

# The Race to Vaccinate

By Mario Giannini, CEO | 25 March 2021

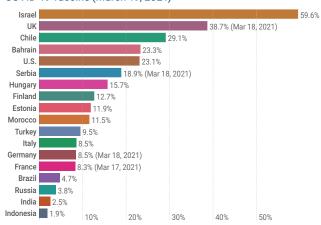
#### **Key Takeaways**

- Europe and South America are the outliers with the surge in cases. Some countries in Europe are re-instituting lockdowns. The press and politicians are blaming the UK variant and its more contagious features. Perhaps. (p. 2)
- Real-world data from Israel indicates that the Pfizer vaccine is at least 97% effective in preventing symptomatic cases and 94% effective in preventing asymptomatic cases. This is a big deal because it resolves the question of whether you can transmit COVID-19 once vaccinated. It's simple: You can't. (p. 4)
- While all the focus has been on vaccines, GSK and Vir Technologies monoclonal antibody treatment trials were halted early due to "profound efficacy" that showed an 85% reduction in hospitalizations. The ability to treat COVID-19 patients with those kind of efficacy numbers is an incredible advance in treatment options. (p. 4)
- You have heard me say that I don't believe inflation is going to be a concern other than something upon which the markets will fixate for a short period of time. My colleague Brent Burnett offered a different perspective. (p. 7)
- I know I will sound like a broken record, but I am going to mention GP-led secondaries/ continuation funds again. I cannot stress enough how this part of the market will change GP and LP behavior and change how private markets invest and exit transactions. (p. 8)

#### COVID-19

I showed this chart in the last update that provides a snapshot of the pace of vaccination in various countries mentioned in the above table.

### Share of people who received at least one dose of COVID-19 vaccine (March 19, 2021)



Share of the total population that received at least one vaccine dose. This may not equal the share that are fully vaccinated if the vaccine requires two doses. Source: Official data collated by Our World in Data – Last updated 20 March 2021

#### The COVID-19 State of the World

"Always listen to experts. They'll tell you what can't be done, and why. Then do it."

#### - Robert A. Heinlein, "Time Enough for Love"

As virus spread and vaccination pace vary widely, there is an increasing difference in experience depending on where you live. Unlike the classic zipper whose ends increasingly converge as it reaches the end, COVID-19 appears to be a quantum mechanics zipper as it heads to its endpoint of universal vaccination.



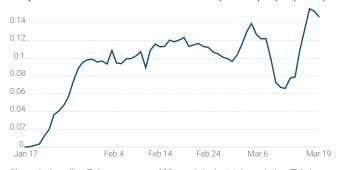
There are countries – fortunately, relatively rare – where the virus continues to spread almost unchecked and it seems as though vaccination is going to take a very long time. Brazil is the clearest example. Daily cases continue to rise, deaths are at record levels and vaccination is agonizingly slow. Compare case levels in Brazil with daily vaccination rates.

#### Daily new confirmed COVID-19 cases (Brazil)



Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing Source: Johns Hopkins University CSSE COVID-19 Data

#### Daily COVID-19 vaccine doses administered per 100 people (Brazil)



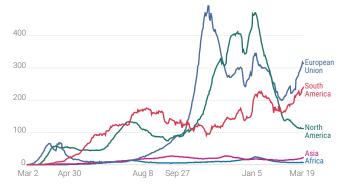
Shown is the rolling 7-day average per 100 people in the total population. This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses). Source: Official data collated by Our World in Data

With an accelerating spread, it is discouraging to see vaccination rates trending flat, at best. To curb the global spread of COVID-19, it will be important for Brazil to accelerate its pace of vaccination and alter the trajectory of its case counts.

### To curb the global spread of COVID-19, it will be important for Brazil to accelerate its pace of vaccination and alter the trajectory of its case counts.

There are other countries, primarily in Europe, where vaccination is increasing somewhat, but a new surge in cases is well underway.

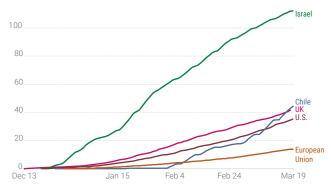
#### Daily new confirmed COVID-19 cases per million people



Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing. Source: Johns Hopkins University CSSE COVID-19 Data

Europe and South America are the outliers with the surge in cases. Some countries in Europe are re-instituting lockdowns. The press and politicians are blaming the UK variant and its more contagious features. Perhaps.

