

Market commentary

- In a matter of a few months, COVID-19 exposed the Achilles' heel of the global economy: integration. For decades, companies and governments implemented policies and erected infrastructure to enhance global interconnectedness. Squeezing out inefficiencies from supply chains that transverse continents was integral to expanding margins. Technology facilitated "just in time" inventory management, allowing cash to be deployed in other, more profitable pursuits.
- Social distancing, quarantines, and travel restrictions are necessary to suppress and eliminate COVID-19, but these measures also run contrary to the interconnected structure of modern economic systems. Policy makers are now confronted with a vicious trade-off between the health of their citizens and the health of their economies. Numerous pharmaceutical companies are testing existing drugs for expanded use as anti-viral therapies. Eventually, health care innovation will succeed in developing a vaccine. Until the vaccine arrives, however, isolation and distance on the part of all citizens are essential to suppression of the virus. The inability to mitigate the spread the virus will serve as a headwind to economic recovery.
- The First Quarter witnessed three global, systemic shocks. First, there was disruption to supply chains as China shut down its economy in response to the virus. Initially, the virus appeared to be contained, and the disruption was assumed to be short lived. As the virus spread to other continents, concerns over supply chains became secondary to the expected collapse in demand for goods and services. Next, Saudi Arabia and Russia initiated a market share war in the energy sector after failing to reach an agreement on production cuts at the OPEC+ meeting. Just as demand for oil began to falter, the Saudis and Russia chose to expand production. The economic impact of a world flooded with oil remains unclear. Clearly, market participants expect job losses in the energy sector along with credit pressures among many companies. Those concerns are offset, to a certain degree, by the rapid decline in the price per gallon of retail gasoline, effectively a much welcome tax cut for cash strapped consumers. Finally, liquidity shortages in short term funding markets manifested in extreme market volatility; dislocations in asset classes considered "safe havens"; and rapid de-leveraging. The global "flight to cash" rendered traditional hedges ineffective in counterbalancing the violent sell-off in the equity markets.



Market commentary (continued)

- In response, the Fed and other central banks unleashed market stability programs quicker and larger than what was undertaken during the Great Financial Crisis. In one critical week during March, the Fed aggressively returned policy rates to zero and implemented asset purchase programs designed to restore liquidity to the system. In an example of bipartisan cooperation, the US Congress passed the CARES Act (Coronavirus Aid, Relief, and Economic Security Act), a support package designed to provide as much as \$2.0 trillion to businesses and workers. The success of these programs with regard to stabilizing the economy depends on the progression of the virus. To the extent the number of new cases fails to peak by April 30, the fiscal package might prove inadequate. Consequently, Congress has already begun preparing legislation for additional financial support.
- Economic data will confirm what most people already know a sharp, sudden, unprecedented downturn in global economies in the worst quarter since the Great Financial Crisis. In the US, weekly jobless claims surged to more than five times the previous high that was registered in 1982. We expect a large number of small business failures, particularly those in the service sector. That said, we are encouraged by the time line to peak new cases in other countries. Based on those examples, we are optimistic that US economic activity could rebound sharply later this year from pent up demand. However, given the regionalized impact of the epidemic, we expect economic recovery will also prove uneven across sectors and geographies. The progression of the virus and the nature of the recovery will influence our investment strategy.



Year to date and historical performance of various asset classes

				Total Returns since		
Asset Class	YTD	1 year	3 Year Annualized	Trough*	Peak*	
Domestic Equities						
S&P 500	-5.95	5.34	9.40	35.18	-10.50	
S&P 500 Equal Weight (RSP)	-13.71	-5.10	3.99	37.94	-15.86	
Dow Jones Ind. Avg.	-11.26	-3.38	7.84	35.39	-14.00	
NASDAQ Comp	9.28	24.63	17.27	42.58	-0.25	
Russell 2000 (IWM)	-16.92	-8.06	0.38	37.78	-18.26	
nternational Equities						
Shanghai Composite (CIN)	2.79	10.18	3.35	13.51	3.48	
Hedged Japan (DXJ)	-11.42	0.27	-0.59	20.32	-9.38	
Hedged Europe (HEDJ)	-13.84	-6.69	-0.42	29.23	-14.89	
Asia Pacific ex. Japan (EPP)	-14.32	-13.75	0.10	35.80	-14.80	
Emerging Markets (EEM)	-10.47	-3.85	0.77	31.25	-9.17	
Brazil (EWZ)	-39.85	-33.50	-3.47	37.09	-35.00	
Canada (EWC)	-15.05	-9.62	0.65	43.87	-17.50	
India (EPI)	-18.54	-21.67	-5.76	41.99	-17.47	
Mexico (EWW)	-29.65	-27.68	-14.67	26.11	-33.39	
Bonds						
Long Treasuries (TLT)	22.85	27.70	11.45	-0.05	14.18	
Inv. Grade Corporates (LQD)	5.66	11.74	6.75	17.34	2.91	
High Yield Corporates (HYG)	-5.42	-1.52	2.46	20.15	-6.16	
Commodities						
Gold (GLD)	16.54	25.25	12.06	13.83	9.72	
Silver (SLV)	-0.30	16.13	1.98	35.09	-3.48	

^{*}Stock market trough at 03/23/2020. Stock market peak at 02/19/2020. YTD through 06/28/2020 Source: Thomson Reuters Datastream



