



February 28, 2020

Corona Correction and a Leap into the Olympic Trials

Dear Friends of Resolute Partners Group (RPG):

Our favorite beer has never been Corona and it will never be. We feel compelled to respond to the growing concern we are seeing across the globe as it relates to COVID-19 aka “the coronavirus.” There are and will continue to be, plenty of news stories around the health implications of the virus (we will briefly touch upon those in this letter). Most, if not all, of those will be better written and more interesting than this. It is our intent with this letter to provide our current thinking as well as provide context to the situation as it relates to the global economy and markets. The situation is fluid and we will have updates as new material information arrives.

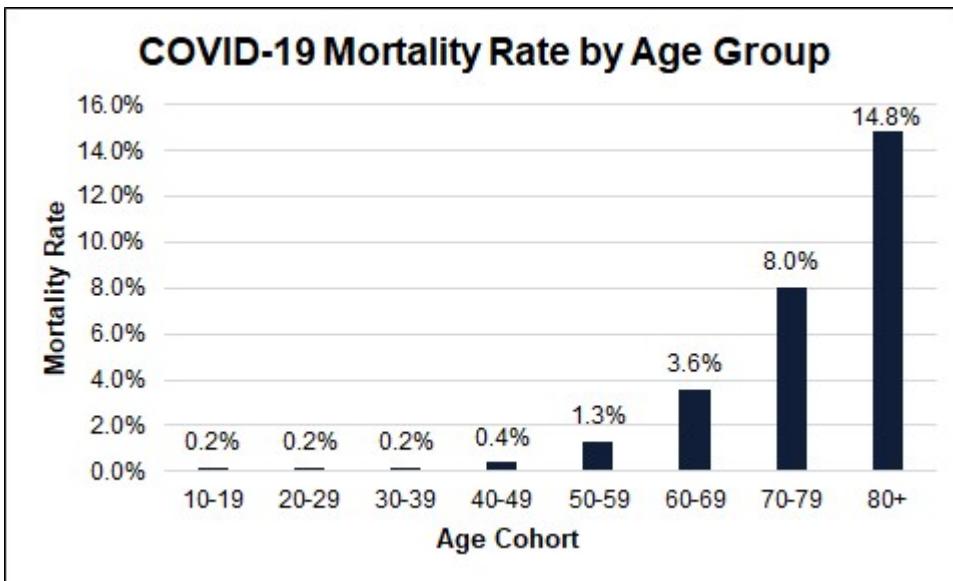
Summary of the Virus:

Two months ago, Gregorian New Year's Eve to be exact, China first alerted the World Health Organization of several pneumonia/SARS-like cases in Wuhan, the capital of Central China's Hubei province with a total population of 11,000,000. New Year's Day, January 1st, the CDC identifies a seafood market in Wuhan as the center of the outbreak, that market remains closed today. Human-to-human transmission of the virus typically occurs in 4 ways: 1) coughing and sneezing 2) close personal contact 3) touching a surface or object with the virus on it, then touching your mouth, nose, eyes before washing your hands 4) fecal contamination.

As of this writing, there are 83,867 confirmed cases of which 2,867 individuals have passed away with 36,686 confirmed recoveries. Mainland China accounts for 95% of cases and 98% of deaths - 60 cases and no deaths have been reported here in the US (yesterday California officials announced they are monitoring 8,400 individuals who have traveled from places of “concern”). While still largely contained to mainland China, we are starting to see reports of unique cases originating outside of China - a trend likely to accelerate in the coming weeks despite large containment efforts being taken by many countries.

On February 24, 2020 the Chinese Center for Disease Control and Prevention released a report using metrics from February 11, 2020 when there were 72,314 cases. From the study, 81% of patients were considered to have mild symptoms, 14% severe, and 5% critical. The case-fatality rate from the study showed a total mortality rate of 2.3% (since increased to ~3.4%) with patients over the age of 70 were most impacted at a 10% fatality rate. Approximately, half of those COVID-19 patients diagnosed “critically ill” have died. So far, this particular virus is impacting the very old and immunosuppressed populations more so than any other. Hearteningly, there appear to be very few cases in children under the age of ten.