#### COVID-19 vaccine doses administered per 100 people



Total number of vaccination doses administered per 100 people in the total population. This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses).

Source: Official data collated by Our World in Data

How about blaming something else, particularly when you start to compare it to places like the U.S., the UK or Israel? A bungled vaccination effort is equally to blame. There is no reason Europe should be so far behind those countries when it comes to vaccination, other than to say that the EU, in particular, mismanaged the entire procurement and distribution of vaccines. The recent surge in cases is a function of the virus spreading as it would have done in the absence of vaccines because most of Europe, in fact, has lacked any real vaccination drive. It's easy to blame variants because they sound so malevolent. It's harder to be a political leader and say, "I let my country down." Fortunately, the pace of vaccine production will soon allow for most of Europe to ramp up vaccination and we should see the region, probably by May or June, be in the position the UK is in today.

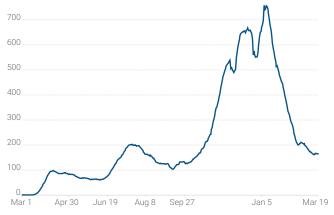


Why did I include Chile? Because Chile is also an outlier and a cautionary tale to many countries. Chile has rapidly vaccinated, yet is experiencing a surge in cases. Is it because the surge began before mass vaccination had an impact? Will the cases drop rapidly as the country reaches a 40% and higher vaccination level? Data from Chile will be important to watch.

#### The U.S.

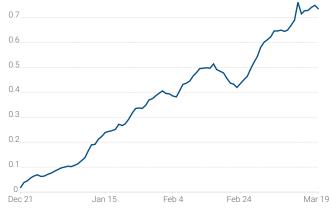
Who would have thought we'd be putting the U.S. in the positive COVID-19 camp? The country has spent the entire pandemic stumbling through an exceptionally poor response and now finds itself, with a massive vaccination development, manufacturing and distribution effort, with a population increasingly prepared to return to a prepandemic lifestyle.

#### Daily new confirmed COVID-19 cases per million people (U.S.)



Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing. Source: Johns Hopkins University CSSE COVID-19 Data

#### Daily COVID-19 vaccine doses administered per 100 people (U.S.)



Shown is the rolling 7-day average per 100 people in the total population. This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses). Source: Official data collated by Our World in Data

The chart on the previous page is daily cases and the chart above is daily vaccine doses delivered. It still amazes me that people say the two charts are unrelated and/or that the U.S. will have another huge surge because these variants have somehow mutated into a completely different virus. There is a great deal of discussion around the fearsome variants and the impending surge and danger lurking behind every potential encounter. I remain doubtful. The only reason I'm hesitant is the Chilean experience. We will know very quickly because the U.S. vaccination pace will continue to increase over the next two months.

Over the short term, the most likely outcome in the U.S. is that case levels will level off for a period and then continue their decline. There will be pockets of outbreaks both because activity resumes quickly and because an insufficient number of people agree to vaccinate and herd immunity does not occur throughout the country. Compared to two months ago, that is an OK problem to have.

#### **Quick Tidbits You Should Know**

"You can sway a thousand men by appealing to their prejudices quicker than you can convince one man by logic."

- Robert A. Heinlein, "Revolt in 2100/Methuselah's Children"
- 1. AstraZeneca. It continues to have the most puzzling story of any of the vaccines. Reports came out from Denmark and Norway that patients developed blood clots after vaccination, with one reported death.

[The Denmark case resulted in death and what was unusual (and made people think it might be tied to the vaccine) was the clotting was accompanied by low platelet counts. The Norway cases did not exhibit low platelets and Norway said the cases were not the same. But, as we've learned in this pandemic, never let facts interfere with a good story and so the narrative now is that blood clots are occurring after vaccination. Both the company and regulators in the EU and the UK have noted that the cases of blood clotting among vaccinated patients is no higher than cases of blood clotting among non-vaccinated populations.]

