

**Key Points**

1. Markets are not being unrealistically bearish near-term. While long-term buying opportunities have emerged forget trying to pick the bottom.
2. Fiscal policy + legislative action key enablers; monetary policy in a supporting role (at most).
3. China's data is pure shit and continues to put lives (Chinese and other) at risk.
4. Listening to WHO (World Health Organization) can kill you.
5. Flattening the curve is key - the death rate will be 1-4% in the U.S. FDA approved test (45 minutes) Sat 3/21!
6. American industry is swinging into action.

**Markets are not being unrealistically bearish. But long-term buying opportunities have emerged.**

		S&P	XLE	BA	
Monday	(Mar 16)	(11%)	(14%)	(24%)	WTI Oil (10%) to \$22.63.
Tuesday	(Mar 17)	5%	1%	(4%)	WTI Oil (6%) to \$26.95.
Wednesday	(Mar 18)	(5%)	(14%)	(18%)	WTI Oil (24%) to \$20.37.
Thursday	(Mar 19)	0%	7%	(4%)	WTI Oil +24% to \$25.22.
Friday	(Mar 20)	(4%)	1%	(3%)	WTI Oil (10%) to \$22.63
		<b>(15%)</b>	<b>(20%)</b>	<b>(44%)</b>	<b>WTI Oil (29%) for the week.</b>

**Energy (XLE ETF)** - WTI Oil price off another (29%!) for the week. U.S. seeking to work out an agreement between Saudi Arabia and Russia. There is a common interest in a sustainably attractive oil price of at least \$50/barrel (higher for Russia and Saudi Arabia) but also other dynamics. Here is where interests align and diverge and it is about enemies, frenemies, and opportunities.

**Russia** - Putin is President for life and must hold that position to protect his life and assets from a post-Putin power struggle. He has a two decade hold on power by virtue of his opportunity under Yeltsin and capability (skilled KGB counterintelligence operative). He needs at least \$60-70 oil to pay all his bills (budget, bribes, whatever) and is striking at a moment of real or perceived weakness of his opponents (Saudi Arabia, United States). Saudi Arabia floated Saudi Aramco this past year which means greater transparency of the cash flows the oil company pays to support the regime. Further, the 32 year old "MBS" is younger, hotter headed and has far less control than Putin.

**Saudi Arabia** - the Saudis are not fans of U.S. fracking and tried to knock it out with an oil price war in 2014-2015 that sent oil price plummeting and the Haynes & Boone Oil Patch Bankruptcy monitor skyrocketing. At the trough an estimated 50% of production was pumping for debt service not profit. But U.S. financial system liquidity and commercial bank patience held up for most.

**United States** - became the #1 global oil producer with fracking, which has dramatically improved the U.S. trade balance and energy posture BUT U.S. production costs are significantly higher (labor rates + shale is more cost intensive to extract). It is also an election year and we don't need this shit with the virus going on.

In a nutshell, Putin threw a big geopolitical punch against his #1 opponent (United States) and its' #1 Middle East ally (by size - Israel is #1) at the most inopportune time.

**Boeing** - off (44%) for the week as congress balking at requested \$60 billion aid package. President Trump and Congress critical of share repurchases and former U.N. Ambassador Nikki Haley left the board as CEO Dave Calhoun gave up 2020 pay, suspended dividend and mulled job cuts.

1. Airlines crushed again with United (UAL) off (41%), American (27%) and Delta (44%) as countries continue to lock down.
2. Aviation suppliers fell including General Electric (GE) off (17%), United Technologies (22%) and Honeywell (25%).
3. Also lowers demand for high margin jet fuel.

Numerous companies are trading at significant discounts to their intrinsic value and a patient investor can buy if they are willing to stomach volatility.

**Fiscal policy + legislative action key enablers; monetary policy in a supporting role (at most).**

1. Federal Reserve / U.S. Treasury would supply up to \$4 trillion of liquidity (\$500B equity) through broad based lending programs per Treasury Secretary Steve Mnuchin. Goal is to help small to mid-sized business get through next 90-120 days. **Bill expected to be on Senate floor Monday.**
  - A. Small-business retention loans to keep workers on payrolls covering two weeks cash flow + some overhead. Loans forgiven if no layoffs.
  - B. Checks for Americans - average family of four \$3,000.
  - C. Enhanced unemployment benefits.
2. Tax deadline extended to July 15 from April 15. (Done)
3. Student loan interest deferred for one year. (Done)

**China's data is pure shit and continues to put lives (Chinese and other) at risk.** Granted welding infected people into their apartment or home (China) is quicker than government yelling at drunk college kids to go home during Spring Break. If you believe China's 60.5 per million and a 4% death rate total fatalities in the U.S. will be about 840 compared to perhaps 30,000 annually for the common flu. I do not believe that. Neither do you.

