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Special CIO Strategy Bulletin

What’s Nu? Revisiting Portfolio Strategies for the Omicron Variant

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Summary

- **The identification of a new COVID variant (“Omicron”) with a large number of spike protein mutations drove world financial markets sharply lower on Friday. It will take several weeks to understand the virulence, transmissibility and immunity-escaping profile of the variant.**
- **In our view, Omicron is more likely to become a serious public health issue, slowing the pace of economic recovery and reopening, but may fail to materially change the existing global health landscape. Our discussions with epidemiological experts suggest the former is more likely.**
- **Markets moved rapidly, assuming Omicron represents a variant that could displace Delta as the dominant strain. Experts see a strong probability that current vaccines and boosters will prove less effective, but not wholly ineffective, in preventing infection. Treatments appear more likely to be effective in preventing hospitalizations and testing for the variant is already working well.**
- **Over the course of the pandemic, economic activity has become less and less sensitive to each new wave of COVID, including delta. While we assume this underlying will hold, the most sensitive of activities – particularly international travel – seem sure to be setback meaningfully.**
- **With greater international coordination, industry experience and government preparation, a significant new variant is highly unlikely to send the world economy into a new recession, but it will slow the path of recovery and extend supply shortages.**
- **Prior to Omicron’s arrival, markets were repricing a transition in monetary policy to fight inflation unleashed by macro stimulus, supply disruptions and shortages of goods. Omicron will now slow this repricing. To an unknown extent, the period of negative real interest rates will be extended if a new wave of infections occurs.**
- **The winter spread of the delta variant in Europe and the US even before Omicron’s arrival seemed underpriced in markets. As such, “reopening trades” were particularly hard hit on Friday with Global airlines falling 7.0% and crude oil posting a 12.8% daily decline, the largest drop since April 2020.**
- **The Citi “leave your home” basket fell 3.9% Friday while the “stay at home” basket fell 0.5%. For comparison, during the global spread of the delta variant, the relative performance of “leave your home” dropped 17% from mid-May to mid-July.**
- **With so little knowledge of Omicron, setting market expectations for its future impact is, by nature, speculative. The sharp reaction Friday and a pattern of “diminishing shock value” may imply that half of the impact of a full new pandemic wave has already been priced in. We do not believe that Friday’s market moves were an overreaction given the information in our possession.**

A “Most Likely” Scenario for the Disease and Economy

The news of the Nu Covid variant (B.1.1.529) drove all global markets downward sharply on Friday with world share prices dropping 2.2% and crude oil posting a very rare double-digit daily loss. That day, the World Health Organization (WHO) held a special meeting where the Nu variant was renamed “Omicron” and classified as a “virus of concern”. The concerns are that Omicron may have greater transmissibility than Delta (the globally prevalent variant of Covid) and that its mutational profile will make existing vaccine and antibody therapies less effective against it. It appears that the WHO skipped two Greek letters in its naming convention, Nu and Xi, so as not to confused them with “new” and the name of the Chinese President, respectively.

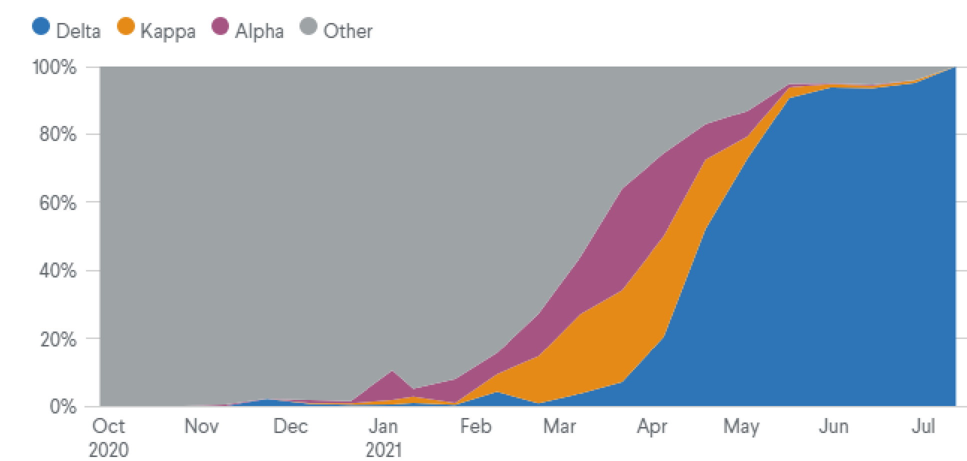
The Omicron variant was identified 5 days ago, initially in Botswana, with subsequent confirmation and sequencing in South Africa. Africa had been viewed as a likely hot spot for “more worrying variants given the high prevalence of poorly-treated, immunocompromised patients” (Citi Research, February 3, 2021). The number of mutations (50) and their location within the virus (28-30 on the Spike protein alone) suggest that the virus may have originated within an immunocompromised patient that had unabated viral replication, allowing mutations to stack up. It is not a certainty that Omicron will become the dominant strain of Covid, as prior concerning variants such as Beta, also identified in Africa, did not become prevalent.