The company reports clotting was not from the vaccine and the EU and UK regulators continued to recommend its use, saying the benefits clearly outweigh any risks. The EU, however, in its usual fashion, noted that it



- can't rule out a link to clotting. That should really boost confidence. The vaccine continues to be used widely around the world (with, interestingly, no reports of unusual blood clotting), but some countries in Europe have continued their suspension of the vaccine. When will it be reinstated? Unclear, but the Dutch health minister said, "There cannot be a single doubt about the vaccines." With that standard, throw out all your vaccines, including any you might use for polio, measles or any other disease.
- 2. Italy, in agreement with the EU, blocked AstraZeneca from exporting vaccines to Australia. Yes, the same vaccine that is going unused throughout Europe. Let me quote something the EU's Health Commissioner said just a few months ago: "No country will be safe, and no economy will truly recover until the virus is under control in all continents. The European Union is ready to play its geopolitical role here, in full alignment with its founding values." Yes, indeed, liberte, egalite and fraternite for all. Well, almost all.
- 3. The poor EU. The leaders of Denmark and Austria, in a clear rebuke to the EU's handling of vaccine development and procurement, announced an agreement with Israel for vaccine development and procurement. The Danish Prime Minister said she was inspired by Israel's rollout of the COVID-19 vaccine. Inspirational is not a word one would readily use to describe the EU's performance.
- 4. Real-world data from Israel indicates that the Pfizer vaccine is at least 97% effective in preventing symptomatic cases and 94% effective in preventing asymptomatic cases. This is a big deal because it resolves the question of whether you can transmit COVID-19 once vaccinated. It's simple: You can't. The data was developed at a time when more than 80% of tested specimens were of the UK variant. You remember that variant; it was going to be so contagious and impervious to vaccination that we all needed to shelter in place for eternity. Nope. Vaccine 1; UK Variant 0.
- 5. The Mayor of the U.S. city of Detroit, a Democrat, refused the city's allotted shipment of the J&J vaccine, saying, "So, Johnson & Johnson is a very good vaccine. Moderna and Pfizer are the best. And I am going to do everything I can to make sure the residents of the city of Detroit get the best." I have ridiculed Republican politicians' keen knowledge and application of science in these updates. As you can see, many Democrats have an equal understanding of science and public health.

- 6. India reported its vaccine, developed and produced entirely within the country, was 81% effective, including effectiveness against the UK variant. (I'll note that vaccines now need to include that statement even though there has never been any evidence that prior vaccines were any less effective against the UK variant.) This vaccine is likely to be an important part of vaccination in many parts of the Indian subcontinent.
- 7. While all the focus has been on vaccines, GSK and Vir Technologies monoclonal antibody treatment trials were halted early due to "profound efficacy" that showed an 85% reduction in hospitalizations. They will apply for emergency use authorization. The ability to treat COVID-19 patients with those kind of efficacy numbers is an incredible advance in treatment options.
- 8. The U.S. has officially said that it will have enough vaccine supplies to jab every citizen that wants a dose by sometime in May. (Okay, so the official statement didn't use the word "jab.") Sitting in various warehouses around the U.S. are *millions* of AstraZeneca doses. The U.S. doesn't use that vaccine because it has not been approved in the country. With the numerous issues that vaccine has faced, do we seriously believe it will receive U.S. approval soon and, if it does, that anyone will take it when there are so many other choices? Numerous countries and organizations have asked the U.S. to release its AstraZeneca stockpile so it can be used by countries that desperately need supply. The Biden Administration has, until the last few days, refused, saying it needs to maintain flexibility to meet U.S. supply needs. It finally agreed to release a fraction of the dosages to Mexico and Canada, but only on the condition that what the U.S. releases now, the countries will return later in the year. I'll say two things (I'd say more, but I want to be respectful of your time):
  - Are you kidding me? We are in a global pandemic where the race is on to vaccinate every human we can, the U.S. is sitting on millions of doses of a life-saving vaccine we all know it will never need, and President Biden finds a need to maintain "flexibility?"
  - Imagine if the Trump Administration had issued the same refusal and released the same small amount. CNN and MSNBC, the NYT, SNL and every late-night comedian would be featuring stories and skits with people dying around the world and Trump sitting on vials of vaccines like Scrooge McDuck in vaults of gold coins. Not a



peep from any of those same sources on the Biden Administration's nationalism. Do we wonder why the media is held in such low regard?