Below is the mortality by age group (note: The study did not report any deaths in children younger than 10, who represented less than 1% of the patients):



Source: Chinese Center for Disease Control and Prevention

Markets and Global Economic Impact:

The financial industry's common compliance refrain of "past performance is not indicative of future results" rings true for this section, however, we do have recent historical comparisons in SARS, MERS, swine flu, avian flu, etc. The end result was rather benign, markets and global GDP recovered shortly after the worst of those outbreaks ended by late spring/early summer. Several examples shown below:



Epidemic	Date	MSCI World Market Returns		
		1-month	3-month	6-month
HIV/AIDS	Jun-81	-0.46%	-4.64%	-3.25%
Pneumonic Plague	Sep-94	-2.79%	-4.67%	-4.30%
SARS	Apr-03	8.64%	16.36%	21.51%
Avian Flu (H5N1)	Jun-06	-0.18%	2.77%	10.05%
Dengue Fever	Sep-06	1.07%	7.09%	9.68%
Swine Flu (H1N1)	Apr-09	10.90%	19.73%	39.96%
Cholera Outbreak	Nov-10	-2.35%	7.02%	13.61%
MERS	May-13	-0.29%	2.15%	8.58%
Ebola	Mar-14	-0.09%	2.37%	4.37%
Measles/Rubeola	Dec-14	-1.71%	1.92%	2.29%
Zika	Jan-16	-6.05%	-0.88%	-0.57%
Ebola	Oct-18	-7.42%	-13.74%	-3.49%
Measles/Rubeola	Jun-19	6.46%	4.51%	12.02%
Average	--	0.44%	3.08%	8.50%
Median	--	-0.29%	2.37%	8.58%
Min	--	-7.42%	-13.74%	-4.30%
Max	--	10.90%	19.73%	39.96%

Source: Charles Schwab, FactSet

The MSCI World Index captures large and mid-cap stocks across 23 developed countries. With 1,646 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

There are two key differences that suggest “this time is different” (the most expensive 4 words in investing): 1) China’s importance in the global economy has increased dramatically - since 2003, US imports from China as a proportion of cost of goods sold and China’s share of global GDP have more than doubled 2) The easiest comparison, SARS, was largely contained to Asia, whereas COVID-19 appears to be going global.

S&P 500 Performance over the course of each outbreak			
Epidemic	Dates	# of Trading Days	S&P 500 % Change
SARS	Jan 2003 to Mar 2003	38	-12.8%
Avian Flu (H5N1)	Jan 2004 to Aug 2004	141	-6.9%
MERS	Sept 2012 to Nov 2012	43	-7.3%
Ebola	Dec 2013 to Feb 2014	23	-5.8%
Zika	Nov 2015 to Feb 2016	66	-12.9%
COVID-19 (coronavirus)	Jan 2020 to present	40	-8.6%

Source: FactSet, Citi Research, Yahoo Finance

The S&P 500 or Standard & Poor's 500 Index is a market-capitalization-weighted index of the 500 largest U.S. publicly traded companies.

Since February 20th, the S&P 500 is down approximately 13%, the worst among developed nations. The fastest recorded correction occurred February 27th as the S&P 500 fell more than 10% from prior highs in just 6 trading days. Grasping at straws to find positive news in the US, we found some relief in seeing the NASDAQ end up 0.01% at today's close buyers flooded the end of today's session - recovering nearly 4% in losses from today's open.



On the heels of some positive news out of China, the Shanghai Composite index is now down -3.2% over the last seven trading sessions and down -6.64% year-to-date.

