

Who had “global pandemic + all economies halting + Kobe Bryant’s death” on their bingo card for 2020? One of the most used words we’ve heard over the past few months is ‘crazy’, and it couldn’t be more fitting. 2020 is crazy, markets are crazy, restaurants are crazy, sports are crazy, and life itself is crazy - everything just feels so far outside of normal. So why not write a ‘non-normal’ mid-year note as well? Instead of assessing the last 6 months against our expectations and detailing what’s changed in our outlook, we are going to use this chart-filled note to outline how we are currently thinking and the data points we are watching most.

More so than any time in recent memory, the range of outcomes between now and the end of the year is extremely wide, meaning no prediction can have meaningful conviction behind it. What does that mean for an investor? **Stay patient & disciplined, don’t be over-exposed to any single outcome, and be ready to adjust your priors.** Before we dive in, it is very important to note that Covid-19 has affected different regions and persons in a variety of ways and our thoughts go out to all adversely affected. Investing is about the big picture and the economy on *aggregate*. It isn’t about what should or shouldn’t be, it’s about what is and isn’t. It isn’t about “things being good or bad,” it’s about “are things better or worse.”

The whole globe is in a recession, but this isn’t news. The real debate centers around how fast or slow a recovery will be. As we’ve outlined in our prior notes, this recession is unlike recent ones in that a human crisis is causing financial pain, versus a financial crisis causing human pain.

- When a financial crisis preempts a recession, it is because too much excess was built up in the system. Subsequently, the recovery is focused on fixing those financial excesses.
- In today’s recession, we didn’t see the types of financial excess we have in the past, but rather an exogenous shock that upended normal life. Therefore, a recovery must be centered around fixing that exogenous shock. As odd as the world may seem, we are actually following a pretty normal progression. **A recovery is centered around fixing what caused the recession in the first place.**

The longer it takes to “fix” Covid-19 = the more things will be displaced along the way = the longer a recovery takes.

We have reasonable certainty that Covid-19 will be “fixed” in time, but that’s not the focus of this note nor do we have any more information than anybody else. **Rather, the most important thing to us as investors is how much gets broken along the way.** In other words: *How many lost jobs are permanent? How many businesses never come back? Which consumer behaviors change forever?* This is where we see things a little differently. These answers lie solely with the ever-changing psychology of people. Not case numbers, not total deaths, not state openings or closings – but only with how consumers collectively perceive the risk of simply being a consumer. Said another way, an economic recovery isn’t shaped by Covid-19 the virus, but

rather it is shaped by the **fear** Covid-19 instills – and the two aren't one in the same. A vaccine would “fix” Covid-19 and squash virus fears, but...

- ...could consumer fears subside and activities increase without a virus fix?
- ...could fear stick around for years even with a vaccine?

Could either one of these statements be true? Of course! This is behavioral economics at its core.

Ask yourself: What has to occur for me to not do something in two weeks that I am currently doing today? From all of our conversations, the overwhelming answer equates to a very high hurdle in hospitalizations or “close to home” bad experiences. **Our human nature doesn't like to go backwards unless the situation is extreme.** Therefore, we want to rely more on what business and consumer activities show us, and less on what the virus numbers actually are. Let's bring out the charts.

-The next few pages present real-time alternative data, skip to the end for conclusions-

First, look at the two adjacent states of North Carolina & Virginia (also two important Doxa Capital states). These charts begin on April 1st.

