



Pragmatic Thinking on...COVID-19

We're All Flying Blind

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Thoughts on COVID-19

Recent fears over the spread of the Coronavirus are warranted and perhaps even downplayed in my view, but need to be placed in the proper perspective. I hope this piece will provide some historical background and practical perspective about how we're going to best navigate what will be an unusually difficult period for many.

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Before I say anything about the markets I want to briefly pass along some tips for managing COVID-19. This is a health crisis and we need to take care of ourselves and one another. Here are a few of the best things I've heard from various sources. This virus is deadly serious and the USA has been behind the curve for a few months now. But it's not too late to catch up.

1. Engage other people as though YOU have COVID-19:

This is probably the best approach to dealing with the virus. Keep this in mind when you consider how you encounter other people. By making yourself accountable for the spread, you become more aware of the responsibility you have to make sure OTHER people don't get sick. That said, we should all be taking the social distancing guidelines dead seriously.

2. DO THE FIVE - via the World Health Organization:

- HANDS - Wash them often
- ELBOW - Cough into it
- FACE - Don't touch it
- SPACE - Keep safe distance
- HOME - Stay if you can

Okay, enough of me pretending to know how to manage the health risks of a global pandemic. Let's talk about something I actually know a thing or two about—managing financial risk.

This Ain't Your *[insert distant relative's]* Market.

We're all in uncharted territory. Our backtests didn't include any global pandemics, so we're flying blind here. Which I guess is apt since the origin of our current global pandemic seems to be...BATS. Yes, bats. I bet your favorite permabear's blog didn't predict that bats would bring down the global economy.

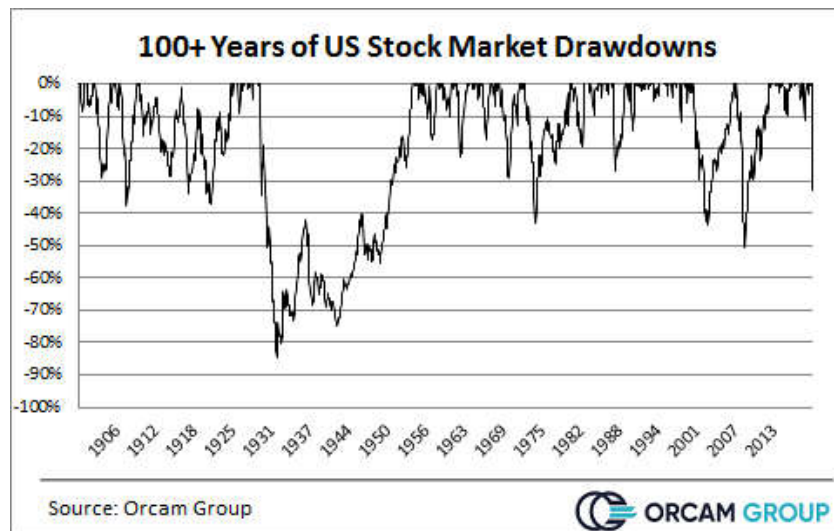
With new territory comes new behaviors: this isn't going to be a normal business cycle "recession". But that doesn't mean we can't understand where we are, where we've been and where we might be going.

Where Are We Now?

We've just experienced one of the fastest and deepest stock bear markets in history. At the recent trough the S&P 500 was down 33% in just a few weeks; one of only four 30%+ downturns in the last 50 years. Unsurprisingly, three of those have happened in the last 25 years. I say "unsurprisingly" because I've often written about how higher valuations mean the likelihood for greater volatility. Yes, equities earn a higher premium with higher valuations, but that premium comes with a price—volatility.

Global Financial Crisis: "Here's your once in a lifetime financial panic."

Coronavirus: "Hey GFC, can you hold my beer?"



The equity market is sending the same message that all other markets are sending—this is a massively deflationary event. Commodity prices and bond yields are sending the same signals. We are on the precipice of a significant economic downturn. The key question to understanding the future is in understanding **how long** that downturn might last.



Where Have We Been?

As I said before, this isn't going to be a normal recession or economic "cycle". This isn't a boom and a corresponding bust. This is a boom with a shock. The key question is whether that shock will temporarily immobilize us or if it will paralyze us for a prolonged period that results in a delayed recovery.

The 1918 Spanish Flu As A Roadmap.

No past event will serve as a perfect roadmap going forward. The world is just too different. But our map doesn't need to be precise in order for it to be useful. And the past is always useful, though imperfect, in understanding the future.