Date	S&P 500	Shanghai Composite Index
2/20/2020	-0.38%	0.11%
2/21/2020	-1.05%	-0.83%
2/24/2020	-3.35%	-0.60%
2/25/2020	-3.03%	-0.28%
2/26/2020	-0.38%	0.31%
2/27/2020	-4.42%	1.84%
2/28/2020	-0.83%	-3.71%
Return since 2/20	-12.76%	-3.20%
Returns YTD	-8.56%	-6.64%

Analysts have cut their first quarter earnings estimates by approximately 3% since the start of the outbreak (led by the energy sector), but have not meaningfully lowered earnings estimates for the remainder of the year - this leaves the potential for downside surprises if the global supply chain of goods and services remains impaired beyond April. Over 180 companies have mentioned the virus disrupting their ongoing operations thus far, however, only 31 have quantified the impact, and most expect it to be transitory. Investor sentiment, a short-term indicator, continues to fall across the board with the consumer discretionary sector being the worst hit.

On the positive side, we are seeing new cases slow in China with early reports that companies are getting workers back to work albeit slower than we would like to see (more on that below). The market is now expecting the Fed to cut short-term interest rates by another 50-75bps before year end, which should be applauded by equity investors and reduce recession fears stemming from long-term yield curve inversions (when longer term interest rates are lower than short-term interest rates, generally a bearish sign for stocks and the greater economy).

A Note on Supply Chain and Manufacturing Disruption in China:

There is a spectrum of disruption occurring - on one hand there is little to no disruption for companies that have moved much of their production/manufacturing to ASEAN region to companies that are still locally manufacturing/producing their end product (might we say the tariff feud with China prompted manufacturers to diversify their manufacturing footprint to include other countries). There is also disruption of the supply chain and inventory management that needs to be discussed. Those companies who have a good grasp on their inventory and have adapted to software to help with their inventory management have done the best job of mitigating the impact of this disruption. The companies who are still in the dark ages with inventory management and understanding their supply chain are being brought into the light – but not without a near term flogging.

This disruption creates opportunity for inventory software products and enterprise software products – Zoom Video Communications (ticker: ZM) has clearly been a net beneficiary (as has Zoom Technologies, Inc. ticker: ZOOM - a stock that has nothing to do with the aforementioned video conferencing platform which is up 124% over the last 7 trading sessions, a sign of the indiscriminate buying/selling we have seen over the last several days). This is one of the last frontiers that the Chinese have yet to fully immerse themselves in when it comes to technology. We expect the advent of this virus to force businesses and companies to explore more “working from home” options.



Outside of the Hubei province where workers and supply chains remain impaired, we have seen just this week Chinese workers and supply chains slowly coming back online. The virus picking up steam around the Lunar New Year did mute disruptions by a couple weeks as many factory workers were already set to take a vacation from mid-January through early February. However, this relative buffer of an impact does have an impact on the consumption side of China (travel, tourism, entertainment, etc.), most-likely resulting in a permanent loss of business as people who put off buying a phone will eventually buy one, but those who didn't go out to eat and buy dumplings/hot pots/etc. won't go eat twice as many of those things. With that being said, e-commerce and grocery deliverables have taken off. Hot pot spice kits that are shipped to you and you do cooking from home have taken off. Streaming services continue to gain traction. For eight consecutive years, services and consumption have outpace manufacturing and construction as a share of GDP - China has evolved to a consumer-based economy. This point is driven home by the fact that 87% of urban employment in China is now in small, privately owned, entrepreneurial companies. While it is good to see China getting back to work, it is likely we see an uptick in new daily cases as people begin to move more freely.

What to Do From Here:

Trying to determine what will happen in the coming weeks and months is always an impossible job, anyone who speaks with authority on such matters should be met with a high level of skepticism. On that note, let's talk about where we think markets are heading in the coming weeks and months. The million-dollar question is, is this a standard correction (defined as a 10% drop from prior highs) or the beginning of a bear market (defined as 20%+ drops from prior highs)?

Since WWII, there have been 26 corrections with an average decline of 13.7% over an average period of four months with an average recovery time of four months. Bear markets on the other hand are far more painful but less frequent with 12 occurring since WWII with an average decline of 32.5% over 14.5 months, and have, on average, taken 24 months to fully recover. As noted above, historical epidemics have followed the correction path - short but steep drops with a relatively quick recovery.