**Border actions matter.** China's neighbors benefitted from the Chinese/Asian/Lunar New Year (everybody was home!).

U.S. Population	CASES PER MILLION	CALC. U.S. CASES	DISTR. DEATH RATE	EST. U.S. DEATHS
<b>320,000,000</b>				
<b>Assume 4% death rate holds.</b>				
China	60.5	19,350	4.3%	840
S. Korea	170.2	54,451	3.8%	2,046
France	215.7	69,037	<b>4.0%</b>	2,761
Germany	269.0	86,067	<b>4.0%</b>	3,443
Switzerland	767.2	245,504	<b>4.0%</b>	9,820
<b>U.S. (Actual)</b>	<b>82.7</b>	<b>24,738</b>	<b>NA</b>	<b>291</b>
U.S. @4.0%	82.7	24,738	<b>4.0%</b>	990
U.S. @ S. Korea	170.2	54,451	<b>4.0%</b>	2,178
U.S. @ France	215.7	69,037	<b>4.0%</b>	2,761
U.S. @ Germany	269.0	86,067	<b>4.0%</b>	3,443
U.S. @ Switzerland	767.2	245,504	<b>4.0%</b>	9,820

Given China's poor handling of SARS in 2003 their reaction was (generally) swift. 11/17 FIRST case detected in Wuhan. -- North Korea - closed border to tourists. 1/14 WHO tweets Chinese authorities found no clear evidence of human to human trans.

1/28 Mongolia - temporary border restrictions.

1/30 Kazakhstan - suspension of bus, train, air travel with China and visa issuance to Chinese nationals.

Laos - sealed off Golden Triangle border region to Chinese and Myanmar citizens. Nepal - closed border for 15 days.

Russia - suspended electronic visa issuance through Far East boarder checkpoints. Vietnam - suspended entry visa issuance. Vical Aviation Administration called on airlines to suspend flights to infected areas.

**2/1 United States - ordered stopping of flights.**

2/27 S. Korea - closed border

Italy - closed travel to/from China.

**Listening to WHO (World Health Organization) can kill you.**

WHO = MUST play ball to stay in China. Take their praise of China responses with a grain of salt.

Selected World Health Organization Tweets bearing inaccurate information:

1/14 Preliminary investigations conducted by the Chinese authorities have found no clear evidence of human-to- human transmission...

1/19 An animal source seems the most likely primary source...with some limited human-to-human transmission occuring between close contacts.

1/30 To date, new #coronavirus (2019-nCoV) person-to-person transmission outside of #China has been limited.

**1/28 Practically EVERY neighboring country shut down their borders.**

**2/1 U.S. suspended flights by order of President Trump.**

2/4 Q. Can 2019-nCoV be transmitted from person to person?

A. Yes...usually after close contact with an infected patient, for example, in a household workplace, or health care centre.

2/4 Q. Can 2019-nCoV be caught from a person who presents no symptoms?

A. According to recent reports, it may possible that people infected with 2019-nCoV may be infectious before showing significant symptoms. However, based on currently available data, the people who have symptoms are causing the majority of virus spread.

**Messaging shifts from inaccurate medical information toward defensiveness and pro-China CCP handling of situation as well as denial of origin.**

2/6 We don't know the source of the #2019nCoV outbreak....

2/15 We must be guided by solidarity, not stigma. The greatest enemy we face is not the #coronavirus itself; it's the stigma that turns us against each other. We must stop stigma and hate! - Dr. Tedros.

2/21 The measures #China & other countries have taken have given us a fighting chance of containing the spread of the #coronavirus.

2/27 But this #coronavirus is not influenza. With the right mesures, it can be contained. That is one of the key messages from #China. The evidence we have is that there does not appear to be widespread community transmission.

**Take-away:** WHO in a tough situation and has to make certain statements to stay in China.

**Flattening the curve is key - the death rate will be 1-4% under the best of circumstances.** Some countries are running dramatically higher fatality rates but we think that reflects sampling biases (sickest tested first then died) as well as major differences in response capability including acute bed capability, medical supplies and civic/government effectiveness. Italy (9% of cases dead, 80% to be determined or TBD), Iran 7.5% / 55% and blaming everyone else but themselves, as well as France and UK.