Year to date and historical performance equity sectors

				Total Returns since			
Domestic Equity Sectors	YTD	1 year	3 Year Annualized	Since Trough*	Since Peak*		
Domestic Equities							
Consumer Discretionary	-0.80	7.08	11.67	41.50	-6.30		
Retail (XRT)	-9.59	0.91	2.43	53.13	-7.58		
Consumer Staples	-9.07	-0.51	2.24	20.01	-11.16		
Energy	-37.88	-38.75	-13.90	54.93	-30.65		
Oil & Gas Exploration (XOP)	-46.57	-52.46	-25.25	65.85	-31.85		
Financial Services	-25.18	-15.15	-0.73	29.45	-26.51		
Regional Banks (KRE)	-37.07	-28.42	-10.24	28.76	-33.91		
Health Care	-1.44	11.48	9.92	34.07	-3.41		
Industrials	-16.75	-9.56	2.58	36.93	-19.53		
Materials	-12.75	-4.81	1.21	44.78	-10.40		
Technology	11.97	30.75	23.71	44.49	0.91		
Telecom	-14.58	-1.70	2.59	11.38	-14.37		
Utilities	-13.69	-5.96	4.21	23.42	-21.34		
Transportation (IYT)	-19.45	-13.36	-1.53	31.13	-19.26		
Real Estate	-17.63	-9.25	1.31	35.69	-23.21		

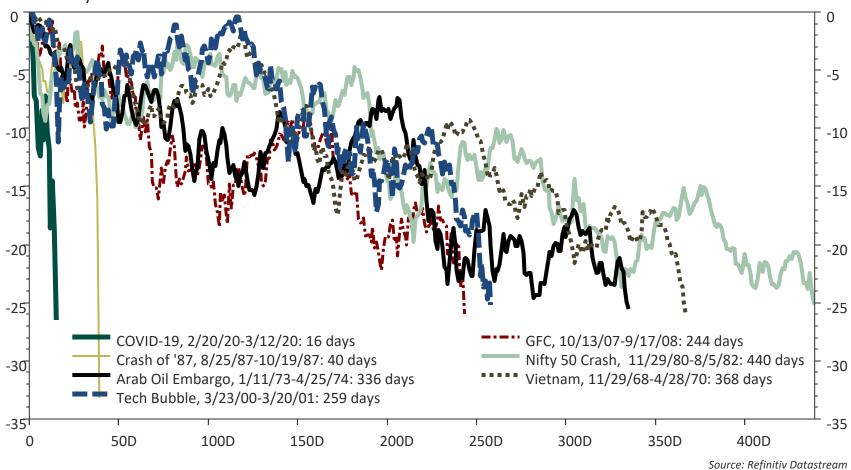
^{*}Stock market trough at 03/23/2020. Stock market peak at 02/18/2020. YTD through 06/28/2020 Source: Thomson Reuters Datastream



Swiftest 25% Drawdown in History



of Days to >25% drawdown





Exceptional Volatility

Four of the largest one-day percentage moves in the S&P 500 occurred during March 2020

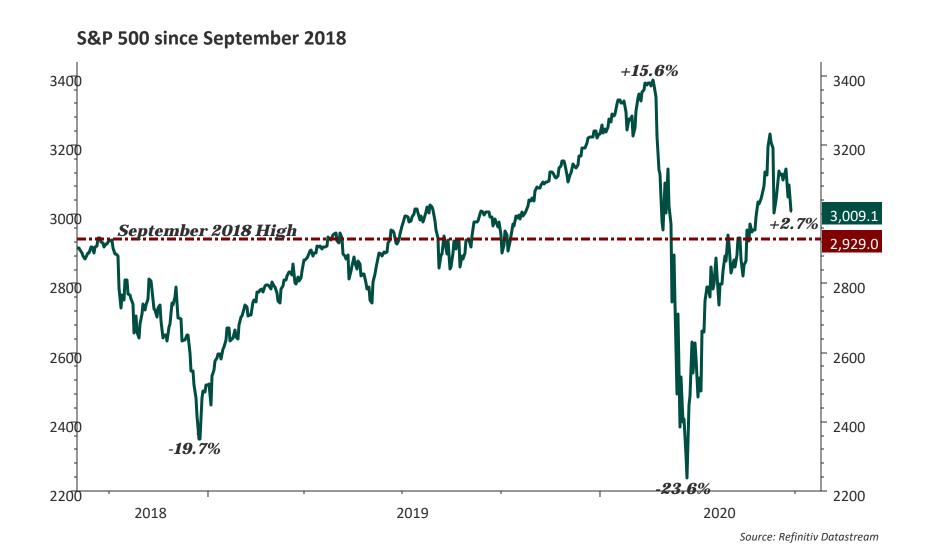
S&P 500: Largest One-Day Gains

Date	% Change
3/15/1933	16.61
10/30/1929	12.53
10/6/1931	12.36
9/21/1932	11.81
10/13/2008	11.58
10/28/2008	10.79
9/5/1939	9.63
4/20/1933	9.52
3/24/2020	9.38
3/13/2020	9.29

S&P 500: Largest One-Day Losses

Date	% Change
10/19/1987	-20.47
10/28/1929	-12.34
3/16/2020	-11.98
10/29/1929	-10.16
11/6/1929	-9.92
3/12/2020	-9.51
10/18/1937	-9.27
10/15/2008	-9.04
12/1/2008	-8.93
7/20/1933	-8.88