Researchers, governmental health agencies and major Pharma companies are actively monitoring the Omicron variant to see if current testing, treatments and vaccines are affected by the variant. Over the next two to six weeks, we will learn (1) whether Omicron is likely to overtake Delta in countries where it is dominant, (2) if Omicron is able to evade the immune systems of those previously vaccinated and (3) initial rates of hospitalizations associated with Omicron. We do know that current PCR and rapid antigen tests are able to detect Omicron.

An Initial Take on Omicron

In our view, based on initial, limited data, the medical, economic and political consequences to the appearance of Omicron are likely to be material. The WHO suggested that Omicron could pose greater risks than the Delta variant that displaced all other variants in India within two months and rapidly spread to become the dominant strain in over 100 countries (**figure 1**). The concern with Omicron is that its unusual mutational profile may allow for an increased risk of vaccine breakthrough or reinfection such that people who were vaccinated may get infected and people who contracted COVID-19 and recovered could be more likely to catch it again, spread it and/or get sick.

Figure 1: Delta rapidly became dominant variant in India: COVID-19 cases sequenced in India.



Source: World Health Organization through November 1, 2022, Our World in Data. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events

The fact that Omicron has traveled so far, so quickly is already of great concern. In addition to South Africa and Botswana, cases caused by Omicron have already been detected in the UK, Israel, Belgium and Hong Kong. The level of infection on a Dutch airliner suggests a virulent new strain is present. The increased rate of holiday air travel is likely to exacerbate its spread further. And Omicron’s transmission is occurring amid a spike of delta cases across Europe after many countries had loosened travel restrictions. Thus, the implementation of travel restrictions and public health measures are unlikely to stop the spread of Omicron if it is more virulent than Delta.

A “Most Likely” Scenario

Based on our conversations with Dr. Michael Mina, previously on the faculty of Harvard Medical School, the Harvard School of Public Health and the Harvard Center for Communicable Disease Dynamics, and now Chief Science Officer at eMed, the following is a “most likely” scenario:

1. Omicron becomes the dominant strain of Covid globally. It is more widespread than we know. The uniqueness and complexity of the mutations and suggests the virus originated in an immunocompromised individual or individuals, unable to clear the virus and thus enabling mutations to stack up. Alternatively, the virus could have been brewing under the radar, gaining mutations across populations for over a year in places where genetic sequencing is limited, finally being identified in Botswana and South Africa with their sequencing efforts.
2. Omicron will <u>not</u> become a pandemic within a pandemic. Because of the rapid, prior spread of Delta and the use of more than 7.7 billion vaccinations worldwide, those previously exposed to Covid will generally be protected from the most severe outcomes. In short, the speed of delta’s prior spread will offer a future benefit in this instance.
3. The critical metric to watch for understanding if the virus will become dominant is the percentage of sequences that are Omicron compared to Delta. If the percentage begins to accelerate, as it has done in South Africa already, it will be evidence that Omicron will take over.
4. The critical metric to watch for Omicron’s threat is the rate of hospitalizations per cases detected. Absolute numbers of infections are less important. In the event that we see many more hospitalizations per infection, we will know that Omicron is likely more virulent. If Omicron is much more transmissible but has the same virulence as Delta, we will also see more hospitalizations in terms of absolute numbers but not per cases detected.
5. Omicron will be somewhat more immune evasive than Delta. This means that, regardless of increased transmissibility, it will likely create a greater incidence of Covid globally as it can more readily reinfect those previously exposed or vaccinated.
6. The overall level of disease severity for Omicron is likely to be less than Delta was. Given the passage of time and the broad, heterogeneous immunological responses built to Covid globally since the beginning of the pandemic, Omicron can become a dominant strain and still have less impact than Delta did.
7. That said, the “news” associated with Omicron will grow louder and more concerning before all of the data comes through. This means increased travel restrictions and border closures are likely. Political pressure to “respond” to the threat of Omicron will be great and measures to lockdown countries are likely. This will be exacerbated by the fact that we are in peak virus season in much of the developed world and the fear that has become entrenched within society more broadly. It may turn out that trying to limit the spread of the Omicron variant will do more harm than the virus itself. It will be prudent to try to limit its spread using the least disruptive methods possible.
8. It is likely that Pfizer’s oral antiviral treatment, known as Paxlovid, will be effective for Omicron. That treatment is likely to get emergency use authorization and to be in production as of December. The regime is 40 pills over 10 days, and the drug only works if started in the first three days of symptoms, so the need for early detection is critical. Thus, if testing is emphasized globally, especially fast and early testing among the elderly and other vulnerable populations, hospitalizations can be minimized.
9. Vaccine makers will move to make new vaccines rapidly. Whereas Delta was not addressed specifically in vaccine formulations, Omicron is likely to be specifically addressed by vaccines in 2022. A major benefit of mRNA vaccines is their ability to be updated quickly and multiple or even many sequences can be incorporated into a single vaccine dose.
10. The recovery from the Covid pandemic will be extended as a result of Omicron’s arrival and spread. Supply chain issues, labor shortages, travel restrictions, Covid-related inflation and other temporary, but significant impacts will continue to roil markets. In countries with a preference for social control, like China, we can expect extended frictional economic impacts.
11. By the Summer of 2022, provided that there is no worse variant that appears, we will be much closer to the end of the pandemic than it appears today.

Further Comments on the “Most Likely” Scenario

Evolutionary epidemiologist Paul Ewald’s "theory of virulence” suggests that the deadlier the germ, the less likely it is to spread. His theory recognizes that, in general, most germs will evolve to become less virulent as they circulate and adapt to the human population. But Ewald’s theory does allow that certain germs will maintain both high virulence and transmissibility.

In the most recent edition of the Smithsonian Magazine (11/16/21), "Will the Coronavirus Evolve to Be Less Deadly?", Ewald looks to the durability of Covid as a clue to its virulence. "He argues that SARS-CoV-2 is likely to evolve virulence to levels much like that of seasonal influenza, with a typical death rate of 0.1 percent." Columbia University virologist Vincent Racaniello notes in the same article that, "SARS-CoV-2 may become less deadly, not because the virus changes, but because very few people will have no immunity. In other words, if you're exposed to the virus as a child (when it doesn't seem to make people particularly sick) and then again and again in adulthood, you'll only get a mild infection."

Over the next weeks, we will see data about the new variant's transmissibility as well as its ability to displace Delta. At the same time, the major vaccine manufacturers will begin to assess the effectiveness of existing vaccines and treatments against the new variant. They will also begin the development of a new vaccine immediately for delivery in 2022.

Given the course of Covid thus far, a reasonable scenario for Omicron will see more breakthrough cases of Covid among those who have been previously vaccinated. The associated burden of this outcome would mean increased hospitalizations, stressing the capacity of health systems (severely in many cases), but may not necessarily result in a rise in mortality.

The most likely scenario for Covid, therefore, remains its transition to a seasonal disease like influenza. With the development of monoclonal antibodies and other specific treatments that reduce hospitalization and death, it is likely that over time the burden of SARS-CoV-2 infections will become similar to influenza. That does not mean that Covid will become unimportant. The annual mortality rate of influenza is estimated to be 250,000 to 500,000 deaths in non-pandemic years, comprising around 2% of all annual respiratory deaths. So, it is highly likely that Covid will be an incremental health burden assuming an optimistic view of the course of the pandemic.