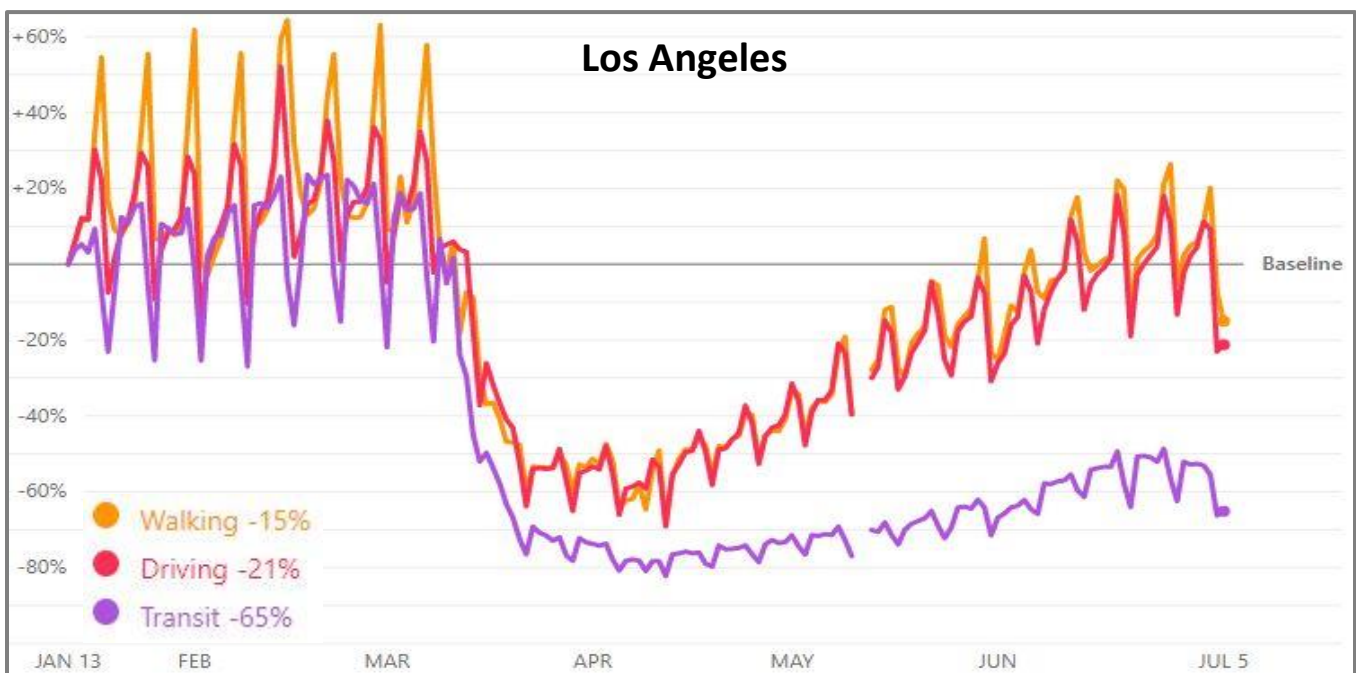


Observations: NC & VA were on different opening timelines, with NC beginning phased openings 3 weeks before VA. But remember, openings don't matter if fear remains persistent. **As you can see, social distancing (blue bars) has decreased steadily in both states since April 1st, regardless of when a state opened.**

Surely the severity of the virus matters? Yes, but loosely. Looking at the data, Virginia saw active cases¹ (pink bars) peak around the beginning of June with 3.2 per 1000 people. NC is still setting new highs daily, currently at 3.8 per 1000 people.² Did social distancing materially change when cases were peaking in VA? Are they changing now in NC? Don't the spending patterns (green bars) look similar in both states, regardless of where case loads are? **Again, Covid-19 itself has less of an aggregate effect than the *fear* of Covid-19, and a population's psychology toward something is influenced by a variety of evolving factors. We'll come back to this.**

Let's look to some different locales:

Los Angeles and Atlanta are both seeing active case growth peak daily, currently around 3.5 per 1000 people. *These charts show the % change in route requests through Apple Mapsⁱⁱ to represent mobility.*