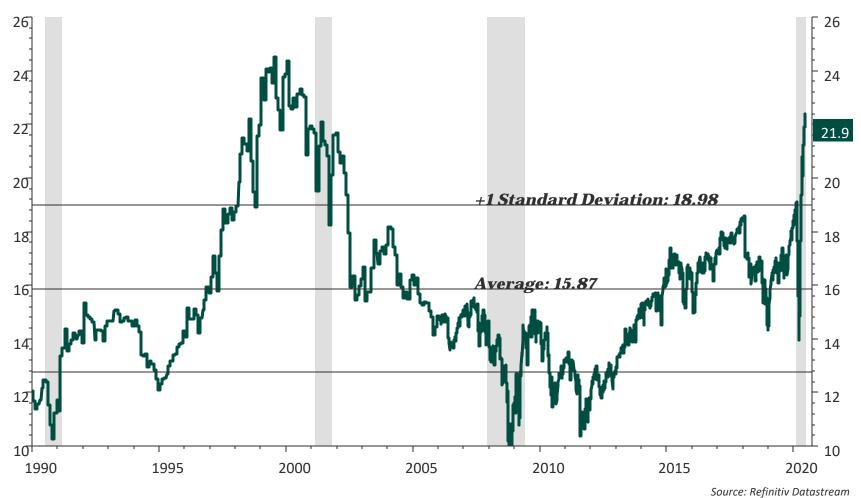
Despite volatility, markets little changed since September 2018





S&P 500 Valuation





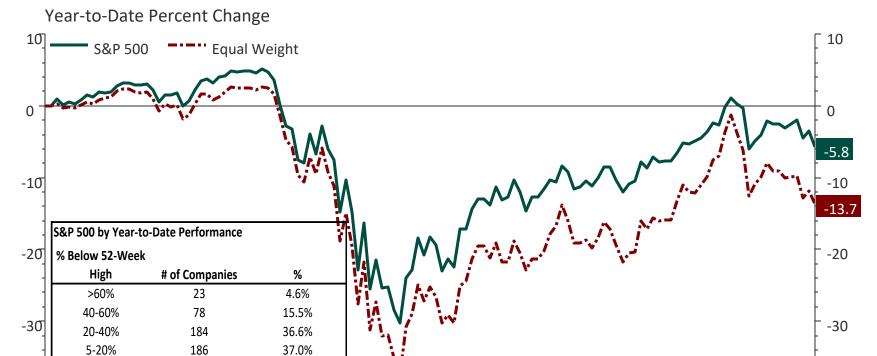


Bifurcated Market

S&P 500 vs. Equal Weight S&P 500

6.4%

Feb 2020



Mar 2020

Source: Refinitiv Datastream

Jun 2020



0-5%

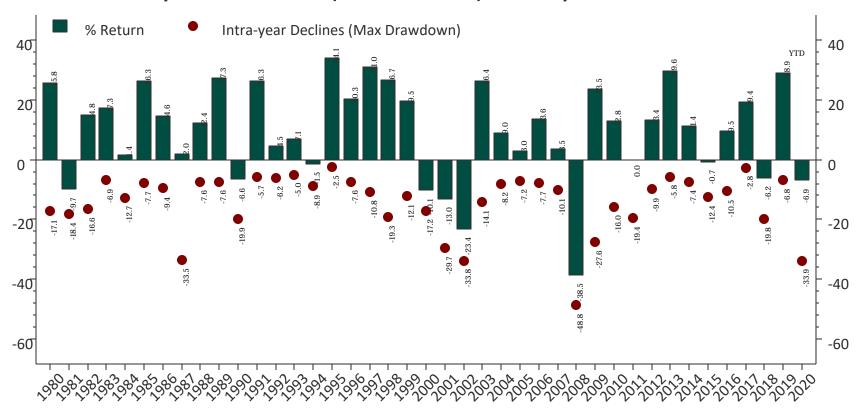
Jan 2020

Apr 2020

May 2020

Stock Market Sell-offs are Normal

S&P 500 Intra-year Price Declines (Max Drawdown) vs. Yearly Price Returns



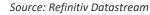
Source: Data provided by Thomson Reuters



