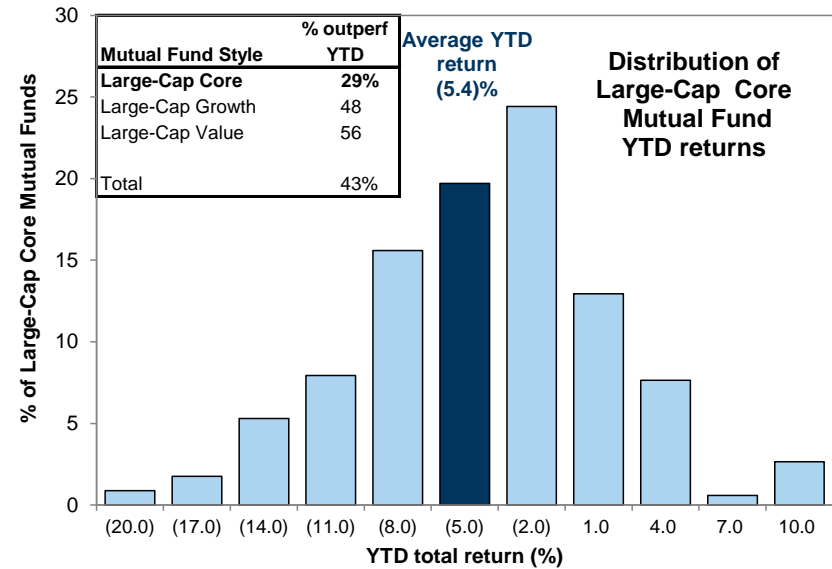
Source: Compustat, FactSet, I/B/E/S, and Goldman Sachs Global Investment Research.

Fund Flows, Fund Performance, and Short Interest

Domestic equity fund flows



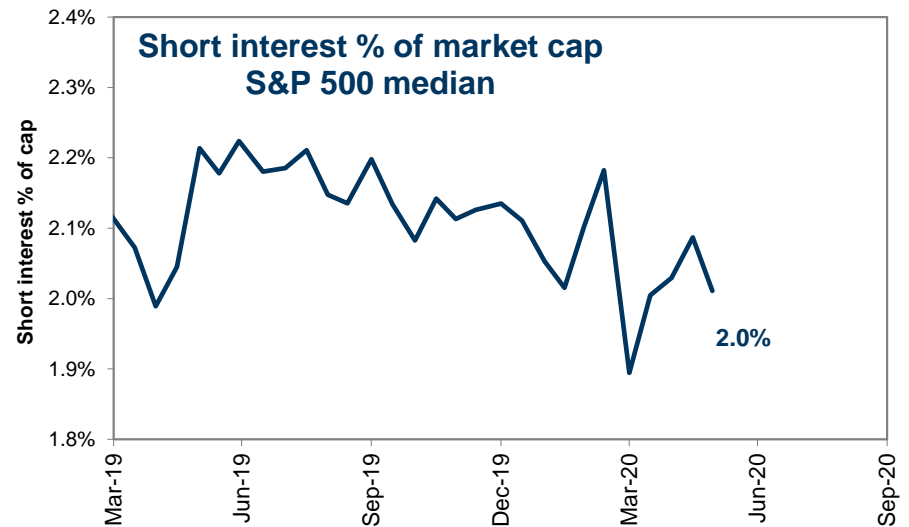
Mutual Fund Performance



Weekly fund flows

(\$ billions)	EPFR Mutual Fund Flows			EPFR ETF Fund Flows		
	Total Assets	4-Wk Avg Flows	Total Flows YTD	Total Assets	4-Wk Avg Flows	Total Flows YTD
All Equity	7,051	(1.0)	(119.9)	4,632	5.3	96.9
U.S. Equity	3,003	(0.0)	(77.5)	2,790	5.9	76.7
Equity Income	554	(0.8)	(17.0)	265	0.5	(1.2)
Int'l Equity	3,541	0.7	(23.6)	1,455	0.0	15.4
Global	507	(1.6)	(18.8)	387	(0.7)	4.7
All Bonds	4,845	12.8	(57.4)	1,272	10.4	95.3
All Taxable Bond	4,057	12.1	(48.2)	940	11.4	65.7
Gov't Treasury	338	(0.3)	(1.0)	279	(1.6)	25.6
Municipal Bond	450	1.1	(8.2)	53	0.6	4.0
Money Market	6,037	(7.5)	1,224.4	40	(0.4)	11.4