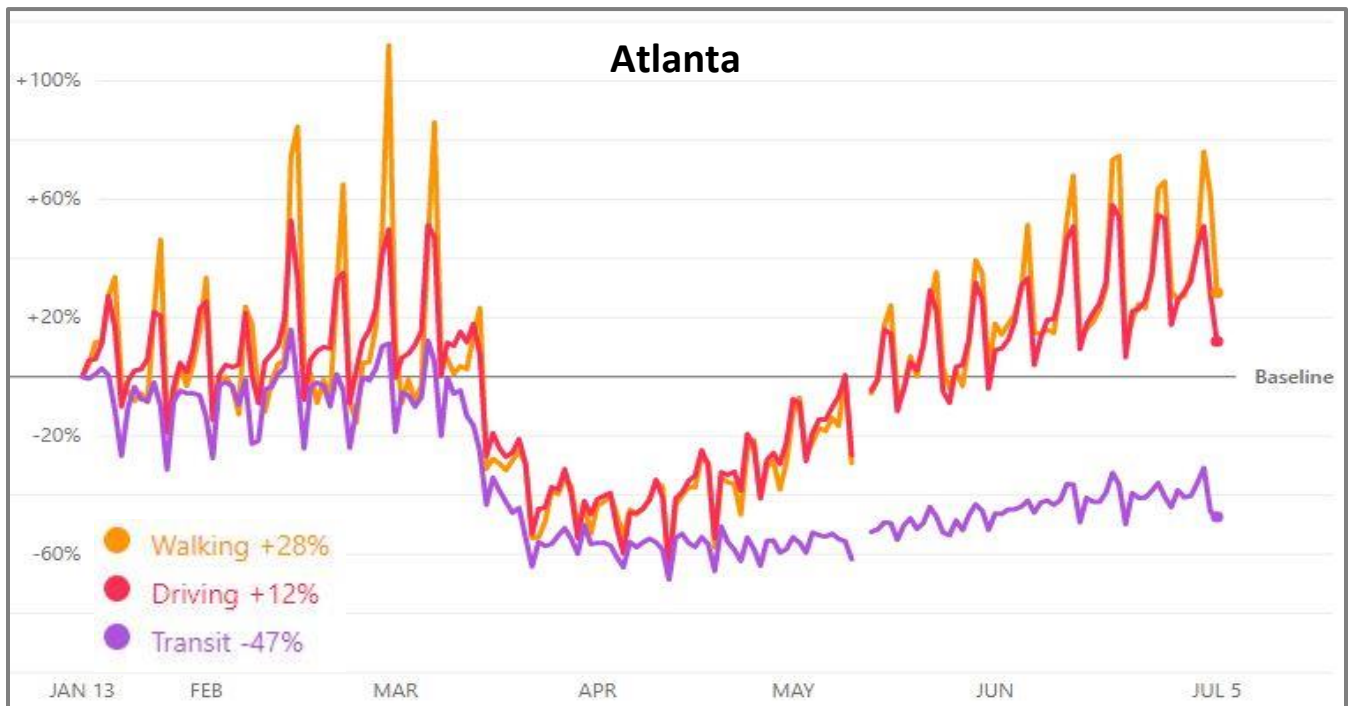


Observations: Mid-March, all regions (*Atlanta & Boston next page*) saw about the same mobility drop of around 60% against the baseline. Georgia came out of the gate a little faster and is plateauing a little higher, *but the mobility trajectories are roughly the same*. By and large, different regions, different virus affects, roughly same mobility. Psychology drives behavior. The actual risk of Covid-19 in Atlanta and Los Angeles are higher today than they were in April by a factor of 3! **The fear just isn't as pervasive now as it was then.**

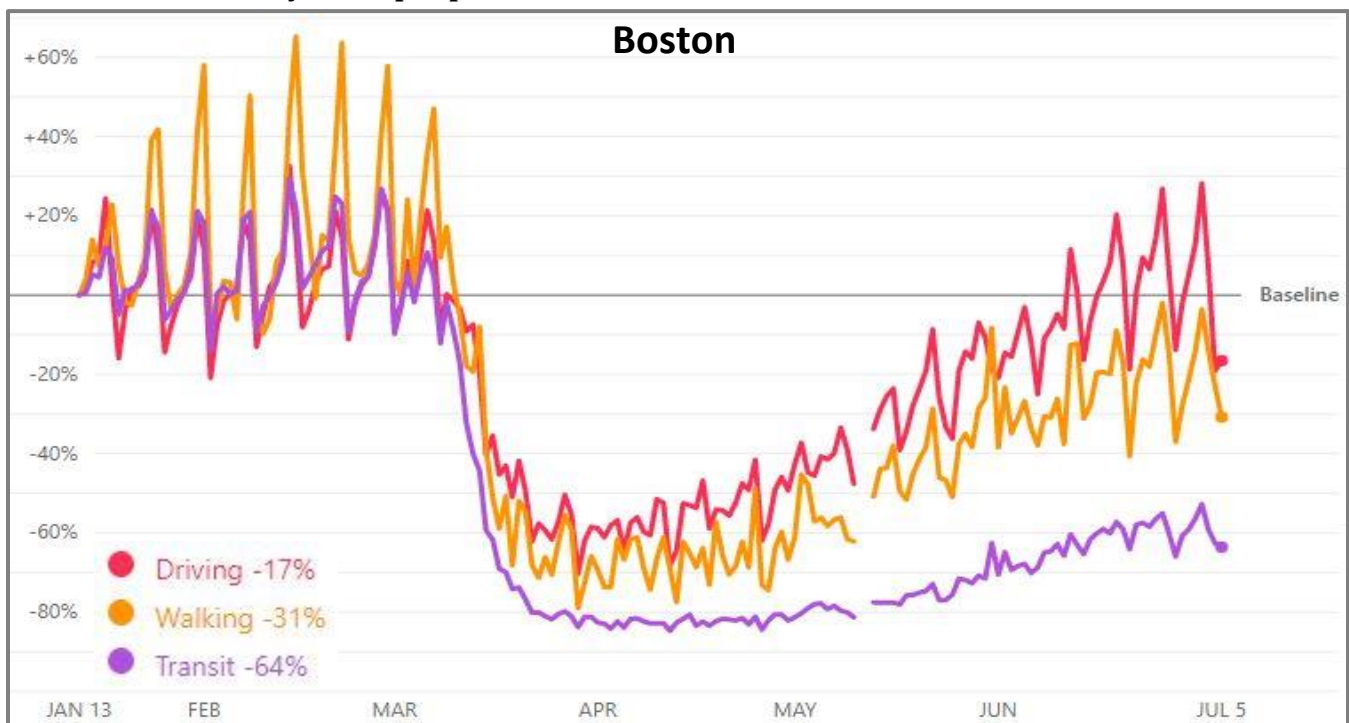
¹ Active Cases are defined as total cases (minus) total recoveries. In other words, cases of Covid-19 out there now.