S&P 500 vs. the US Dollar

S&P 500 vs. the US Dollar







S&P 500 vs. the 10-Year Treasury



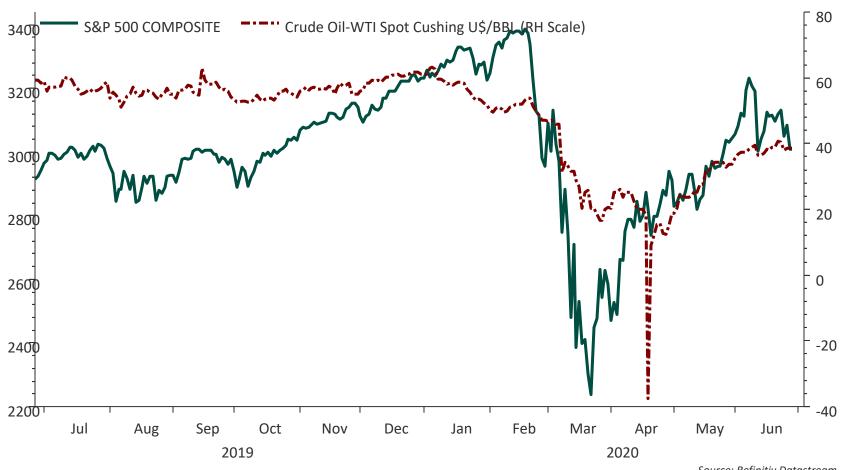


Source: Refinitiv Datastream



S&P 500 vs. the price of crude oil

S&P 500 vs. WTI Crude Spot



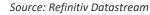




Dr. Copper

LME Copper Spot Price

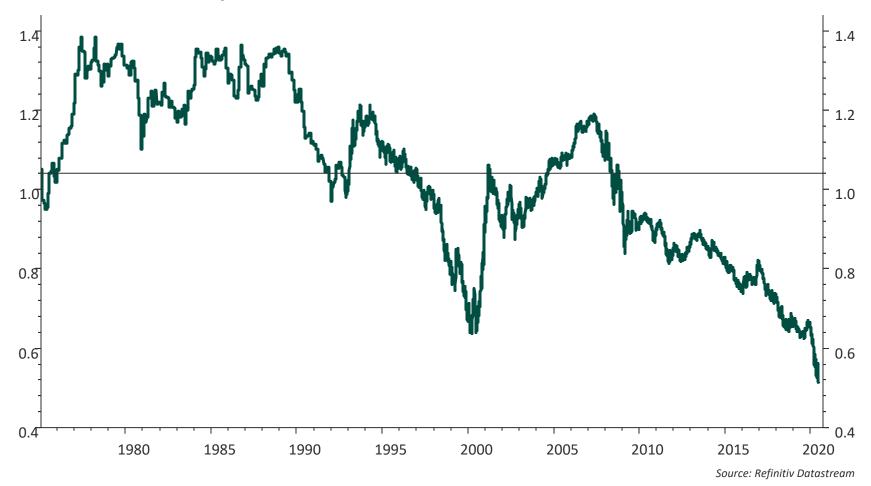






Value is out of favor

S&P 500 Value Index/Growth Index

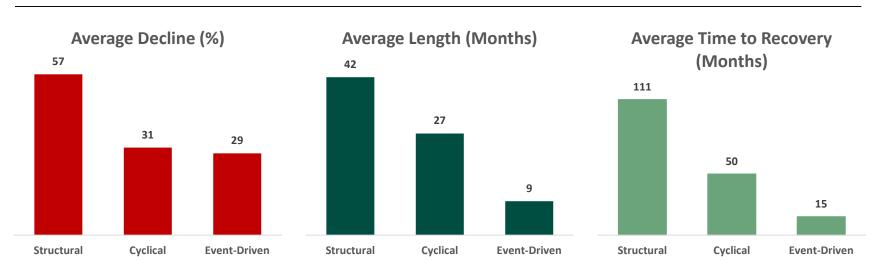




Characteristics of a bear market

Pre-Bear	Structural	Cyclical	Event-Driven
Rising Rates	✓	\checkmark	Maybe
Exogenous Shock	Maybe	Maybe	✓
Speculative Rise in Equity Prices	\checkmark	*	x
Economic Imbalances	✓	x	x
Rising Productivity	✓	Maybe	✓
Unusual Strength in the Economy	✓	x	×
New Era Belief	✓	*	*

US Bear Markets & Recoveries





Global Interest Rates

Global Bond Yields on June 29, 2020

Maturity	US	Canada	UK	Germany	Switzerland	Japan	Spain	Italy	Brazil	Greece
2 year	0.162	0.308	-0.073	-0.697	-0.673	-0.139	-0.436	0.117	3.405	NA
5 year	0.289	0.374	-0.041	-0.703	-0.602	-0.102	-0.205	0.752	5.625	0.526
10 year	0.638	0.522	0.170	-0.466	-0.438	0.017	0.472	1.371	6.910	1.295
30 year	1.374	0.993	0.615	-0.021	-0.267	0.592	1.273	2.282	NA	NA

Change in Global Bond Yields since June 22, 2020

Maturity	US	Canada	UK	Germany	Switzerland	Japan	Spain	Italy	Brazil	Greece
2 year	-0.002	0.005	0.003	0.022	-0.003	0.002	0.020	-0.011	-0.185	NA
5 year	-0.008	-0.013	-0.003	0.010	0.020	0.010	0.010	-0.001	-0.015	-0.040
10 year	0.000	0.008	0.000	0.015	0.007	0.016	0.016	0.006	-0.030	0.026
30 year	0.002	0.003	-0.010	0.015	0.015	0.003	0.018	0.013	NA	NA

Source: Data provided by Thomson Reuters



Forward interest rates

Forward Rate Analysis US Dollar Swap Curves

Forward Rates

		13.000											
Maturity	Current	6 Mo	1 year	2 year	5 year	10 year	Chg (in bp)						
1 year	0.259%	0.215%	0.188%	0.254%	0.731%	1.065%	81						
2 year	0.226%	0.214%	0.221%	0.315%	0.789%	1.106%	88						
3 year	0.232%	0.248%	0.273%	0.394%	0.840%	1.087%	86						
5 year	0.302%	0.369%	0.420%	0.551%	0.919%	1.104%	80						
10 year	0.603%	0.658%	0.699%	0.795%	1.010%	1.100%	50						
30 year	0.864%	0.892%	0.902%	0.924%	0.967%	0.937%	7						
2 - 10 Curve	38	44	48	48	22	(1)							
1 - 30 Curve <i>61</i>		68	71	67	24	(13)							
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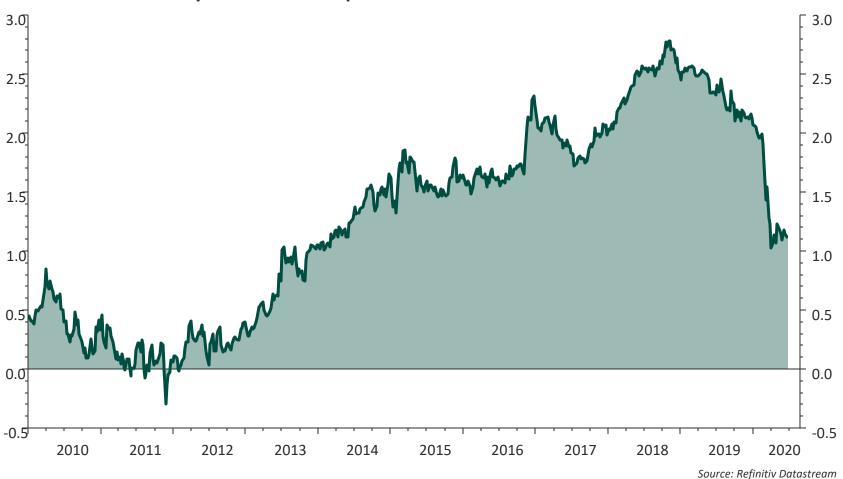
^{*}market rates as of 06/29/2020 and based on 3 month LIBOR.