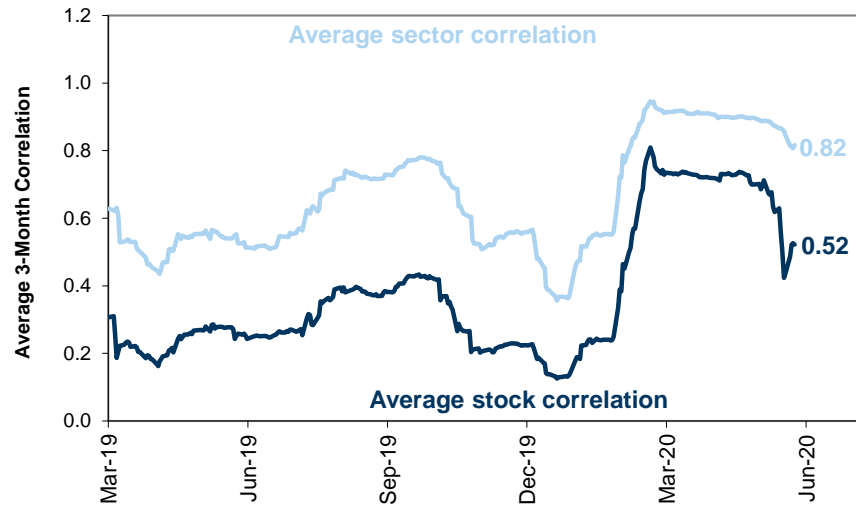
Short Interest



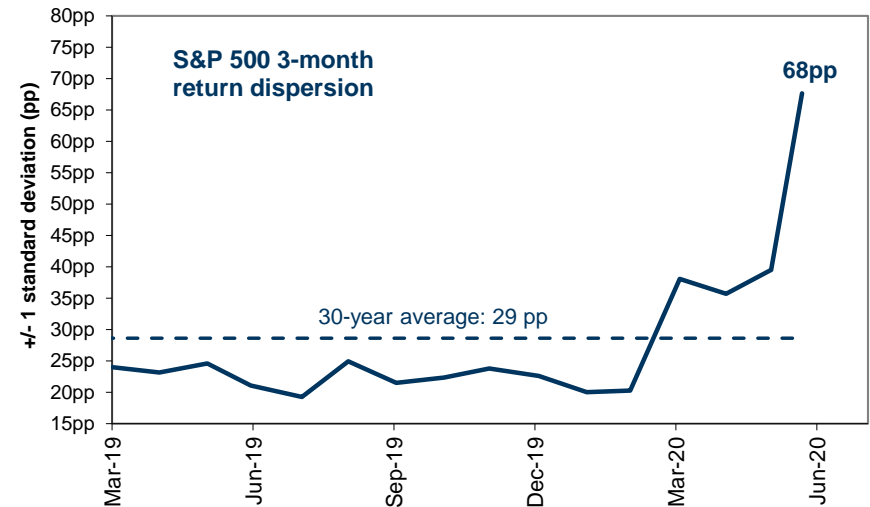
Source: FactSet, EPFR, and Goldman Sachs Global Investment Research.

Correlation, Breadth and Dispersion

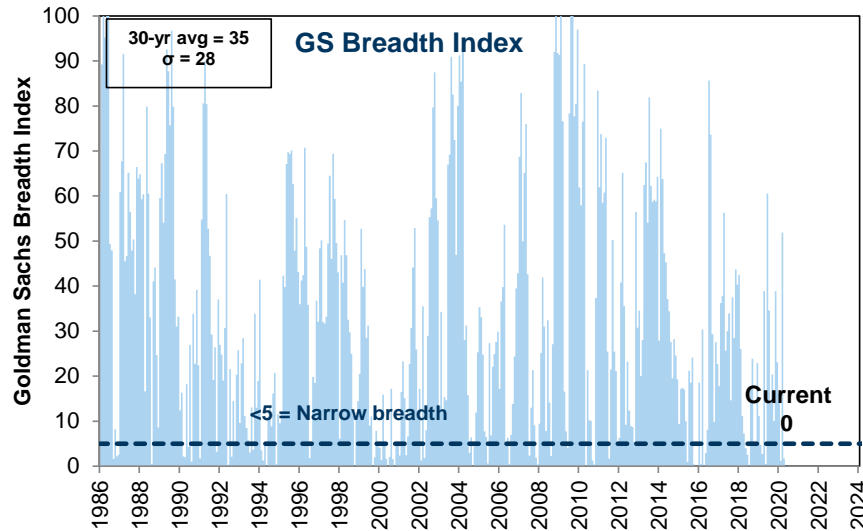
Sector and Stock Correlation



S&P 500 3-month Return Dispersion



Goldman Sachs Breadth Index (GSBI)