(Let's compare this response to Australia's delivery of vaccine and personnel to Papua New Guinea to help battle the outbreak. Australia is already short of vaccine and looking to increase supply in order to vaccinate its population, yet manages to take a portion of the supply it needs today to help PNG. Or consider Chile, which donated doses to Ecuador and Paraguay as it continues to vaccinate its own population.)

#### And What Becomes of The Virus?

"A generation which ignores history has no past — and no future."

#### Robert A. Heinlein, "Time Enough for Love"

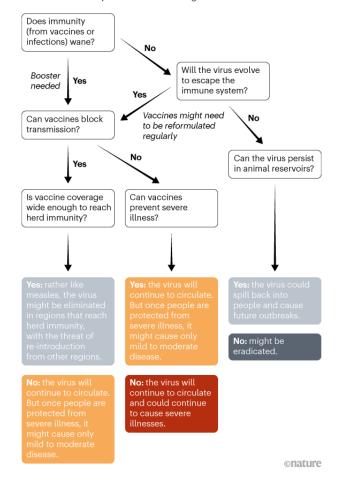
We are on the path to vaccinating large portions of the world. Then what? What happens to COVID-19? On one end of the spectrum, like measles, it is effectively eradicated. We never worry about it again except for peculiar, periodic outbreaks, particularly if the virus requires annual vaccination or boosters people don't take. The other end of the spectrum is the theory favored by the many experts solemnly speaking as they are trotted across your news feed. The virus will mutate and variate and other words that actually don't exist, but that sell one essential message: We will face a virulent, deadly, continual series of crippling outbreaks. Both outcomes are equally unlikely. The most probable outcome is that we are going to replace, for some period of time, the word "pandemic" with the word "endemic." What does that mean? Take a look at the chart on the right from an article in "Nature" that provides a handy flow pattern of potential outcomes and deals with an endemic virus.

There are already four endemic coronaviruses and they behave similarly: They tend to infect children, causing a relatively mild infection and the body builds some immunity and defenses for later infections. The virus has not gone away, but its virulence is reduced. It does, however, continue to cause some death, albeit nothing on the scale seen with COVID-19 over the past year.

Will it be like the flu, recurring seasonally? Remember, the flu is still responsible for 650,000 deaths annually. (Interestingly, flu pandemics today date back to the virus responsible for the Spanish Flu in 1918.) To date, it appears that the flu mutates more quickly than COVID-19. That means that vaccines are not as effective and need

#### **CORONAVIRUS: HERE TO STAY?**

SARS-CoV-2 has spread so far around the world that it is very unlikely to be eradicated. Here are some of the key factors that are likely to lead to it becoming endemic.



to be re-formulated each year. In the absence of rapid mutation, vaccination, likely with periodic boosters, would prevent COVID-19 from recurring in the same pattern and with the flu's death levels

There are, however, a number of scientists who believe that COVID-19 will behave like another coronavirus that seems to have the ability to evade immune responses over time. However (and this is the big "however" that you don't hear when experts tell you about this calamitous eventuality), prior coronavirus with this feature have NOT become more lethal and, in fact, have become less so. It is far too early to know whether COVID-19 will either evolve to develop this ability or evolve into more or less lethal strains. The existing evidence suggests the latter, but that's no fun to report, so don't expect to hear that outcome discussed much.

What should we expect then in the most likely scenario? Global vaccination will take a couple of years, so there will be parts of the world that reach herd immunity relatively quickly, but there will remain a large segment of populations that have not, with periodic outbreaks in various parts of the world. However, with what will likely be annual vaccinations, the number and severity of outbreaks will continue to decline and COVID-19 should become more akin to other human coronaviruses, with ongoing circulation responsible for illness and death to which we become more accustomed, as we have with the flu. One thing to note is that, at least for a year or two, the reaction to the phrase, "another COVID outbreak" will be far more extreme than the disease itself is likely to require, simply because of the experience of the past year. An outbreak of COVID will be more feared than a more lethal outbreak of the flu.