To our readers: This Special CIO Strategy Bulletin was prepared with care after consultation with several leading medical, epidemiological and financial experts. That said, there are material uncertainties about Omicron and its trajectory that will become clearer in the weeks ahead. The scenario presented herein assumes that Omicron triggers typical B and T cell immune responses to those who have had vaccines and/or prior exposure to Covid.

Increased Resilience for the Economy and Markets Through Repeated Exposure

Personal mobility continues to recover globally despite wave after wave of COVID infections (**figure 2**).

The "pandemic recovery" has been a process of adaptability by individuals and business. Over the past 20 months, there were setback and recoveries associated with the rise and fall of Covid infections. For example, the rise in infections in the winter 2020/2021 was a material setback. At that time, Covid required compromises to social mobility to limit spread of the virus. The setback associated with the Delta variant spread in May-July 2021 was similarly significant, but the adaptability of the economy to COVID has increased while vaccination levels and the availability of treatment improved.

We expect a similar pattern now. With the increased spread of Delta now and the likely spread of Omicron ahead, there will be a material rise in global infections. Thus, greater social restrictions are likely in the months ahead.

Most Affected Sectors

Looking back to mid-2021, the sharp spike associated with the more infectious delta variant slowed sectors of the economy most closely linked to social interaction, such as leisure, hospitality and travel (**figure 3**).

While there is much uncertainty ahead, it seems probable that the arrival of the Omicron variant will cause of repeat of this dynamic in the next several months. The distortions to the economy associated with COVID – such as a rise in goods spending at the expense of services – may also extend the shortages and price spikes of pandemic. For this reason, central banks may see a rising risk to recovery similar to the onset of the delta variant.

Figure 2: Global mobility at retail and recreation sites vs global new COVID infection rate %

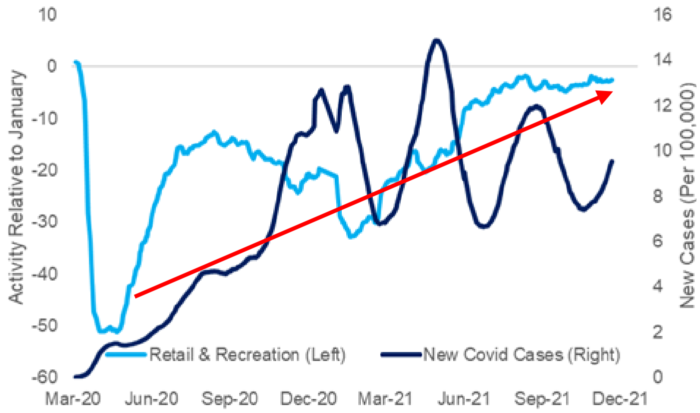
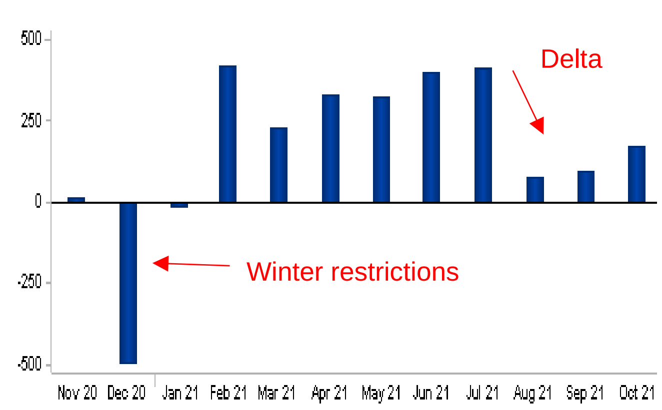


Figure 3: US leisure and hospitality employment, monthly % change



Source: Haver Analytics through November 26, 2021

Expect Significant Rotation Toward "COVID Defensives," but Less Than Mid-2021

The speed at which markets have reacted to new Covid news has also increased with experience. On Friday, there were very large single-day adjustments in asset pricing that represented approximations of how Omicron might affect global growth. Whether these moves continue or reverse will depend on the course of the new strain and the ability of current vaccines to protect against Omicron or be adapted quickly to do so. According to Citi Research, Pfizer, for one, believes it can deliver a new variant vaccine within 100 days of sequencing and deliver four billion doses of a new vaccine within a year (November 26, 2021).