$$Breadth = \frac{R^2 * \sum w^2}{\sum w^2 r^2}$$

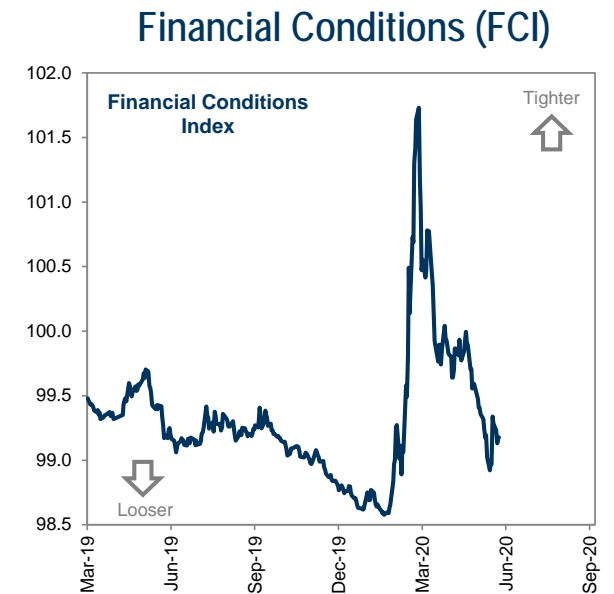
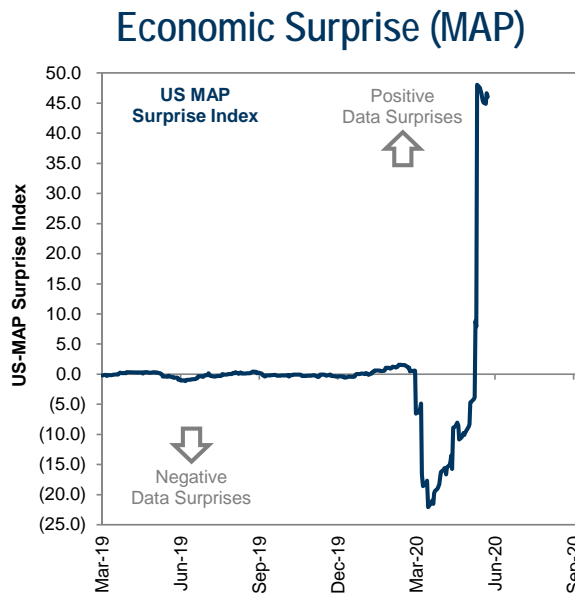
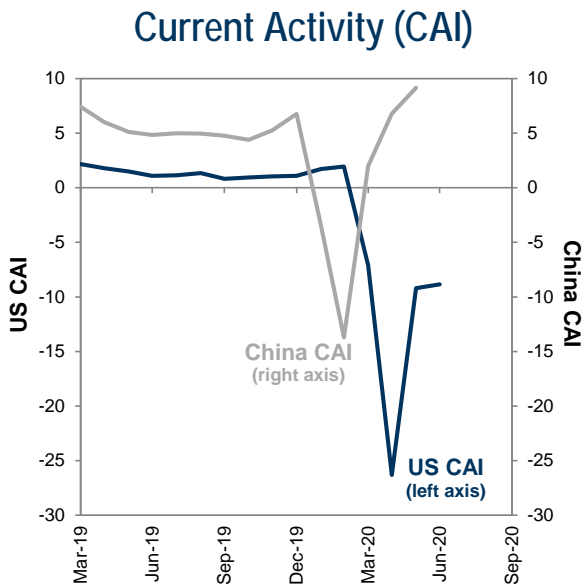
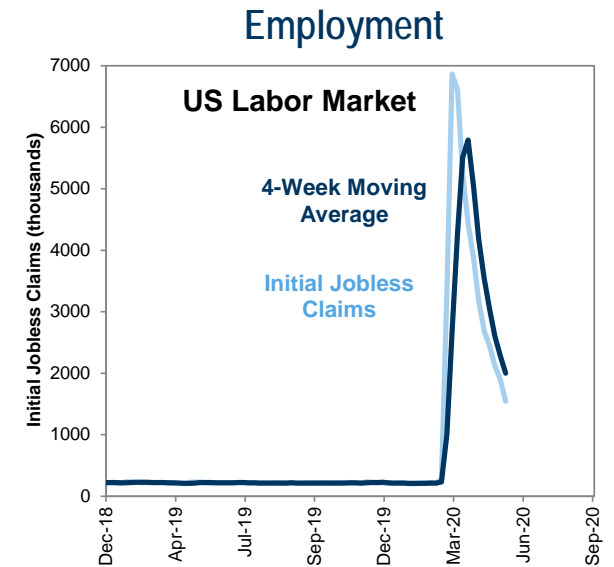
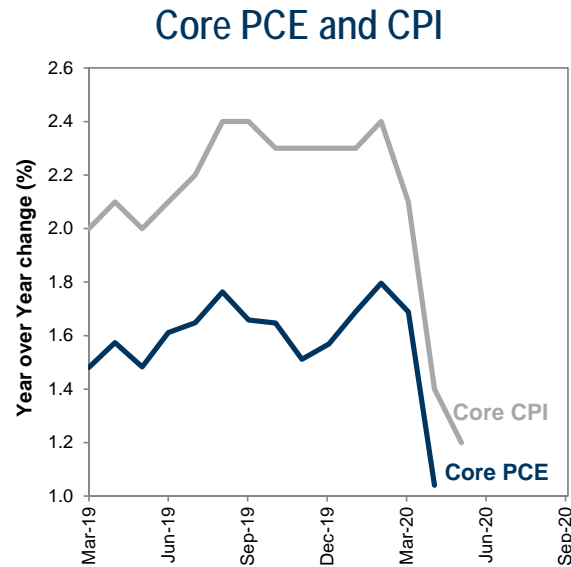
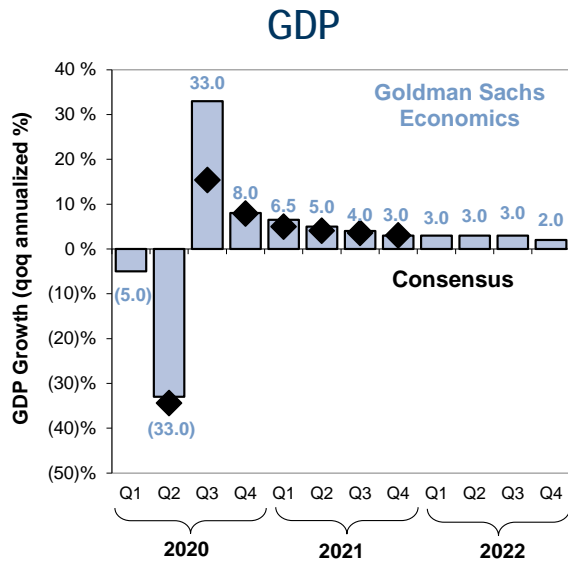
R = SPX return
w = individual constituent weights
r = individual constituent returns