² Case per 1000 people data from <https://data.covid.umd.edu/>

Are we plateauing a little bit today? It appears so and bears watching, but it's still early and real-time alternative data like this is pretty noisy.

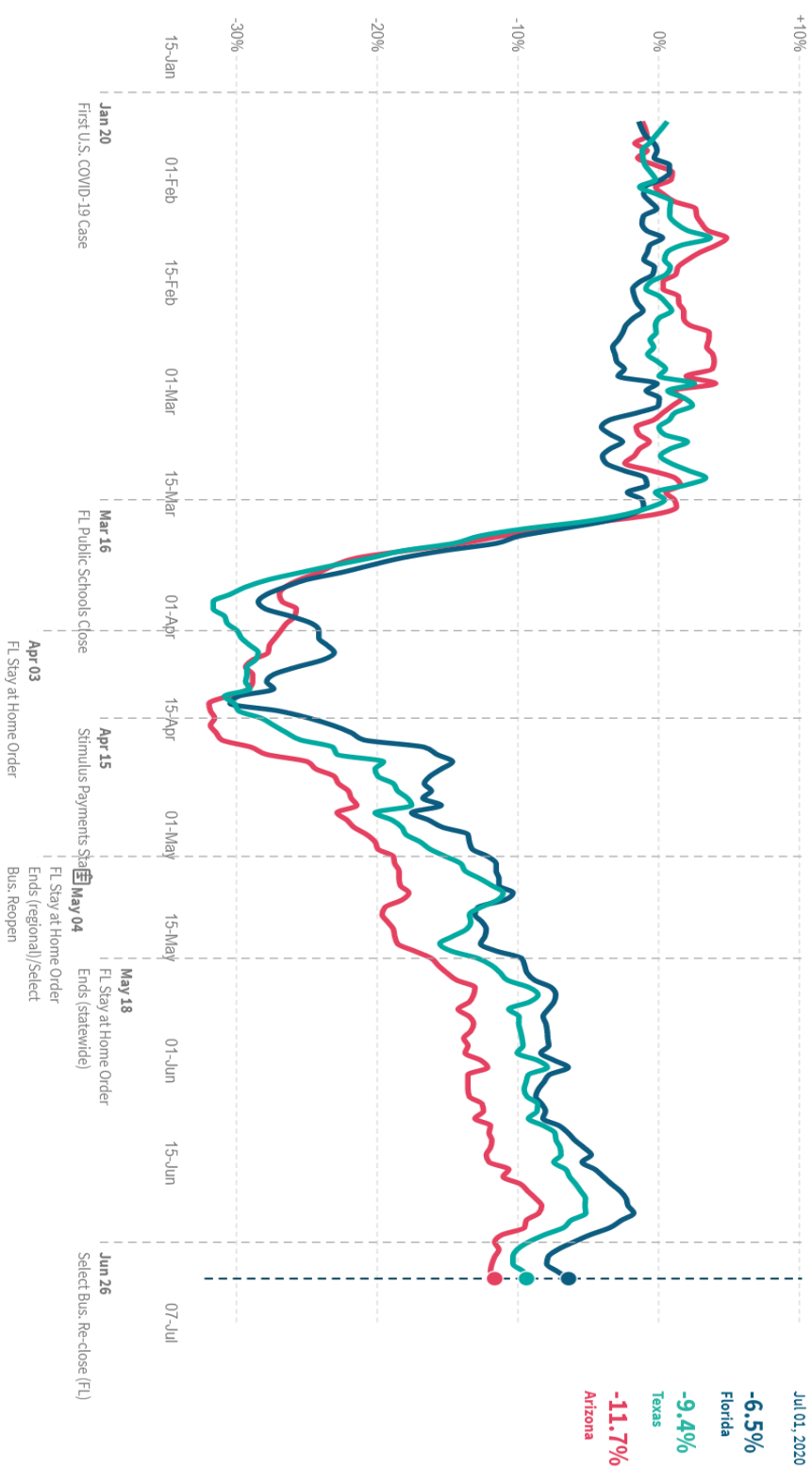


For proper context, below is Boston – while hit harder in the beginning, **Boston now only has 1 active case for every 1000 people.**



Percent Change in All Consumer Spending*

In Florida, as of July 01 2020, total spending by all consumers decreased by 6.5% compared to January 2020.