Those with excess cash or reduced equity allocations (relative to their strategic targets) should use the recent market drop as a starting entry point to allocate to (or back into) equities. We like the idea of dollar cost averaging into this market versus an all-or-nothing approach. If the market continues to react to negative headlines, we anticipate there will be more buying opportunities ahead.

Those who are fully allocated to equities (relative to their strategic targets) should maintain exposure and rebalance back to target if additional losses occur - an underweight of 10% or more to your strategic equity target is appropriate for rebalancing.

For those who are truly concerned we are headed to a bear market or worse we would advise against meaningfully disrupting your long-term strategic portfolio allocations to equities at this point. Instead, reduce your equity allocation by 10-20%. This will help psychologically without materially altering your portfolio's long-term goals and objectives.

Notes on Our Week (unrelated to coronavirus):

Best Video Game Trailer of the Week from [Harmonix](#).

Monday, the team dined with Stanford's David Cohen (thank you Kiki Tidwell). David is the Executive Director for Stanford's new Center for Human Rights and International Justice. The Center is in its third year and appears set to advance many initiatives. David was off to Indonesia. For context of where we are in regard to human rights, Indonesia is now seen as the leader in Southeast Asia for



human rights. If you would like to learn more about the Center, please let us know. We would love to help.

Tuesday, we had dinner with supporters of Gratitude Railroad (thank you Howard Fischer, the SPAC king!), an investment platform focused on impact investing. The evening was capped with an interview led by Peter Knight, founding Partner of Al Gore's Generation Investment Management, and Dr. Laura Tyson, former Chair of the US President's Council of Economic Advisers during the Clinton Administration. She also served as Dean of Berkeley's Haas School of Business, Director of the National Economic Council (the first woman to do so) and is an economic advisor to California Governor, Gavin Newsom - to take a quote from NYU Branding Professor Scott Galloway, she's a complete gangster and total badass. The conversation was wide ranging from current politics (Bernie, if nominated and elected to President, is unlikely to get anything done) to modern monetary theory (she's not a fan, thinks it is dangerous policy) to reaching the upper echelon of her profession in a male-dominated era and field (see: gangster and total badass). On healthcare reform, she cautions us to not get too excited about action, as the field commands significant income and the recipients of that income won't cede that without a fight.

Thursday, Ryan spent the day at the Vertex Ventures, LP meeting in Menlo Park (Thank you In Sik Rhee). Vertex does a wonderful job of focusing on the future and while some declined shaking hands, 99.9% of discussions were on FB, AMZN and software platforms - next to no Coronavirus. For the Facebook lovers, Alex Stamos (Former FB Chief Security Officer) noted that Facebook is likely number five in directly facilitating the capture of child abusers (behind the FBI, DHS, NYPD and LAPD). For the Facebook haters, Julie Cordua, of Thorn ("We build technology to defend children from sexual abuse."), noted that FB Messenger is likely the number one most used encrypted messenger tool for the exploitation of children. No words convey the importance of Thorn's work. We encourage you either visit the Thorn website or watch Julie's TED talk [here](#).

What Ryan is watching this weekend: (Staying home and watching TV or playing a videogame is a great way to NOT contract COVID19! What a market thesis!). We have 6 friends/acquaintances racing in Saturday's Olympic Trials Marathon. The race, which is sort of hilly, starts at 12pm eastern - running conditions look perfect, partly sunny with a high of 51 degrees, low of 30. We encourage everyone to watch and cheer. Watch NKE as the shoes have dramatically changed the sport. Despite the hills, the shoes should make it a fast race. The top three women and men qualify for the Tokyo Olympics, which we sincerely hope happens. I am personally super cheering for my beloved running coach, Katie Kellner! Global readers remember [Katie](#) for saving the woeful dog walker who fell into a Boston-area reservoir. Visit Katie's coaching site [here](#).

What Kevin is watching this weekend: see above. We will be cheering from afar for my hometown hero, 2-time Olympian, Molly Huddle and dear friend, Lauren Perkins. Good luck ladies!

Best Regards,

Ryan McDermott & Kevin Lutz
RPG Founders and Managing Partners

Sent from our iPhone. Please excuse any typos.