The Spanish Flu of 1918 devastated the population early in the year and then came back in the Fall of 1918 with a vengeance when it killed most of its victims. While the flu persisted into 1919 its world tour was largely over within the calendar year of 1918. In the end it killed an estimated 0.6% of the entire US population and 1% of the global population.

Recent Coronaviruses.

Perhaps a more useful roadmap includes the recent coronaviruses including MERS and SARS. SARS was mildly contagious and lasted approximately six months in 2003. MERS was also mildly contagious in two bouts, both lasting approximately six months in Saudi Arabia and then again in South Korea.

There's good and bad news with this:

- 1) COVID-19 is devastatingly contagious and is causing far more acute and painful consequences than these recent Coronaviruses. In this sense it looks more like the Spanish Flu and appears to have somewhat comparable fatality rates.
- 2) COVID-19 is unlikely to last for several years. The recent Coronaviruses as well as the Spanish Flu lead us to believe that point 1, while being horrific in its acuteness, is good in the long-run in that it means we likely don't have to worry about several aftershocks.

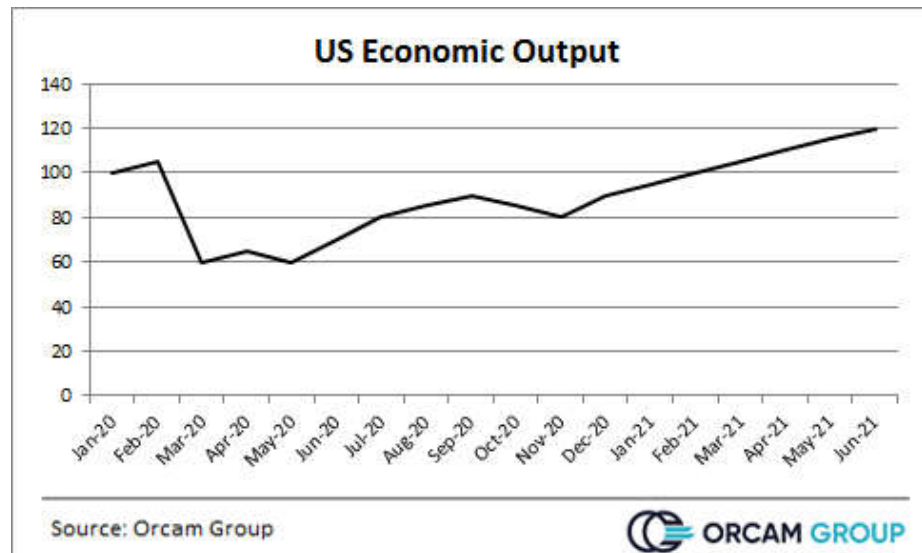
Where Might We Be Going?

All of this leads me to believe that we are confronted with one of two likely outcomes here:

- 1) Short and painful.
- 2) Short-ish and painful.

Short and Painful.

Scenario 1 looks something like this: COVID-19 shuts down the economy until the Summer. There is some evidence that our bodies will respond better to the virus as temperatures rise and that we can “flatten the curve” through various proactive policies. This will give us time to work on better treatments and plan for a resurgence in the Fall. The positive scenario there is that we peak sometime in May or June and improve through the Summer before a brief resurgence in the Fall as the Southern hemisphere is hit and the northern hemisphere reverts to colder temperatures. In this scenario we are better prepared for the aftershock and the Spanish Flu style wave is not as devastating as it was in 1918.



Modeled US Economic Output—Scenario 1

In this case there is a strong likelihood that we have seen the low for the stock market this year or that the low will occur some time before Summer and before cases peak. There is a very real chance that the stock market falls 50% or more from its highs in this scenario before bottoming. This will be short-lived if cases peak in the Summer.