Source: Data provided by Thomson Reuters



US Treasury – German Bund Spread

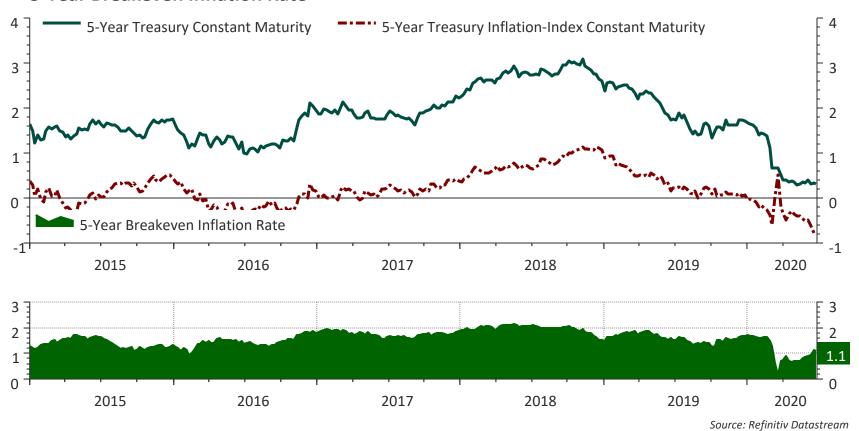






Low inflation expectations

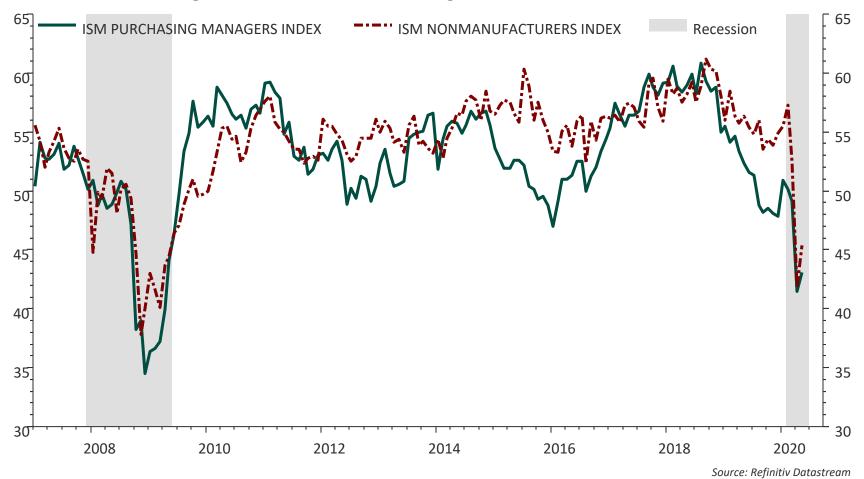
5-Year Breakeven Inflation Rate





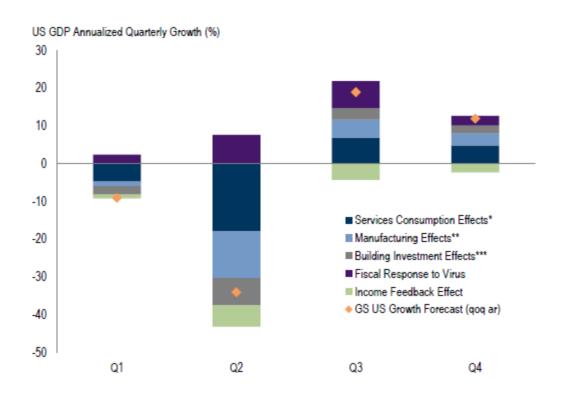
Manufacturing and Services sectors in contraction