#### **Two Masks**

In the U.S., it has become accepted science that two masks are the key to eliminating COVID-19 infections. One expert on a major news outlet explained that the reduction in U.S. cases was due to double mask usage. (I know, you wish I was making this stuff up, but I'm not.) In some places, wearing one mask causes people to look at you as if you're maskless. Is there evidence for this double masking? Scientists in Japan, using supercomputer simulations, looked for evidence. What did they find?

Two masks are little better than one.

They found that one surgical-type mask, made of non-woven material, had 85% effectiveness in blocking particles when worn properly. Adding a polyurethane mask boosted effectiveness to 89%. Here's the part that was eye-opening (I guess I should say particle opening): Wearing two non-woven masks isn't useful because air resistance builds up and causes leakage around the edges.

"The performance of double masking simply does not add up," wrote the researchers.

This science stuff always gets in the way doesn't it?

Iceland has said that any tourist from any country can enter without tests or quarantine if they have proof of vaccination. We can expect other countries and regions to develop similar standards. While governments and multilateral organizations push for "standards" and collective ways of re-opening, the surge to return to more normal patterns of activity will overwhelm those efforts.

Think, in this context, of the U.S. CDC issuing guidance on what the fully vaccinated can do and saying that plane travel is not recommended. If you can't travel when you are fully vaccinated, when can you travel? It is that type of guidance that undercuts credibility.

#### The Public Markets

You wonder how fast consumers are going to come back? Are you curious whether people will wait for governments and institutions to decide what's safe and what isn't? Bank of America Global Research ("BAGR") published this chart on the behavior of older Americans, a group vaccinated at a faster rate than any other. This chart makes clear that it seems there is one thing people are inclined to do once they get the vaccine: Fly.

## Exhibit 8: Traditionalists vs. Millennials: airline and lodging spending

Index, June 2020 average =1 for each demographic group, 14-day moving average



Source: BAC internal data

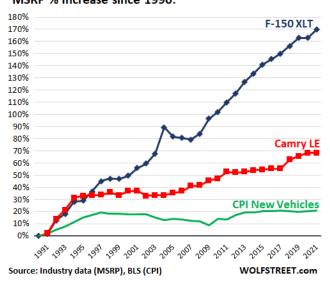
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BAGR had this to say: "Consumers between ages 73-92 have dramatically ramped up their airline spending after COVID vaccines became available, a sign of how quickly consumer habits are liable to change once people feel safe to resume a wide range of activities."

You have heard me say that I don't believe inflation is going to be a concern other than something upon which the markets will fixate for a short period of time. My colleague Brent Burnett offered a different perspective. He asked if anyone has purchased a new vehicle lately. If you looked at the CPI measure for new cars and trucks, you would find that new vehicle prices have been roughly flat for the last 20 years. Is that reality? Brent provided the chart on the right on the actual prices of a Ford F150 and a Camry LE relative to the new vehicle component of the CPI:



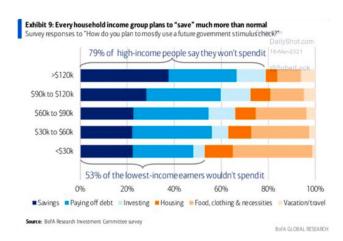




So, inflation is flat, but new prices have increased 170% and 70%, respectively for these vehicles. Why? The article from which Brent found the chart explained that hedonic quality adjustments are made within the CPI measurements, adjusting goods for quality differences that exist today vs. back then. But, as Brent points out, you can't decide to take your 2021 F150 with 1995 quality, even though the intended use for both is the same. You pay actual prices for the new vehicle today. So, while CPI is trying to isolate the purchasing power of a dollar, these quality adjustments don't really reflect what consumers experience and there are some big categories where their dollar is not going nearly as far today as it has in the past.

Brent made a further point (acknowledging he may be the boy who cried wolf) that the inflation risk is real, at least in the short term. He recalls his econ studies in college (apparently a key field of study to make him one of the great infrastructure investors now) that taught him this simplified equation: Inflation = Money Supply – Growth Rate. Brent's question is simple: What growth rate do you need to assume to keep inflation in check with money supply having increased by 26% over the last 12 months?

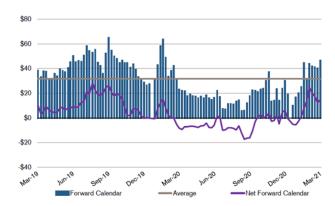
On Brent's last point about money supply, let's go back to BAGR for a moment. What do they think will happen to all that stimulus money?