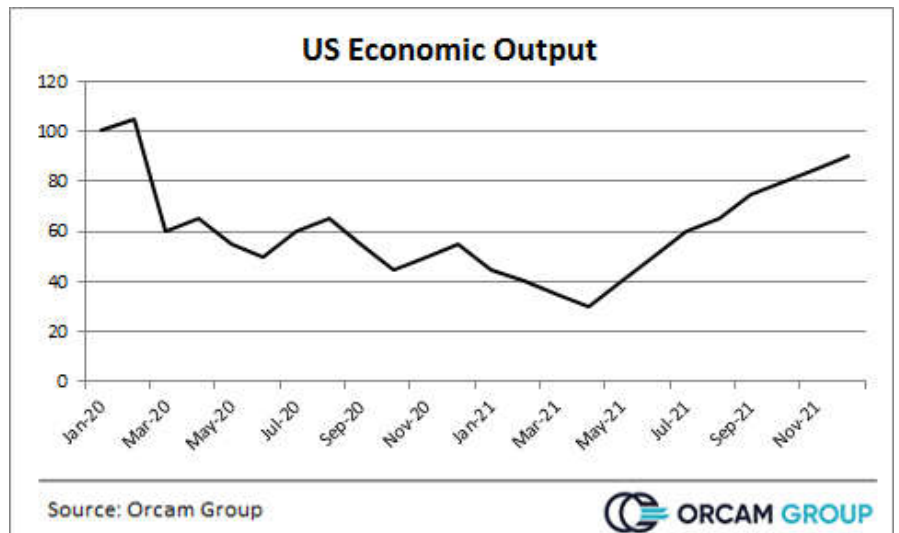
Even in the scenario where COVID-19 peaks in early Summer it still means that recovery will be somewhat slow. Caution will reign supreme. It will take time to rebuild confidence and get back to our normal way of life. This is, after all, the kind of shock that could change the way we all interact in the future. Will we shake hands? Will masks become more common throughout the West? Will we live in persistent fear of the next big pandemic?

So, even our best case scenario here is a somewhat prolonged recovery albeit v-shaped in comparison to the 2008 financial crisis. This is an important point because the GFC was a structural pricing problem in the consumer’s most important balance sheet item (houses). This is not a structural shock, but an exogenous shock.

Short-ish and Painful.

Scenario 2 is the more nightmarish scenario. In this scenario the virus kills many more people than expected in its Spring phase, subsides only marginally in the Summer and then does its real damage in the Fall. In this case the economy is shutdown well into 2021. Rents are not paid. Workers are not just furloughed, but fired. The financial system becomes largely insolvent. The large government policies can offset the pain to some degree, but the halt in cash flow will be so acute in certain sectors that it's impossible to offset entirely.

This is, quite simply, not something that a modern monetary system is designed to withstand. The monetary system is like a human body in that it needs a constant flow of funds to pass nutrients through the system so that it can thrive. A prolonged shutdown is like a cardiac arrest. Stop the flow temporarily and you damage the system. Stop it for a long time and you either kill the system or cause some irreversible damage.



Modeled US Economic Output—Scenario 2

Yes, the economy comes back eventually from scenario 2 but it will be unlike anything we've seen since the Great Depression given the duration of the shutdown.

In scenario 2 you get a rolling series of waves of bad news much like 2008/9. Every glimmer of hope is met with an eventual reality of bad news. As a real economic downturn persists the financial system is eventually rotted to its core. Governments spend more to offset the downturn, but productive capacity remains offline, inflation rises, stagflation sets in and the economy more or less rots for a few years. The stock market in this scenario gets wrecked and every bounce turns out to be a "dead cat" bounce. The market grinds lower through the year and doesn't bottom until well over a year from now. Then we run out of Netflix shows and start calling our local divorce attorney.

I've often debunked the notion that the current economy could look like the 1970s, but a very long drawn out pandemic with rolling government responses makes me less confident in the view that the 1970s cannot be replayed.

Where Are We Headed?

My personal opinion is that a situation similar to scenario 1 is the more likely outcome. While I expect COVID-19 to persist well into 2021 there are reasons to be optimistic that the virus will peak sooner rather than later and that our lives will slowly get back to normal:

- 1) **It is highly contagious.** This might not sound like a reason to be optimistic, but the fact that it is highly contagious could mean that we will overcome it faster.
- 2) **Life finds a way.** Please excuse the *Jurassic Park* quote, perhaps inappropriate given it's a story about an extinct species...But our worst case scenario gives us time to find a solution. Yes, the worst case scenario involves an aftershock, but the initial earthquake was so bad that we are now all scrambling for solutions. This means we will be far better prepared if an aftershock does indeed occur. This is good news. The dinosaurs didn't get a chance to prepare for a second meteor. We do. We will. We will find a way.

What Can You Do To Prepare? Taming the temporal conundrum.

As I've written on many occasions, all of portfolio management is a "temporal conundrum". In other words, it is an asset/liability mismatching problem. Everyone has a mismatch. That is, they have short-term liabilities that need to be funded by longer-term assets. But the degree of this mismatch is generally the difference between good behavior and bad behavior. The only people who cannot ride out bear markets are the people who have an unsustainable mismatch or do not understand their mismatch.