*Change in average consumer credit and debit card spending, indexed to January 4-31 2020 and seasonally adjusted. This series is based on data from Affinity Solutions.

last updated: July 07, 2020 next update expected: July 14, 2020

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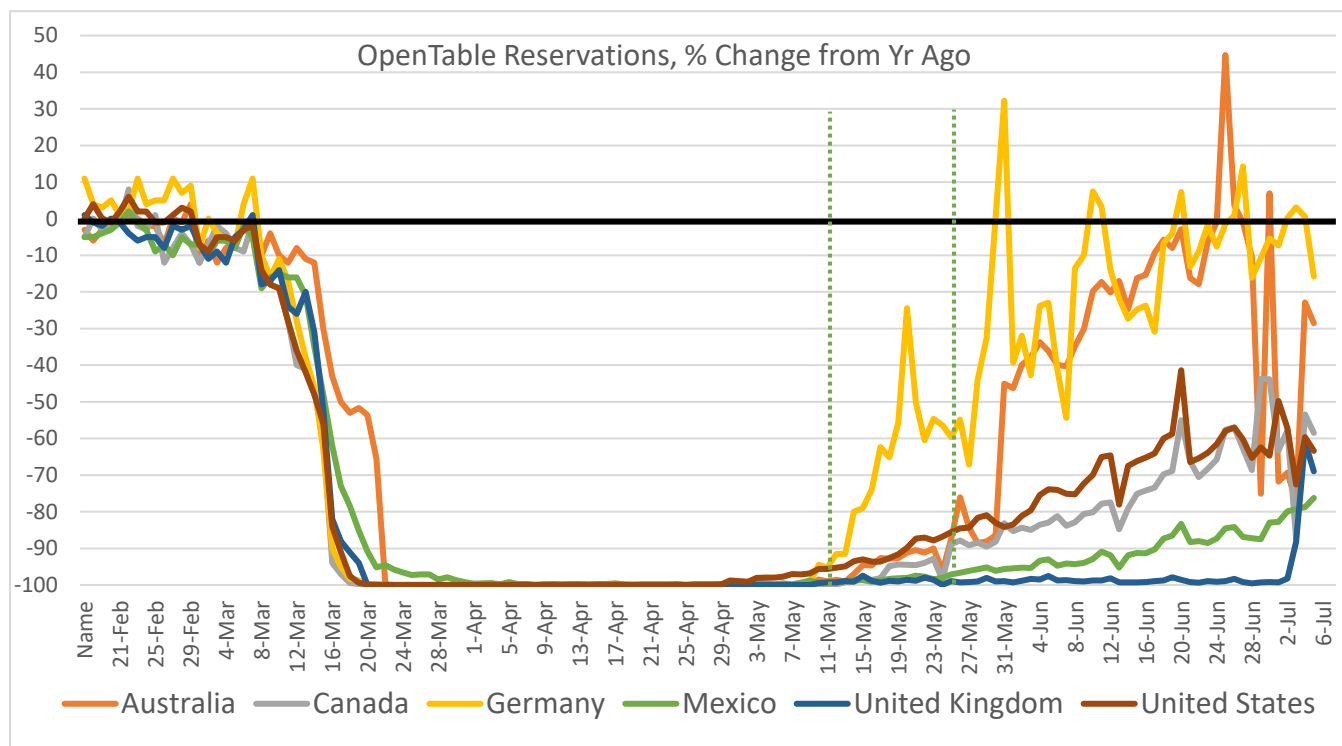
Above we have consumer spending trends for the three current hotspot states. Texas has 4 active cases per 1000 people, Florida has 5.5, and Arizona has 9.5! For context, at the peak NY/NJ had around 11 active cases per 1000 people – AZ is closing in fast.

What's notable here? Arizona had 0.2 cases per 1000 people on April 1 and now has 9.5, yet spending has recovered by 2/3rd since then.

These new case hotspots are absolutely taking a pause, but we have yet to see anything that resembles the fear that existed in April, irrespective of the case load.

Undoubtedly, two of the hardest hit sectors are restaurants and airlines. We'll look at restaurant activity through OpenTable's reservation dataⁱⁱⁱ by country.