Factors that can drive morbidity down:	Infect...	Potential U.S. Deaths from Covid-19				
		4%	3%	2%	1%	
Worst Case Scenarios	60%	7,680,000	5,760,000	3,840,000	1,920,000	
1. <b>Flattening the infection curve.</b> This is why we are locking down.	50%	6,400,000	4,800,000	3,200,000	1,600,000	
	40%	5,120,000	3,840,000	2,560,000	1,280,000	
2. <b>Rapid testing.</b> Cepheid received FDA approval Saturday (3/21) for a test that can be tested on 23,000 global (5K U.S.) automated testing systems.	1918 Spanish Influenza (killed 10%)	33%	4,224,000	3,168,000	2,112,000	1,056,000
	2009 H1N1	25%	3,200,000	2,400,000	1,600,000	800,000
	"Normal" flu (kills 0.1%).	9%	1,152,000	864,000	576,000	288,000
	China: If you believe them.	0.006%	768	576	384	192
3. <b>Nutrition and health.</b> 1918 Spanish Influenza killed so many people because 1/3 got it (little response was taken by global governments at the time) and because most people didn't eat much (so 10% of those infected died). It was also after World War 1 had devastated much of Europe. Americans, including the author, are not starving.						
4. <b>Acute care access.</b> That massive spending on U.S. healthcare (which does have a lot of waste) also means U.S. has more acute care capacity than most other countries. Not enough, mind you, but more. And Army Corps of Engineers / National Guard can ramp capacity. Others are not so lucky. Northern Italy is not putting anyone over 60 nor those who are terminally ill on respiratory machines. NY - anecdotally an acquaintance went to the emergency room this past day for a kidney stone. After 10 hours of waiting in pain they went home.						

#### Let's think about the scenarios:

##### Goldilocks Scenario: South Korea

- 170.2 infected per million adding 2 per day (per million). Continue that trend to end of 2020 = 720 per million.
- U.S. population 320 million round figures @ 1% death rate = 2,300.
- U.S. population 320 million round figures @ 4% death rate = 9,200.
- H1N1 Swine Flu = 12,469.
- Normal flu season = 29,000.

##### H1N1 Scenario: 2009 U.S. response

- 60.8 million US cases (25% of population), 274,000 hospitalizations and **12,469** deaths. (0.2% fatality rate) over 1 year period.
- 25% infection rate @ 1% = 800,000.
- 25% infection rate @ 4% = 3,200,000.

Late March - first case in California. Spread to TX, NY, others by mid-April.

4/22/09 - CDC activated Emergency Ops Center (EOC).

4/25/09 - WHO declared public health emergency. First US deaths.

4/26/09 - US Dept. of Health and Human Services declared an emergency.

End of May - all 50 states, 27,717 total cases.

10/24/09 - President Obama declared Swine Flu a national emergency.

12/10/09 - CDC estimated 50 million Americans had it.

**Do we have a shot at Goldilocks?** Possibly, and it will be driven by the extreme actions taking place. In 2009 the Obama administration was dealing with the Great Recession and Swine Flu was, candidly, a bad flu that killed at an 0.2% rate versus the 0.1% "normal" rate. This one is different because its' lethality is 5-20X that of Swine Flu and the United States is making a decision to absorb an economic bullet (with a strong economy) to try and protect (by my estimate) 800,000-3,200,000 lives.

**Is worse possible?** Yes. NY Governor Cuomo has stated 80% infection rate is possible and the NJ Health Commissioner Judith Persichilli, who actually has a medical background, thinks 100%. You can inspect the math above.



**AMERICAN INDUSTRY IS SWINGING INTO ACTION.** So is the world but let's watch the locals!

#### MEDICAL COMPANIES (selected)

**Gilead Sciences** - Phase 2 trial for existing drug that was effective against SARS and MERS.

**Cepheid** - FDA approval (3/21) for rapid test which can be automatically tested in 45 minutes at 5,000 US locations.

**Medtronic** - doubling ventilator capacity by going to 24/7 in Galway, Ireland facility.

#### RESPIRATORS / VENTILATORS

**3M Company** - doubled production of N95 respirator masks. **Now at 100 million per month!**

**Honeywell** - also increasing production of N95 respirator masks. Donated \$2 million of equipment to hospitals in Wuhan, China.

**General Motors** - helping Ventec Life Systems ramp to 1,000 ventilators/month from 150 by providing logistics, purchasing and manufacturing expertise.

#### BOOZE TO HAND SANITIZER

**Pernod Ricard USA** - converting to hand sanitizer (from alcohol).

**Patapsco Distilling Co.** (Sykesville, MD) - converting to making hand sanitizer.

**Smuggler's Notch Distillery** (Vermont) - converting to make hand sanitizer.

**J&L Distilling** (Boulder, CO) - delivering hand sanitizer to local fire department and senior care organizations.

**Republic Restoratives** (Wash., DC) - producing and distributing hand sanitizer.

#### EMPLOYMENT

**Walmart** - seeking 150,000 temporary workers.

**Amazon** - hiring another 100,000 workers. A guy who lost his restaurant job on Thursday in Rogers, Arkansas was at Wal-mart by Friday afternoon.

**Target** - temporary \$2/hour pay raise to offset reduction in hours. Associates 65+, pregnant, or ill can take paid leave.