The possibility of "false alarm" also exists. However, our working assumption, as detailed above, is that Omicron will represent a new, significant wave of infections, most easily comparable to the delta variant. With greater widespread immunity from previous infections and vaccines, Omicron is likely to have a diminished absolute impact on global health outcomes than delta. International travel will be forced to slow dramatically as a token gesture by authorities, but the overall economy will continue to show decreased sensitivity relative to the scope of past viral waves.

Therefore, **our base case view is that markets will continue to adjust to a new wave of infections driven by the omicron variant in the coming weeks and months, but with less absolute impact than the delta variant at mid-year**. It would not surprise us if financial markets post a "reflexive bounce" on Monday given the severity of Friday's adjustment. Investors will note that the history of the pandemic thus far has been unusually positive for financial markets given the macroeconomic policy responses to it. (Global equities are 27% above their level of early February 2020 at the onset of the pandemic shock.)

Weighing against any immediate notion that Friday was an overaction is the fact that monetary and fiscal authorities are unlikely to respond as vigorously to a future health crisis unless it is as threatening as the onset of Covid was. Unless a financial shock proves highly severe – which we deem unlikely – the Federal Reserve is unlikely to completely change course. We see the Fed as more likely to avoid speeding up its pace of policy normalization to fight inflation. (In other words, the Fed will continue to slow Quantitative Easing by $15 billion per month, not slow these bond purchases at a faster pace).

Assuming that there is little additional day-to-day clarity, Omicron will likely drive a larger impact on the relative performance of various financial assets than we have seen thus far. Amid heightened volatility, the course of the virus we expect this winter should further depress "COVID cyclicals" and boost "COVID defensives."[1]

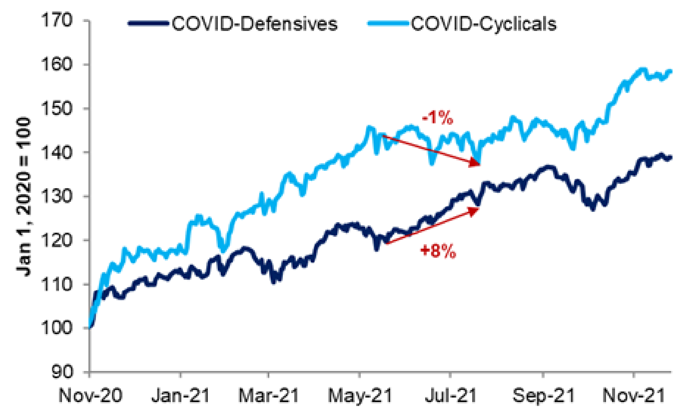
Expect More Volatility

Larger market moves in COVID sensitive assets are likely to occur now, just as they occurred during the rise of the delta variant earlier this year. The most COVID sensitive assets fell 17% relative to those positively impacted from mid-May to mid-July. The relative move Friday was a mere 3.4%. In addition, 10-year US Treasury yields fell 52 basis points in the period compared to 16 basis points Friday.

[1] At a global sector level, we consider COVID Cyclicals to be Consumer Discretionary (ex-E-Commerce), Energy, Financials, Materials, Industrials and Real Estate, while COVID Defensives are Consumer Staples, E-Commerce, Healthcare, Information Technology, Telecom Services and Utilities.