ISM Manufacturing PMI and Non-Manufacturing NMI





US economic drag from COVID-19 likely concentrated in 1H20



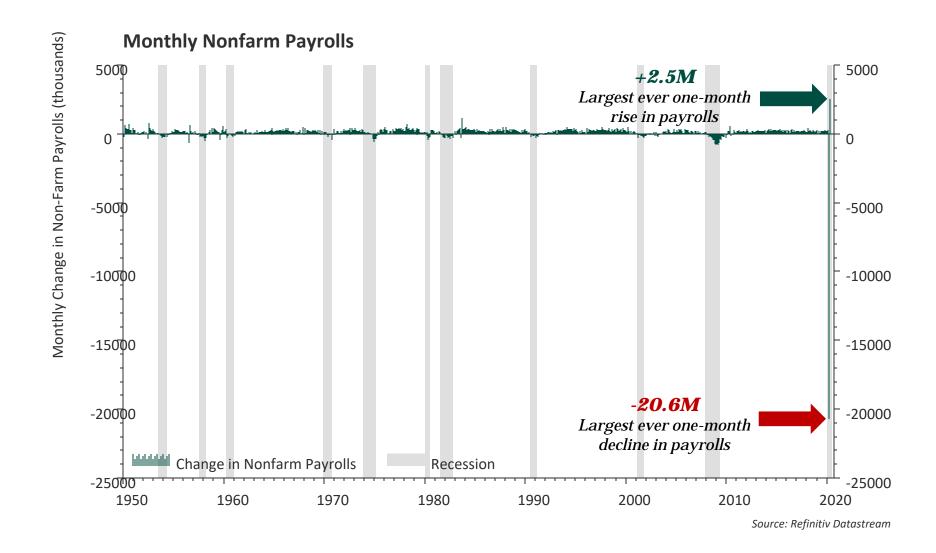
Key Drivers for Lower Growth

- Sharp contraction in March and April
- Consumers and businesses continue to cut back on spending
- Emerging supply chain disruptions
- · Tightening in financial conditions

Source: Goldman Sachs Global Investment Research and GSAM. As of March 31, 2020. "Includes cutbacks to consumption categories requiring face-to-face interaction. ""Includes reduced domestic and foreign demand for goods, supply chain disruptions, and plant shutdowns. ""Includes cutbacks to structures investment, homebuilding, and home sales. "QOQ AR" refers to quarter over quarter annualized rate.



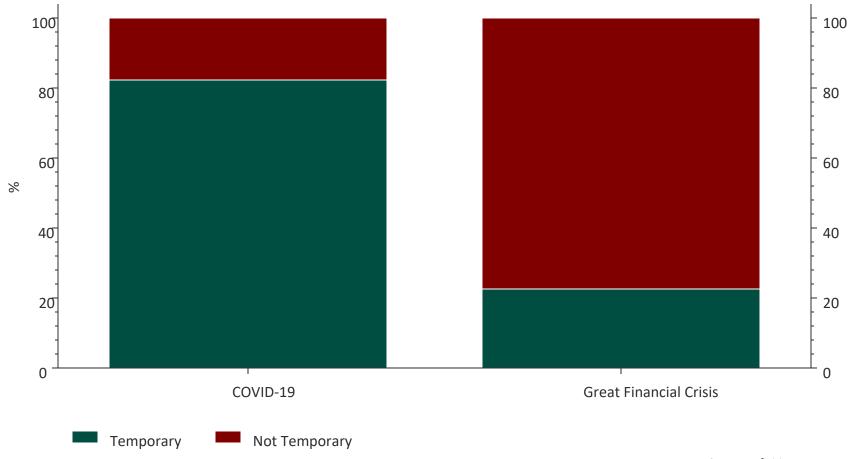
Labor: Unprecedented moves in employment