In our case, every single one of our clients has substantial short-term assets that match their short-term liabilities for well over a year. This is the crux of our strategy. We match your liability needs to the corresponding potential cyclical risk of economic shocks. That said, I understand the unusual nature of this event. This is a behavioral challenge that none of us have ever encountered. But we should resist the urge to overreact. After all, even our worst case scenario involves a short-lived pandemic. And when it ends, which it will, we will rebuild. We will recover. Just as we always do.

That said, I would urge everyone to take control of what you can control—your own liabilities. We can't control what the financial markets will do in the coming year, but we can control our own liabilities. Don't be afraid to cut back on waste, ignore portfolio contributions or take other unusual measures that increase your short-term cash flows and thereby increase your own personal certainty and emergency reserves.



Portfolio Positioning and Update.

Our largest client holdings coming into 2020 included money market funds, short-term munis, short-term corporates and intermediate term T-Bonds. We have weathered the storm fairly well here. Our average portfolio is down -9.6% year to date while the S&P 500 is down -19.4%. The strategy has done more or less what I would have expected in a big bear market.

The bond market turmoil in recent weeks has mostly subsided as I said it would in our last note. These sorts of events cause temporary dislocations and while it's great to be able to see the minute by minute price in certain investment products this is also a behavioral double-edged sword. John Bogle always hated ETFs because of the temptation to treat them as short-term instruments. He would have surely hated the recent dislocation between ETFs and their mutual fund counterparts. Personally, I think people make too much of these events. The added transparency, when viewed through the right behavioral lens, is a feature, not a bug.

That said, I do expect the bond market to remain challenging, though nothing near as challenging as the equity markets. Interest rate risk remains unusually high given the recent rapid rate of change in rates and inflation expectations. If we get even a hint of stagflation in the coming year we will see long bonds tumble. They say cash is king. Given that corona is Latin for crown, I guess that makes sense.

Equity markets are beginning to look increasingly attractive **in the long-term** as valuations come in and prices adjust. The long-term equity market participant should be licking their lips at this environment as other investors adjust their portfolios for their temporal/behavioral mismatch. I calculate future expected 10 year equity returns at 7%, up from 4% just a few months ago. This figure will **increase** if equity markets decline further. This, strangely, is a *good thing* for the patient investor.

As for how our portfolios might rebalance in the future - the honest answer is that I am uncertain. I am somewhat concerned that our countercyclical methodology might not look as "countercyclical" as it did coming out of the financial crisis. While the strategy turned bullish in 2009/2010 I am somewhat concerned that the current downturn will not resemble a "cycle". The nature of a "shock" is more akin to a natural disaster. And if that's true then the economy will likely recover faster than it did coming out of the GFC. There is still an outside chance that the best case scenario unfolds and this all passes by Summer. In that case there's a chance the economy snaps back so strongly that it will make heads spin. This, quite simply, will not give us time to accumulate the data necessary to digest the potential need to rebalance as the equity markets will predict the upturn far faster than our models will. In this sense, the relatively short-term nature of this disaster is positive and negative. Positive in that it won't last forever. Negative, for our particular strategy, in that the markets will sniff out the bottom very quickly.

Remember, our models are somewhat long-term by design. They don't capture trading bottoms and short-term market events. They capture long-term cyclical changes in the economy and markets. So patience is the key to navigating the next few years.

In any case, I feel very good about how we are currently positioned and our ability to weather any client asset/liability mismatches. If you have any questions or concerns please feel free to contact me. And if you're feeling down in the dumps over social distancing please do yourself a favor, watch "Tiger King" on Netflix and remember that life can always be worse.

Also, in happier news, please enjoy this photo of my brand new baby girl. She loves all of you.

Be Healthy!



When Life Gives You Lemons, Make a Cute Baby.

Important Disclaimer

Cullen Roche is not a doctor. He does not even play one on TV. Please consult a real doctor for medical advice. Nothing contained herein should be construed as an offer to buy any security or a recommendation as to the advisability of investing in, purchasing or selling any security. Some of the statements contained herein are statements of future expectations and other forward-looking statements. These expectations are based on Orcam's current views and assumptions and involve known and unknown risks and uncertainties. Actual results, performance or events may differ materially from those in such statements due to, among other things, general economic conditions, performance of financial markets. Orcam Financial Group, LLC assumes no obligation to update any forward-looking information contained in this document. Please note that all fees are charged quarterly and an invoice is available upon request.

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