Return Dispersion

	+/- 1 Standard Deviation					
	1-Month Returns			3-Month Returns		
	Current Jun 18	30-Year Average	Historical %ile	Current Jun 18	30-Year Average	Historical %ile
S&P 500	20 pp	17 pp	81 %	68 pp	29 pp	100 %
Energy	15 pp	14 pp	71 %	118 pp	25 pp	100 %
Industrials	25	14	98	47	23	99
Consumer Discretionary	21	17	85	77	29	99
Consumer Staples	16	13	87	41	22	99
Materials	16	15	72	51	25	98
Real Estate	17	9	93	53	15	98
Communication Services	18	15	77	57	26	98
Financials	21	13	89	51	22	98
Health Care	15	15	60	47	26	97
Utilities	6	10	19	37	18	94
Information Technology	15	20	32	47	35	83

Source: FactSet and Goldman Sachs Global Investment Research.

Economics



Our Current Activity Indicator (CAI) measures the growth signal in major high-frequency activity indicators for the US economy, expressed in GDP-equivalent units.

Source: FactSet and Goldman Sachs Global Investment Research.

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Goldman Sachs Global Macro Forecasts

Goldman Sachs Global Macro Forecasts

	units	Current	3m	6m	12m	Change to Target
Equities						
TOPIX	level	1583	1600	1550	1675	6 %
STOXX Europe 600	level	363	360	370	380	5
MXAPJ	level	511	525	480	510	(0)
S&P 500	level	3115	2950	3000	3100	(0)
Ten Year Rates						
US	%	0.7	0.4	0.6	0.9	21 bp
Japan	%	0.0	(0.3)	(0.2)	(0.1)	(11)
Euro Area (Germany)	%	(0.4)	(0.9)	(0.9)	(0.7)	(20)
Corporate Bonds						
Investment grade	bp	158	135	130	125	(21)%
High yield	bp	601	500	490	465	(23)
Currencies						
Sterling / US Dollar	£/\$	1.24	1.23	1.28	1.34	8 %
Euro / US Dollar	EUR/\$	1.12	1.08	1.10	1.15	3
US Dollar / Yen	\$/¥	107	102	105	105	(2)
Commodities						
NYMEX Nat. Gas	\$/mmBtu	1.64	1.75	3.50	3.25	98 %
Brent Crude Oil	\$/bbl	42	39	45	53	26
WTI Crude Oil	\$/bbl	39	27	35	49	25
COMEX Gold	\$/troy oz	1731	1800	1900	2000	16
LME Copper	\$/mt	5799	6000	6250	6500	12

	EPS Forecast			EPS Growth		NTM P/E		Div Yield
	2019	2020	2021	2020	2021	Current	YE 2020	
TOPIX	¥ 95	¥ 78	¥ 104	(18)%	33 %	17.5 x	16.0 x	2.5 %
STOXX Europe 600	€ 25	€ 14	€ 21	(45)	50	21.2	18.2	3.1
MXAPJ	\$ 35	\$ 27	\$ 35	(22)	30	16.5	14.4	2.6
S&P 500	\$ 165	\$ 110	\$ 170	(33)	55	22.5	17.6	1.9

Goldman Sachs US Economics Forecasts

	Share of GDP	% Annual Change			
		2019	2020E	2021E	2022E
OUTPUT AND SPENDING					
Real GDP	100%	2.3%	(5.2)%	6.4%	3.6%
Consumer Spending	69	2.6	(5.8)	6.2	4.0
Total Fixed Investment	17	1.3	(5.1)	7.6	5.0
Business Fixed Investment	14	2.1	(7.0)	7.7	5.0
Structures	3	(4.3)	(11.9)	5.2	3.9
Equipment	6	1.3	(10.2)	7.5	4.2
IP Products	5	7.5	(0.1)	9.2	6.6
Residential Investment	3	(1.5)	2.1	7.3	5.1
Federal Government Spending	7	3.5	4.1	2.6	0.1
State and Local Government	11	1.6	2.7	3.0	1.2
Net Exports (Bil.)	(4)	(954)	(945)	(1,103)	(1,105)
HOUSING MARKET					
Housing Starts (000s)		1,295	1,295	1,500	1,578
New Home Sales (000s)		685	637	770	832
Existing Home Sales (000s)		5,330	4,964	5,530	5,615
Case-Shiller Home Prices (%)		3.2	(2.1)	2.3	1.9
INFLATION					
Core CPI		2.2	1.3	1.3	1.9
Core PCE		1.6	1.0	1.2	1.6
LABOR MARKET					
Unemployment Rate		3.7	9.7	8.5	6.9
U6 Underemployment Rate		6.7	16.4	13.2	11.3
Payrolls (000s)		178	(790)	421	240
GOVERNMENT FINANCE					
Federal Budget (FY, Bil.)		(984)	(4,000)	(2,400)	(1,650)
Federal debt-to-GDP ratio (FY, %)		79	101	108	109
FINANCIAL INDICATORS					
Fed Funds Rate		1.6	0.1	0.1	0.1
10-year Treasury Rate		1.9	0.8	1.4	1.8