Labor: Vast majority of layoffs are temporary

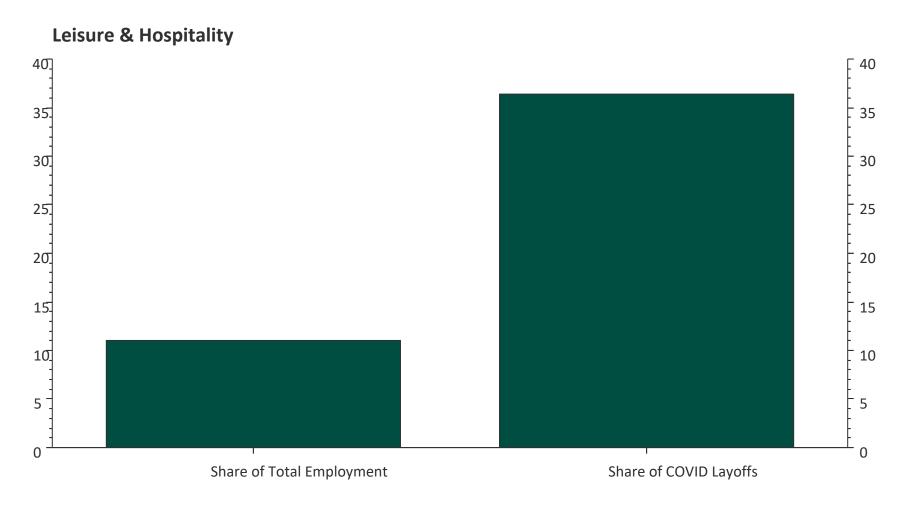


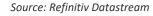






Labor: Leisure & Hospitality hit hardest

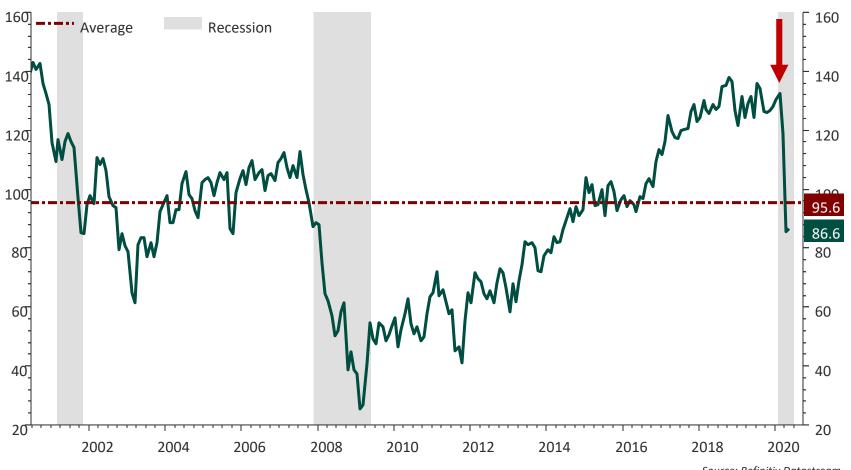


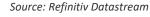




Consumer: Confidence rattled by COVID-19

Conference Board Consumer Confidence







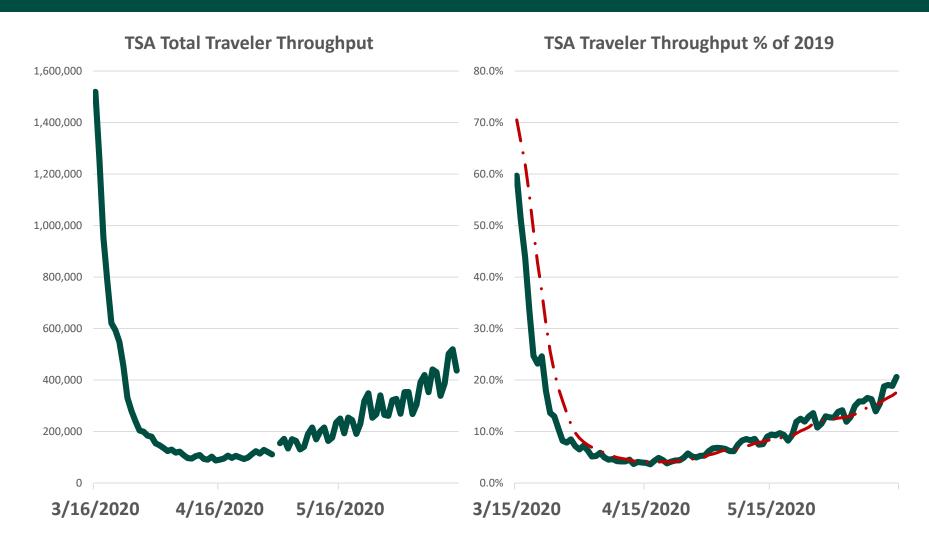
COVID-19 Recovery Heat Map

US Economic Activity Heat Map

	Metric	3/1/2020	3/8/2020	3/15/2020	3/22/2020	3/29/2020	4/5/2020	4/12/2020	4/19/2020	4/26/2020	5/3/2020	5/10/2020	5/17/2020	5/24/2020	5/31/2020	6/7/2020
	Hours Worked	1.0%	1.1%	-6.4%	-43.6%	-59.4%	-61.0%	-62.6%	-60.4%	-57.7%	-54.6%	-49.7%	-44.9%	-39.3%	-40.0%	-32.3%
aboı	Locations Open	-1.0%	-1.6%	-3.9%	-28.9%	-46.0%	-48.6%	-50.9%	-49.0%	-47.1%	-44.6%	-41.0%	-35.4%	-31.6%	-32.3%	-26.3%
1/ssa	Employees Working	1.0%	1.0%	-4.4%	-42.1%	-58.3%	-60.1%	-61.6%	-59.7%	-57.1%	-54.1%	-49.6%	-43.4%	-40.9%	-38.9%	-31.9%
Business/Labor	Google Mobility Workplaces	2.6%	2.9%	-3.0%	-28.9%	-42.4%	-46.1%	-49.0%	-45.3%	-44.4%	-41.9%	-39.0%	-37.3%	-35.6%	-38.4%	-30.4%
a	Google Search: Unemployment	100.0%	125.0%	1000.0%	1850.0%	2500.0%	2275.0%	2225.0%	2075.0%	1975.0%	1650.0%	1625.0%	1550.0%	2033.3%	1425.0%	1375.0%
A: T	TSA Throughput	99.1%	87.6%	70.5%	31.0%	9.8%	5.9%	4.3%	4.2%	4.6%	6.2%	7.4%	8.7%	10.9%	12.6%	14.6%
Air Travel	Google Search: Flight	81.6%	103.1%	84.0%	50.6%	42.5%	39.0%	35.8%	42.3%	46.6%	47.3%	46.2%	43.2%	44.4%	46.3%	44.7%
	Google Mobility Transit	4.1%	3.3%	-6.4%	-33.0%	-48.1%	-50.4%	-52.4%	-50.3%	-48.0%	-43.4%	-41.0%	-40.0%	-36.7%	-36.9%	-32.7%
General Activity	Apple Mobility Transit	102.0%	100.9%	78.6%	37.2%	26.3%	24.3%	23.4%	23.8%	25.0%	27.3%	29.0%	30.9%	33.3%	36.1%	38.6%
al Ac	Apple Mobility Driving	118.1%	118.9%	105.2%	69.6%	54.4%	53.4%	54.4%	61.4%	67.3%	75.4%	83.6%	96.7%	105.9%	109.7%	116.6%
ener	DOE Gasoline Demand	100.7%	102.8%	104.9%	104.4%	97.3%	85.0%	72.0%	62.1%	59.9%	64.4%	70.9%	75.0%	78.9%	81.4%	82.8%
G	AAR Waste & Scrap Railcar Loads	97.5%	107.2%	104.6%	95.7%	94.7%	87.7%	76.8%	75.6%	84.8%	87.8%	92.1%	91.9%	91.9%	97.4%	90.6%
Restaurant	Open Table Reservations	2.0%	-2.0%	-48.0%	-99.9%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-99.2%	-96.9%	-93.6%	-87.9%	-83.0%	-74.1%
Kestaurant	Google Search: Restaurant	92.0%	80.5%	73.6%	53.4%	55.4%	59.3%	57.1%	61.0%	65.4%	69.7%	72.7%	72.9%	74.7%	71.3%	75.8%
	STR Hotel Occupancy	-1.7%	-7.3%	-24.4%	-56.4%	-67.5%	-68.5%	-69.8%	-64.4%	-62.2%	-58.5%	-55.9%	-54.1%	-50.2%	-43.2%	-45.3%
els	STR Avg. Daily Rate	1.6%	-4.6%	-10.7%	-30.2%	-39.4%	-41.5%	-45.6%	-42.2%	-42.9%	-44.0%	-42.1%	-42.4%	-39.7%	-33.3%	-35.9%
Hotels	STR Rev. per Available Room	-0.2%	-11.6%	-32.5%	-69.5%	-80.3%	-81.6%	-83.6%	-79.4%	-78.4%	-76.8%	-74.4%	-73.6%	-69.9%	-62.1%	-65.0%
	Google Search: Hotel	116.2%	104.0%	93.0%	69.9%	54.1%	60.0%	61.8%	62.3%	58.6%	62.9%	71.2%	69.0%	56.0%	70.9%	79.3%
	Google Mobility Retail & Recreation	7.7%	8.4%	1.9%	-27.7%	-42.0%	-42.3%	-45.7%	-41.7%	-39.7%	-33.9%	-29.6%	-28.9%	-24.3%	-23.9%	-18.6%
ii & ation	Google Search: Movie Theatre	65.5%	58.3%	28.6%	13.1%	10.9%	10.0%	9.3%	8.3%	9.2%	14.8%	18.4%	26.9%	18.5%	18.6%	23.2%
Retail & Recreation	Bloomberg Consumer Comfort	63.0%	62.7%	63.0%	59.7%	56.3%	49.9%	44.5%	41.4%	39.5%	36.9%	35.8%	34.7%	35.5%	37.0%	38.7%
~	Redbook Same Store Sales	5.4%	6.0%	7.2%	7.9%	7.5%	7.0%	-2.0%	-4.4%	-5.7%	-6.6%	-7.5%	-8.5%	-7.5%	-7.5%	-9.7%
Housing	MBA Mortgage Puchase Apps	111.3%	118.8%	112.9%	95.0%	73.6%	65.0%	64.2%	65.0%	74.5%	82.7%	87.9%	94.0%	106.0%	114.0%	124.3%