They believe it won't get spent.

I recall, coming out of the GFC, telling a client that inflation was going to make a comeback with the combination of Fed money supply growth and fiscal stimulus. He said, "Mario, money isn't made until it is lent and spent – otherwise it's like we simply bury it in our backyards." If BAGR is right about consumer spending and the stats on bank lending, which show it is actually decreasing, are correct, then you'll find money and inflation in the same place: Buried in backyards.

With the pandemic a year old and vaccination ongoing, we are hearing a lot of stories of what has recovered to pre-pandemic levels and what hasn't. The public credit markets have recovered to pre-pandemic levels.





#### The Private Markets

I know I will sound like a broken record, but I am going to mention GP-led secondaries/continuation funds again. I cannot stress enough how this part of the market will change GP and LP behavior, and change how private markets invest and exit transactions. There will be some great deals and there will be some egregious transactions. Every investor needs to pay attention to this segment of the market.

Brokers report that the large majority of deal flow is from GP-led deals, particularly single-asset deals. The pipeline is full, which tells you how appealing these deals are to general partners.

The speed with which these deals are moving is striking. Negotiated legal documents are now required with final bids. Why? Valuations are moving aggressively and quickly in the markets, which means that 1) The longer a deal takes to close, the more likely the valuation will be stale and this can crater the deal, and 2) Competition from SPACs and other buyers is increasing, particularly for the single-asset deals.

There is every incentive for bad behavior here, isn't there? Brokers have every reason to drive prices and terms higher because doing so attracts GPs and, surely coincidentally, increases their own fees. While LPs can note to GPs that what they do today will impact future fundraising efforts, we know that, in a market where there is a lot of capital and the concept of risk is lost in a 12-year bull market, we are talking to many who see something quite different when they look in the mirror now.

What of the forlorn LP market, the market that started the entire secondary market? Participants report a frustrating level of "non-trading" from LPs due to rising valuations. Numerous processes have been pulled because, despite the market delivering pricing above expectations, sellers don't want to part with assets that have appreciated post their decision to sell – and think buyers should pay for any appreciation. This could put a damper on the LP volume for 2021, despite a large backlog of supply. My colleague Tom Kerr has a solution to this logjam. He suggests that we start buying off forward valuations...

We often talk about lines blurring among asset sectors, something that particularly seems to happen when valuations are high, as general partners search for acquisitions. We'll play a small game. I'll give you an asset that either is in your infrastructure portfolio today or will soon be there and I'll provide the explanation you'll soon hear. We'll make it like "Jeopardy," with the asset shown first and then the answer in the form of a question.

#### Industrial Real Estate.

*Answer:* What is e-commerce infrastructure?

#### Cable Companies.

Answer: What is an adjacent sector?

## Infra Portfolio Investment That Leaves You Scratching Your Head.

Answer: What is an asset related to digitization and energy transition?

This isn't necessarily bad or good, as we have seen this happen in most sectors as they mature, but it will make for interesting portfolio characteristics for a while and it will likely result in funds over or underperforming based on whether they chose classic infrastructure assets or those more afield.

As you have noted in these updates, I have an ability to travel back and forth in time, a handy power for someone in the investment field. I just recently returned from the future and read an interesting article that my colleague John Stake will write on the pace of fundraising. I urge you all to read it when it appears on his LinkedIn account in the coming weeks. A related aspect to the speed at which GPs are coming back to market is the amount of capital they have drawn before coming back to ask for more. An increasing number are returning with less than 50% drawn, even adjusting for reserves, deals done post the as-of date, and deals still on the line of credit. John noted, only half in jest, that we might soon see a group launch their next fund without having their first capital call in the current fund.



#### Conclusion

"A dying culture invariably exhibits personal rudeness. Bad manners. Lack of consideration for others in minor matters. A loss of politeness, of gentle manners, is more significant than is a riot."