**Note: this measure reflects people going out to eat with a reservation, not take-out or casual dining.*

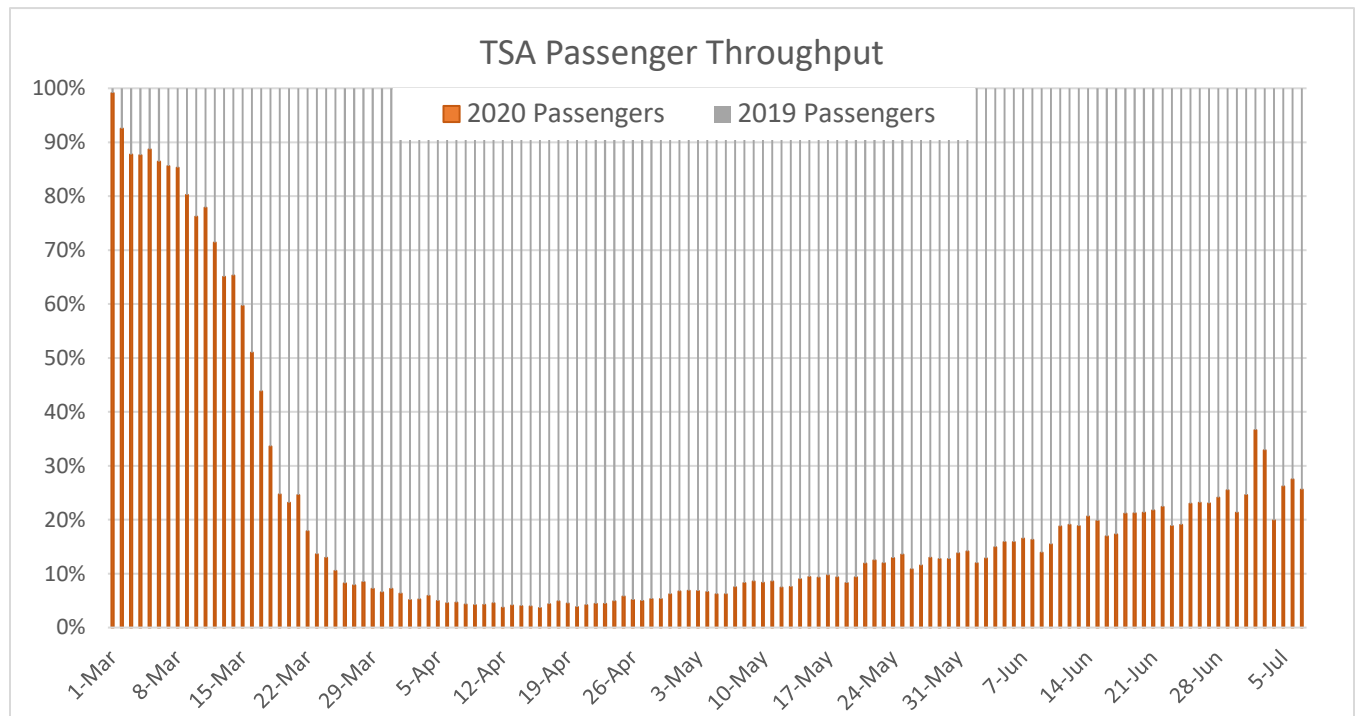


Observations: Restaurants are influenced by allowed openings and capacity rules more so than mobility or spending, which makes us come at this from a different angle. We aren't largely seeing if people want to go out to eat or not, we are seeing if they are allowed to.

Example (Germany): On May 11, most German states allowed restaurants to open with varying restrictions. On May 25 most states permitted indoor seating. Few states have capacity restraints, instead they must keep tables 1.5 meters apart. *Note the uptake as restrictions were lifted.* Yes, the Germans have done a world class job in containing the virus – that's why they are well ahead of other countries – but we see as a story of resilient consumer psychology as well.

The next page^{iv} shows the number of passengers going through TSA checkpoints. The recovery here somewhat resembles the transit lines from our mobility data. Mid-April, travel was down by

a staggering 95%, whereas now we are seeing about a 75% decline. This chart is more interesting than informative because flying is very restrictive: airlines have cut flights by 50%+, international travel is constrained by border laws, and alternative travel methods can be easily substituted. **Nevertheless, this is an area of the economy where psychology is still pretty damaged.**