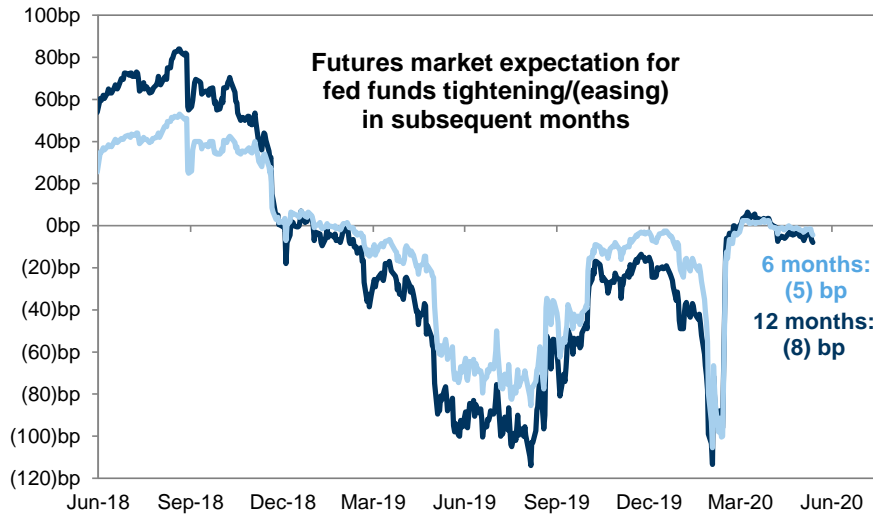
Real GDP

	2020E	2021E	2022E	2023E
China	3.0 %	7.7 %	5.0 %	5.3 %
World	(3.8)	6.5	4.5	3.8
Australia	(4.5)	6.0	4.0	2.9
Russia	(5.0)	6.0	3.0	3.4
USA	(5.2)	6.4	3.6	2.2
Japan	(5.6)	3.3	1.9	1.0
Brazil	(7.7)	4.0	2.5	2.7
Germany	(9.2)	8.6	4.3	2.0
UK	(10.4)	7.0	5.2	3.1
Euro Area	(11.2)	8.1	4.7	2.2
France	(12.1)	8.4	4.9	2.3
Spain	(12.7)	8.1	5.5	2.7
Italy	(14.1)	7.4	4.7	1.7

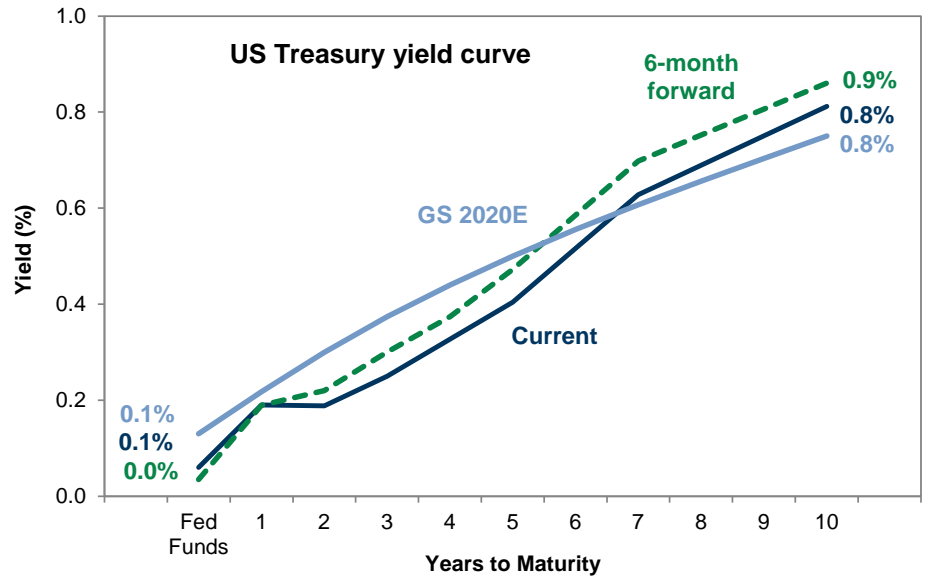
Source: FactSet and Goldman Sachs Global Investment Research.