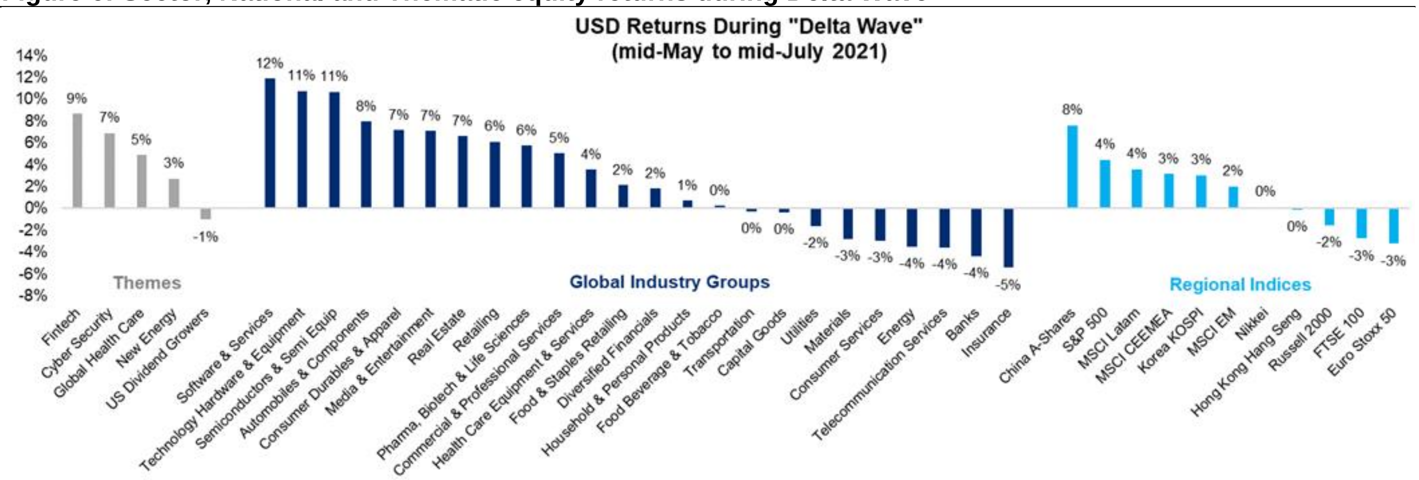
Figure 4: Citi 'Stay at Home Basket' relative performance to 'Leave Your Home Basket' and 10Yr US Treasury Yield (%)

Figure 5: Global Covid Cyclicals and Defensives Since November 2020, Delta Impact



Source: Bloomberg through November 26, 2021. COVID Cyclicals are Consumer Discretionary (ex-E-Commerce), Energy, Financials, Materials, Industrials and Real Estate, while COVID Defensives are Consumer Staples, E-Commerce, Healthcare, Information Technology, Telecom Services and Utilities. "Stay at Home" basket includes names identified to benefit from COVID-related disruptions and a shift to working from home "Leave Your Home" basket includes Buy and Neutral Rated US names in the following sub-industries: Banks, Industrial Conglomerate, Machinery, Oil Gas & Consumable Fuel, Textiles Apparel & Luxury Goods, Energy Equipment & Services, Hotels Restaurants & Leisure, Building Products, Retail REITs, Construction & Engineering, Leisure Products, Airlines, Multiline Retail. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. Past performance is no guarantee of future results. Real results may vary.

Figure 6: Sector, National and Thematic equity returns during Delta Wave



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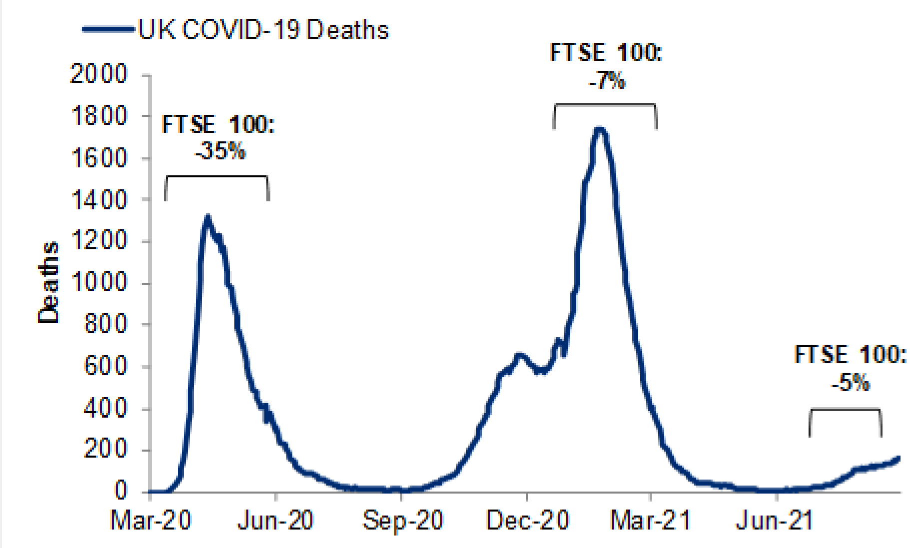
Investors should note that the *absolute* impact of COVID waves has indeed been diminishing over time. The delta wave hit the UK particularly hard and was a dominant factor in its financial markets at mid-year. However, with declining severity of health outcomes and less broadly disruptive actions to slow the viral spread, the financial market reaction to new COVID waves was much smaller than in 2020 (**figure 7**).