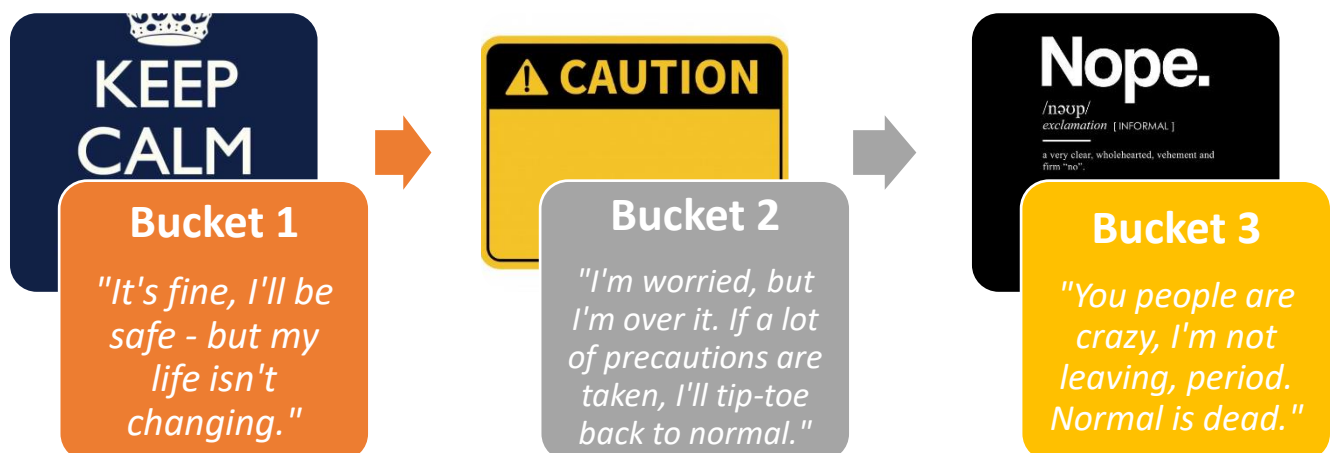


[Conclusion]

Putting it all Together.

There are two clear parts that will determine how quick this economic recovery will be:

- 1. How does our collective psychology adapt going forward? This can't be predicted - it must be monitored.** As we've shown, its not always a 1:1 correlation between Covid-19 numbers and economic activity. Each person has their own risk tolerance. We view the population in three buckets:



***REMEMBER: there is neither a right/wrong, nor are we saying what should/shouldn't be.**

We are simply calling it how we see it through the lens of economic activity. At this point, bucket 1 is already back. This is the 25% of people flying. *Nothing will change their minds.* Meanwhile, nothing will change the minds of bucket 3 either, but in the opposite regard. They are waiting for a vaccine, maybe longer. **They are part of the economy that won't come back anytime soon.**

Bucket 2 is back doing some things, but still not close to normal. They *may* go to a restaurant and sit outside, but would definitely get takeout if it means skipping another night of meatloaf. They are driving and walking around, slowly getting back into their life. It appears this is the largest part of the population – and the ones who will drive marginal improvements. **The key to this recovery is making bucket 2 feel safe. So how do we gauge that?**

It's all about psychology!

- a. So far, hotspot increases haven't materially reversed any trends, just paused them. This tells us that hotspots can come and go without too much effect. A sweeping outbreak would be a test (and one we don't want the answer to).
- b. The passage of time and big numbers is numbing. The first 1,000 deaths stoked more fear than the last 1,000.
- c. In our opinion the most important variable is the “close to home” factor. There is no faster way to change psychology than having a family member hospitalized.

However, the opposite can also be true. This is where statistics come into play^v:

- i. **Out of 10,000 people in the US, roughly 63 will currently test positive for Covid-19 (0.63%).**
- ii. **Out of those 63 people, around 6 will be hospitalized. 57 of them will not.**³

Is it not more likely someone close to you contracts Covid-19 and was ok rather than becoming severely ill? *Would this create more fear or less? Maybe it matters how ill the person became? Or how they got it?* There are many more variables that apply, but this is a quick thought framework of how psychology can shift. That's why we don't want to predict it - we want to monitor it!

****America is very large & Covid-19 stats can differ drastically by locale. We encourage you to go to your county's health website to see the numbers relevant to you.****⁴

To be clear, we are not arguing that the economy is going to snap right back to normal - *the folks in bucket 3 will take a while* – but no one is expecting a quick return to normal either. We are arguing that getting bucket 2 back into the economy creates an activity level of ~75-80%. That's not amazing but can be perfectly supportive in the short run. **Remember, markets don't think about “is it good or bad”, but rather “is it better or worse.”**

³ All put differently, the US has 2,089,083 active Covid-19 cases as of July 8 & the hospitalization rate of case positives is just under 10%.