Politics and policies

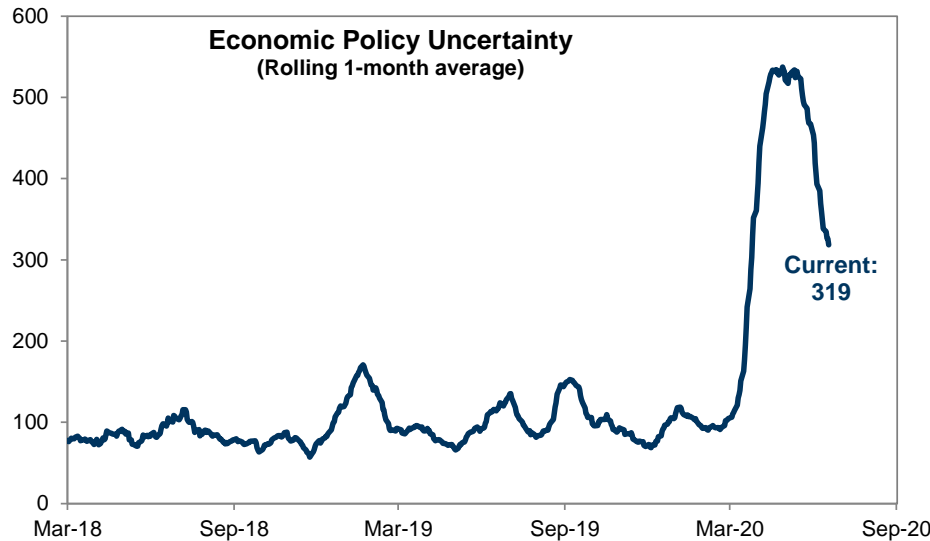
Market-implied change in fed funds rate



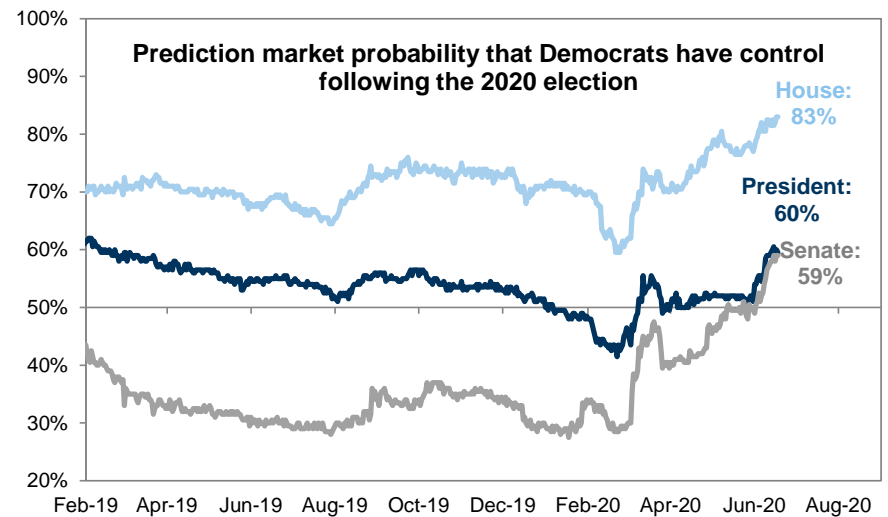
US Treasury yield curve



Economic Policy Uncertainty



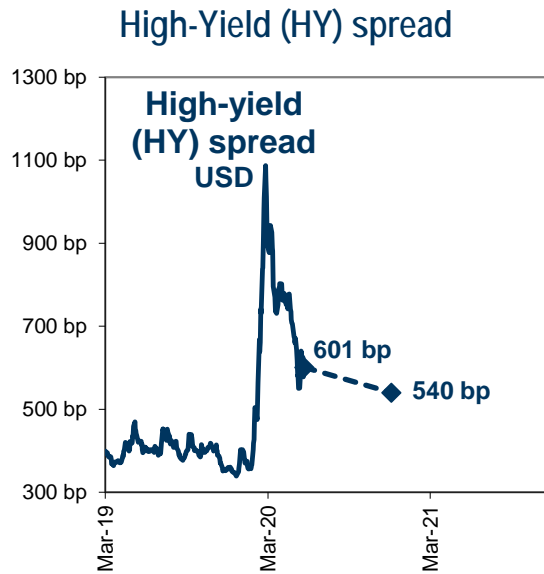
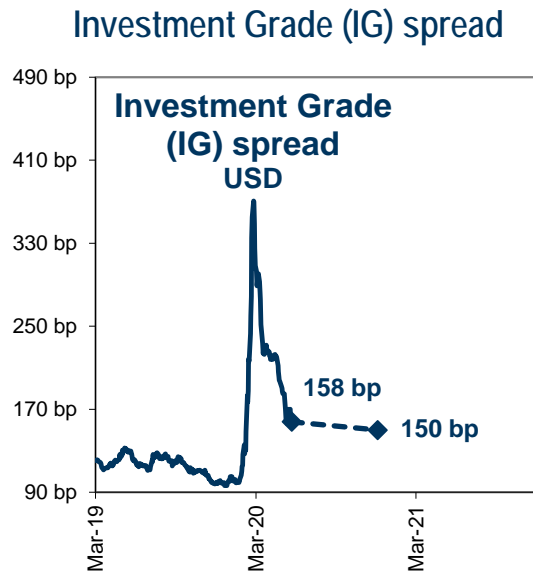
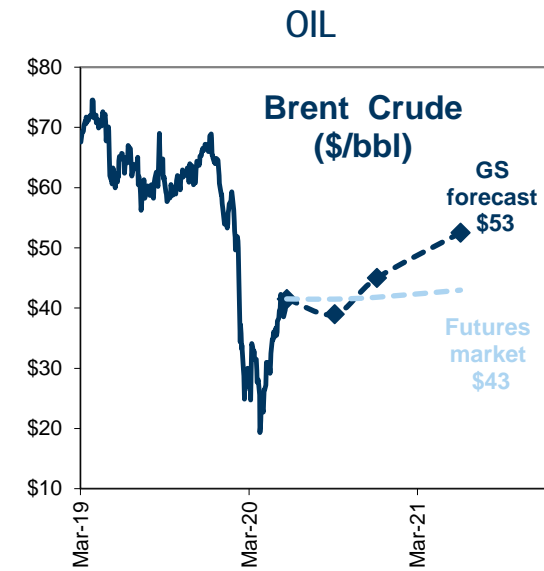
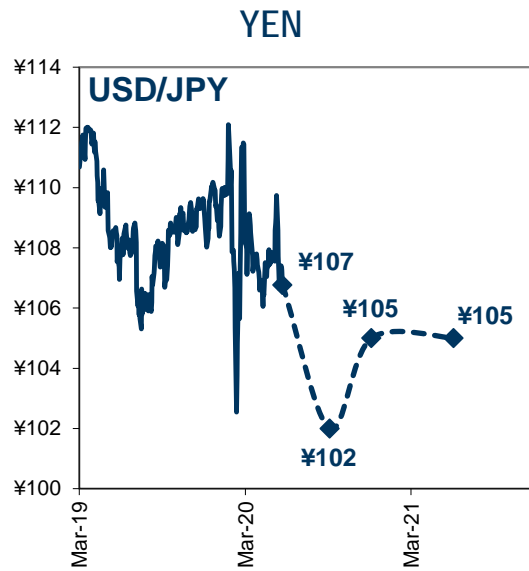
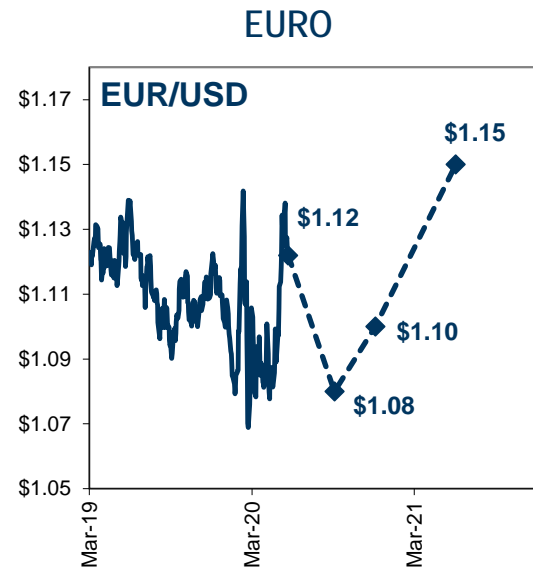
2020 US Election Odds