Figure 7: UK COVID Waves and Equity Market Reaction



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Overreaction in Oil?

In particular, crude oil posted its largest one day drop since April 2020 on the view that international travel will crater. The short-term sensitivity of the oil price to demand is indeed very high. In time, we would expect that the move will prove excessive. Jet fuel accounts for just 5% of global petroleum demand, with international passenger travel just a presently depressed fraction of it. In the coming month or two, the drop will help unwind a portion of headline consumer prices and boost real consumer incomes fractionally.

Healthcare's Critical Role in Portfolios

The latest COVID strains are the result of the world's sadly inadequate response to the pandemic as a collective human problem. The vaccination rate in South Africa – where the strain might not have originated – is a mere 35%, or half that of the US and Europe. The longer it takes to reach all of humanity with effective vaccines, the greater the remaining risk of new mutations affecting everyone. While bleak healthcare news has become less and less shocking, it remains a human tragedy with impact to citizens of all nations.

The spending required to address this pandemic and limiting the risk of others in the future should be a focus of all well-resourced governments. As we care for your portfolio investments, we see the bleak side of this business, but also the more positive one as we discussed in last week's bulletin. Despite the once-in-a-century pandemic, increased healthcare spending allows the human population to extend average longevity ever further (see figure 8). In the meanwhile, the pandemic is likely to further strengthen the sense of indispensability of the sector so critical to preserving human life (see figure 9).

Figure 8: Share of Global Population Aged 65+: UN Projection

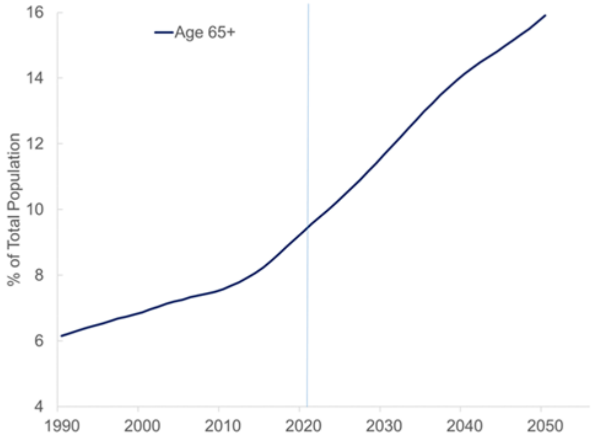
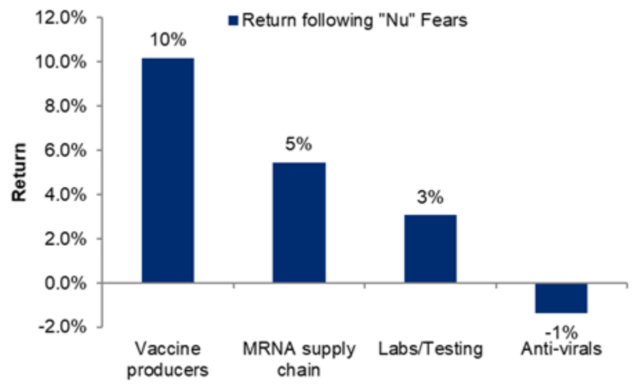


Figure 9: Friday's Return for Virus-Related Equities



Source: Haver as of November 18, 2021. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. Past performance is no guarantee of future results. Real results may vary.

Final Comment:

The world has learned too much from the pandemic to be fully shocked again by a new variant. Much activity was needlessly derailed in 2020 by policies and production shutdowns without slowing the spread of the virus. This set the stage for goods shortages in 2021. The current state of the economy and accommodative central bank policies are not positioned to drive a similar economic contraction. However, the timeframe for a full recovery from the pandemic will likely again be extended by Omicron. Investors should be prepared with diversified portfolios as we will discuss in our coming *Outlook for 2022.* We will continue to update readers with any news and changes in our expectations as information becomes available.