#### Robert A. Heinlein, "Friday"

As many of you know, I have been writing these updates for a year now. During that year, there have been three or four times when I skipped my normal conclusion format and instead discussed a racially-motivated tragedy or murder that had occurred in the U.S.. That seems like such a high number in such a short period of time. And yet, unthinkably, it's happened again, this time in Atlanta, and this time directed against Asian Americans, particularly women. While the killer has denied that race was a factor in his motivations, these recent murders have cast a bright light on the violence and racist incidents occurring - and that have long occurred - against the Asian American and Pacific Islander (AAPI) community in the U.S. Did you know that, while hate crimes in general in the U.S. were down about 7% (surprising and encouraging), hate crimes against Asian Americans increased by almost 150%, with the incidence against women 2.3 times higher than that against men? My colleague Kristin Williamson suggested I say something about the Atlanta murders that claimed the lives of eight people, and yet I was admittedly reluctant, largely because I didn't know what to say. But, as I thought about it, Kristin was right and I thank her for forcing me to wonder why I would avoid saying something. Saying nothing, after all, is part of the problem. However small this update platform is in the world, it is an opportunity to say something about what is happening; to say plainly this is not OK, it is not acceptable and it is not normal, however numb we become to it happening too often.

That numbness is frightening, that process of becoming accustomed to, at first, slights and shorthand slurs, however intentioned or motivated, and then the increasing hate and violence. Of the 3,800 racist incidents directed at the AAPI community over the past year, 68% were characterized as *verbal harassment*. In this same time frame, we have witnessed leaders in the U.S. refer to the COVID-19 virus as the "Kung Flu" to wild applause in front of large crowds. How did we become accustomed to that? How did we become numb to the racially-directed hate in that political slogan? It is obviously more and bigger than any one single phrase; it's reflective of a pattern all around us. Heinlein is right when he cites the

greatest risk to a culture. It is that loss of consideration, that lack of the most common courtesy to those around us. It is particularly easy in this world of social media communication, where we can be avatars hurling words into the void, shielded by electronics and technology, as if they don't matter.

It starts with words and, unfortunately, often ends with the violence we have seen too often. If it starts with words, then we each have an obligation to use our words. to say something. Within each of us lies a superpower: The ability to call out rudeness, bad manners. Equally, the ability to use manners, to act with politeness. It sounds quaint, doesn't it? Rage and confrontation are the new normal. That is how it begins. The numbness, words anesthetized, where violence becomes the natural outcome. People tell me doing anything is pointless, the small number of people prone to that violence will act regardless of what "we" say or do. Those people do not exist in a vacuum. They do not exist in some remote part of the world, locked away from people and social media and the news. They are as numb to the language and the words as you and me, perhaps more so. I'm not naïve; people prone to hate and violence cannot be eliminated entirely from any society-they will always be there. But it is one thing when they are viewed, when they view themselves, as fringe parts of that society. It is another thing when they are allowed to flourish, when we, knowingly or unknowingly, nurture them and encourage them. Or at least turn a blind eye toward them. We do that by our silence, we do that by allowing language that is racially motivated and tinged to go unchallenged, by allowing words motivated by hate to spew with no barrier. We do that by using any of that language ourselves. We do that by shrugging and saying it's just a joke or it's just the way someone is or it is easier to look the other way. We allow it to flourish by saying, "Oh, they're just words." Few things are more powerful than words. Rarely are they just words.

We are approaching the final stage of the pandemic, the stage where vaccinations will end our lives of relative isolation. Those vaccinations are miraculous, science's magic bullet. We don't, unfortunately, have a magic bullet that similarly stops the spread of hate and racism. What we do have is the language we use. What we do have is that ability to pay it forward, to make a small difference in one interaction that then spreads, multiplies like the rice in the story of the man who invented chess, what futurist Ray Kurzweil coined "the second half of the chessboard." I



understand it is easier to move on, to say violence against Asian Americans is someone else's problem; that there's little you can do. I understand it well by simply struggling to write this conclusion. It is much harder to write this than to write what you have normally seen in these updates. But these are our friends, our family members, our co-workers, our neighbors, people we know, people we see in our lives, people who matter a great deal to us, to others. Saying or doing nothing is effectively turning our back on them and we cannot do that.

My advice for this update is to spend this week using your words well. Listen also to the words others speak and say something if their word choice is rude or hateful. Choose your own words as if they matter. Because they do. Be polite, be caring. Give your words the power they have to make a difference rather than to allow the numbness and the indifference.