Source: FactSet, Predictit.org, PolicyUncertainty.com, Federal Reserve Bank, Haver Analytics, and Goldman Sachs Global Investment Research.

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Goldman Sachs Global Macro Forecasts



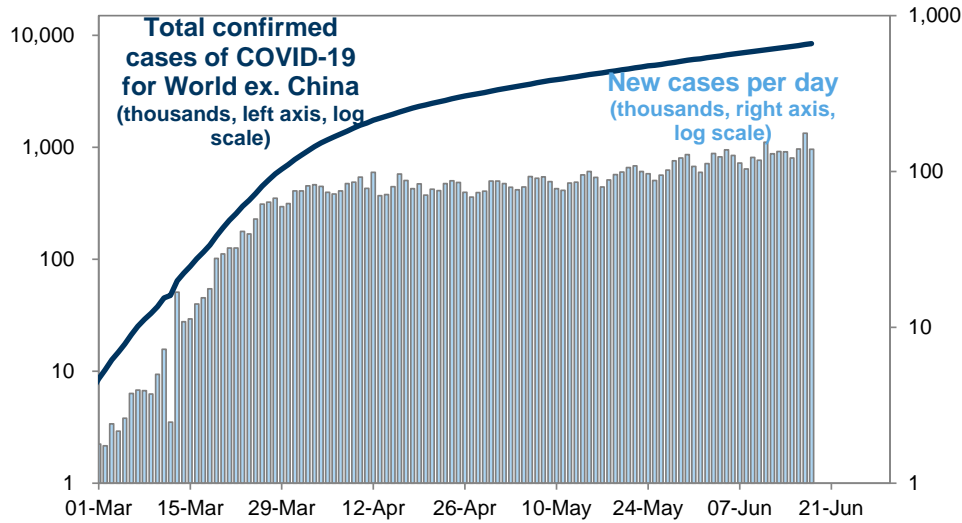
Global Equity Market performance

Market	Price Return (%) US Dollar				Local Currency
	1-Wk	1-Mo	3-Mo	YTD	
China (MSCI China)	3 %	5 %	24 %	2 %	2 %
U.S. (S&P 500)	4	5	30	(4)	(4)
Japan (TOPIX)	(0)	9	27	(6)	(8)
Korea (KOSPI)	(3)	12	38	(7)	(3)
Germany (Dax)	1	15	51	(7)	(7)
Europe (DJ Stoxx 600)	1	10	35	(13)	(13)
Australia (ASX 200)	(1)	15	41	(13)	(11)
France (CAC 40)	2	14	37	(17)	(17)
Spain (IBEX 35)	0	13	22	(23)	(23)
UK (FTSE 100)	1	5	29	(23)	(17)
Mexico (Bolsa)	1	6	11	(28)	(14)
Brazil (Bovespa)	(7)	27	38	(37)	(17)
Average	0 %	11 %	32 %	(15)%	(11)%