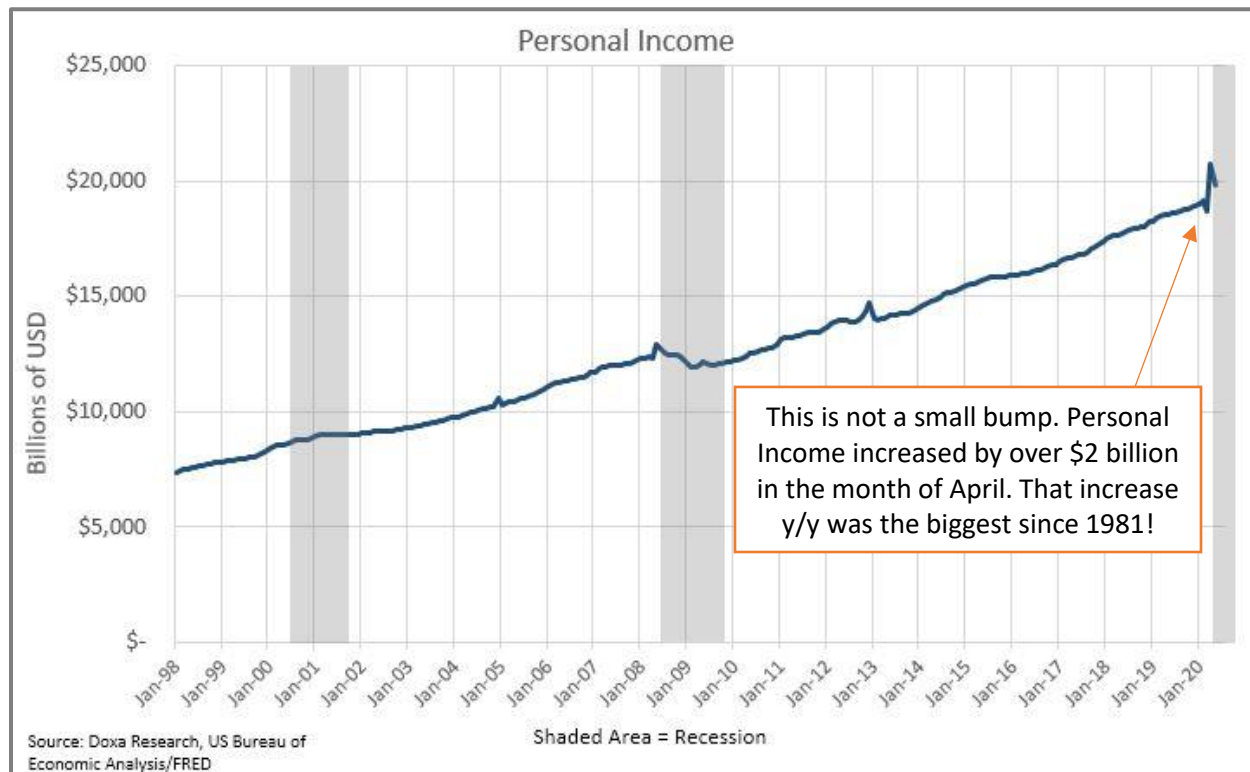
⁴ Honestly, we wouldn't recommend using national statistics when granular data is readily available. The US is a country of 330 million people and Covid-19 data skews very differently across regions & over time.

2. How long does policy continue to fill the lost income gap? We hope for a very long time. In the paragraph above we just said “...not amazing but can be perfectly supportive in the short run...”

How in the world is losing 20% of the economy (bucket 3) still supportive? 20% is a lot! You're right, 20% is a lot. But that's where fiscal policy steps in to fill the gap.

We've written extensively about this in our March and April notes, especially in [This Time is Different, Part 2](#), so we won't spend too much time here. In short, fiscal policy must fill in the output gap Covid-19 created. That is what fiscal policy is meant to do, after all. **So far, it has.** We don't have to look much farther than the broad measure of personal income to see the effect.

Personal Income measures the income people receive + any government support.



For April, all of the lost income was **more** than replaced on aggregate by the extended unemployment insurance (UI) program, the Paycheck Protection Program, and stimulus checks. Note the difference between our current situation and the recessions of 2001 and 2008. The recession of '01 was fairly mild in large part because incomes were unchanged. Contrast to '08, where the recession was more severe as incomes declined. Said another way, economic damage in our current situation can be limited as long as we keep incomes high. We've started out on a good path, but the future trajectory will be of utmost importance. ***The biggest risk we see today is that UI benefits and other programs are set to expire on July 31st.*** The longer we can support income, the faster we will recover once Covid-19 is in the past. The virus crisis hasn't ended, and neither should the support. The consensus expects an extension of benefits of some sort, but the devil is always in the details.

Ideally, we will see continued support for personal income like we have the past few months, as this will “fill the gap” until a true solution emerges for Covid-19 and we can evolve from an 80% economy to a 100% one.

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We’ve seen the number of cases get worse and big hotspots emerge the past few weeks, but it has yet to really hit psychology. Instead of retreating to the fear of March/April, it seems that everyone is taking a pause and letting things settle down. Add in the unknown fiscal variable, and that’s about how we feel about the markets right now too – “let things settle down.” It’s impossible for anyone to have a high conviction about future outcomes since the range is just so wide. No one can predict the psychology that comes from Covid-19; therefore, **we continue to monitor the data, be patient, and pick our spots.** We are undoubtedly positive on our framework encompassing [housing, electricity, & data](#), but even more so on the global economy as a whole. Our positive outlook comes because we are in the midst of a human crisis, not a financial one – and while the shock is greater, the resolve is stronger. We know better than to bet against humanity.

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ⁱ Data & Charts from <https://data.covid.umd.edu/>

ⁱⁱ Data & Charts from <https://www.apple.com/covid19/mobility>

ⁱⁱⁱ Data from <https://www.opentable.com/state-of-industry>

^{iv} Data from <https://www.tsa.gov/coronavirus/passenger-throughput>

^v Data from <https://covidtracking.com/data/api>

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