#### KEEPING YOURSELF OCCUPIED

**Equinox** (fitness club chain) - advocating orgasms to reduce stress and sleep better. Also not charging fees while closed.

3/21/20

Macro Brief:

UNITED STATES

				%
		Mar 13	Mar 20	Chg.
S&P500 (SPY)		269.32	228.80	(15%)
S&P400 Mid (MDY)		282.07	229.25	(19%)
S&P600 Sm (SML)		725.46	604.74	(17%)
Energy (XLE)		32.19	25.86	(20%) WTI off (38%) ww, Brent (21%).
Financials (XLF)		23.05	18.91	(18%)
Technology (XLK)		84.19	71.42	(15%)
Materials (XLB)		46.51	40.68	(13%)
S&P Trans. (XTN)		44.55	38.23	(14%)
<b>INDUSTRIAL (XLI)</b>		<b>62.94</b>	<b>51.40</b>	<b>(18%)</b>
Cons. Disc. (XLY)		102.30	87.81	(14%)
Cons. Staples (XLP)		56.61	50.40	(11%)
Healthcare (XLV)		90.66	79.09	(13%)
Utilities (XLU)		57.67	47.82	(17%)
United (UAL)		41.64	24.50	(41%)
American (AAL)		14.31	10.38	(27%)
Delta (DAL)		38.36	21.35	(44%)
Boeing (BA)		170.20	95.01	(44%)
General Electric (GE)		7.85	6.52	(17%)
United Tech. (UTX)		105.40	82.53	(22%)
Honeywell (HON)		149.41	112.50	(25%)
3M Company (MMM)		141.68	124.89	(12%)
Emerson (EMR)		50.33	44.09	(12%)
Rockwell Aut. (ROK)		166.18	126.79	(24%)
Apergy (APY)		6.66	3.62	(46%)
Nordic Am. (NAT)		3.18	2.46	(23%)
<b>MACHINERY</b>				
United Rentals (URI)		91.01	70.10	(23%)
Komatsu (6301.T)		1,709.50	1,510.00	(12%)
Caterpillar (CAT)		99.64	95.50	(4%)
Manitowoc (MTW)		10.59	9.80	(7%)
Terex (TEX)		16.00	14.23	(11%)
Oshkosh Cp. (OSK)		60.00	50.70	(16%)
Deere & Co. (DE)		138.96	111.63	(20%)
AGCO (AGCO)		55.33	40.30	(27%)
<b>FLOW CONTROL</b>				
Flowserv		25.72	20.43	(21%)
Pentair		35.81	23.78	(34%)
Xylem		72.12	59.89	(17%)
<b>ELECTION 2020</b>		<b>MAR 13</b>	<b>MAR 20</b>	
Donald Trump		0.47	0.46	
Joe Biden		0.45	0.46	
Virus Response Approval		0.43	0.55	

ABC News/Ipsos poll. 92% Republican approval, 30% Dem.

Country	UNITED STATES
Currency	DXY
Commodity	Oil
Bank	NA
Company	Caterpillar (CAT)

Date	3/21/20	3/14/20	w/w	SIGNIFICANT NEWS FLOW
2 Year	0.32%	vs. 0.51%	(19) bps	Flight to safety
30 Year	1.47%	vs. 1.60%	(13) bps	Flight to safety
Currency/Dollar	102.42	vs. 98.48	4.0%	Flight to safety
Crude Oil - WTI	20.30	vs. 32.90	(38.3%)	Global shutdown + productionincr = massive glut building.
Crude Oil - Brent	27.34	vs. 34.67	(21.1%)	
Natural gas	1.75	vs. 1.98	(11.8%)	
Gasoline	0.67	vs. 0.96	(29.5%)	
Gold	1,453.90	vs. 1,527.70	(4.8%)	Deflationary pressure (USD up, Oil down).
Palladium	1,642.11	vs. 1,806.28	(9.1%)	Shuttered auto production.
Copper	2.16	vs. 2.50	(13.4%)	Dr. Copper signals eco plunge. New unemployment claims agree.
Steel	3,438.00	vs. 3,450.00	(0.3%)	
Coal	66.83	vs. 65.70	1.7%	
Iron Ore	90.00	vs. 90.50	(0.6%)	
Baltic Dry Index	630.00	vs. 633.00	(0.5%)	
Corn	348.75	vs. 368.25	(5.3%)	
Wheat	537.50	vs. 510.50	5.3%	
Rice	13.30	vs. 12.86	3.4%	
Lean Hogs	68.03	vs. 71.40	(4.7%)	
Beef	13.75	vs. 13.98	(1.6%)	
Poultry	4.54	vs. 4.92	(7.7%)	
S&P 500	228.80	vs. 269.32	(15.0%)	Off (21%) in two weeks.
Caterpillar	95.50	vs. 99.64	(4.2%)	