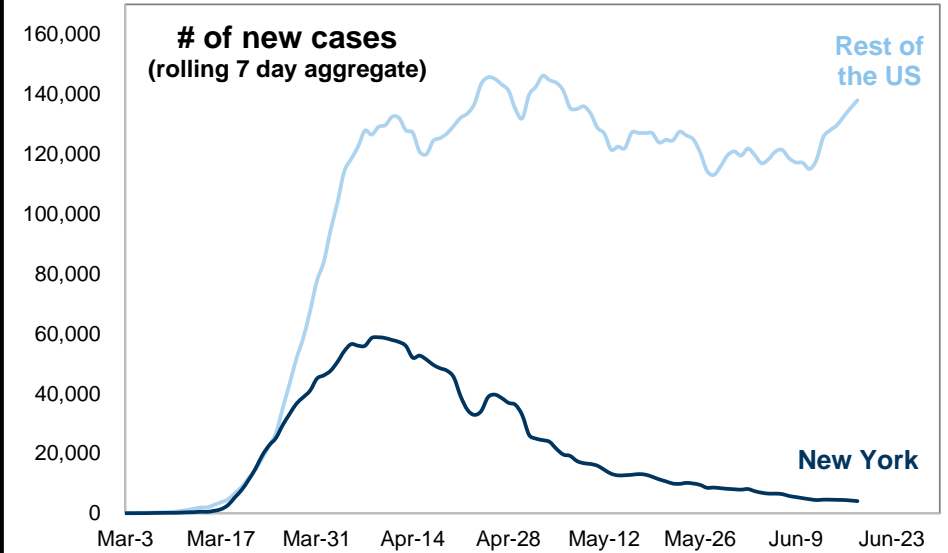
Source: FactSet and Goldman Sachs Global Investment Research.

COVID-19 update: Confirmed cases, testing, and equity performance

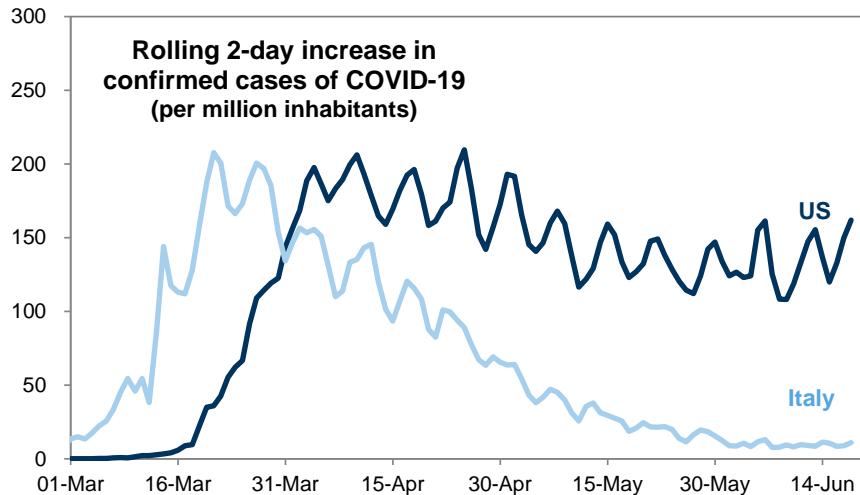
Total confirmed cases of COVID-19 (ex. China)



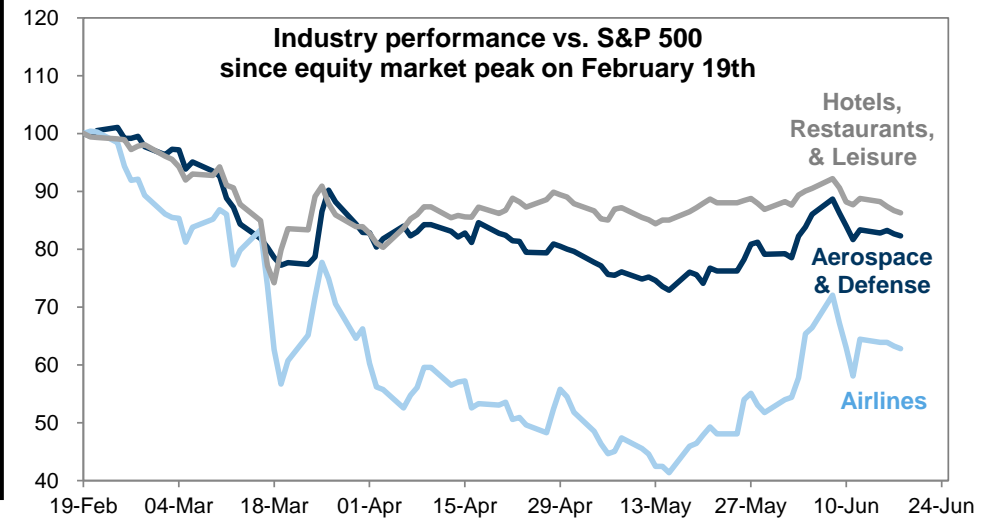
7-day rolling # of new cases



Rate of change for confirmed COVID-19 cases



Relative performance of select affected industries



Source: FactSet, JHU CSSE, and Goldman Sachs Global Investment Research.

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Reg AC

We, David J. Kostin, Ben Snider, Arjun Menon, CFA, Ryan Hammond, Cole Hunter, CFA, Jamie Yang and Cormac Conners, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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