COVID-19 Recovery Metrics: Airlines



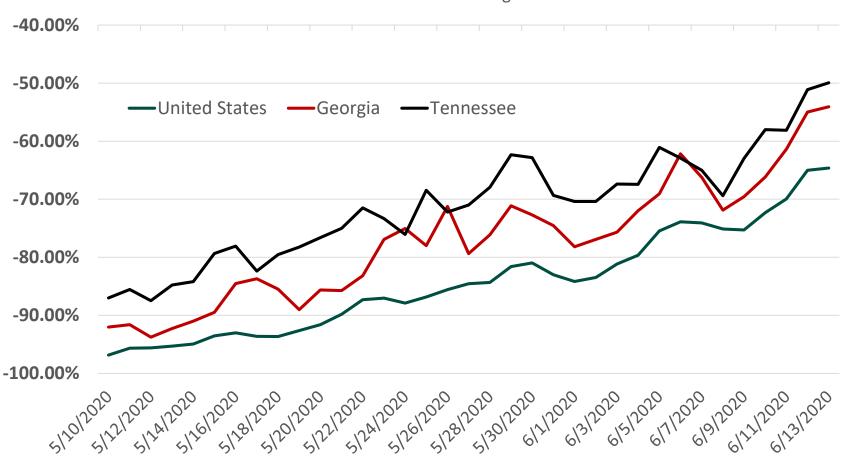




COVID-19 Recovery Metrics: Restaurants

Open Table Seated Diners

Year-over-Year % Change

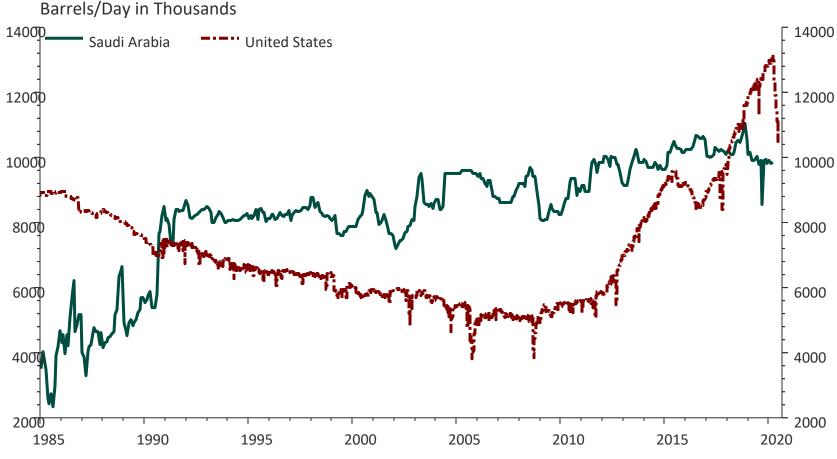


Source: OpenTable



United States is the new swing oil producer

US vs. Saudi Arabia Crude Production







Global Decline in Rig Count

