



The Coronavirus and Narrative Economics

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"It's the advantage of the virus to spread, and you can only spread when you infect people and they infect other people without necessarily killing them. So, if you had 100 percent mortality, the potential pandemic would almost self-eliminate itself." Anthony Fauci

Investment markets declined sharply in the last week of February 2020, driven by growing investor fears about the novel coronavirus COVID-19. There are four coronaviruses that routinely infect humans, causing the common cold; these viruses are believed to evolve in humans to maximise their own spread. By contrast, novel coronaviruses, such as SARS (2003) and H5N1 (or "avian flu", 1997), are picked up from animals or birds. The novel form of the virus is typically associated with a very high mortality rate. For example, the fatality rate of the H5N1 virus is estimated at 60%.

Nevertheless, the critical insight is that if the virus causes the carrier to be very sick and/or has a high mortality rate it is very unlikely that it will spread widely. This outcome arises because the carriers will not have much opportunity to infect others because they are either quarantined quickly (since their sickness is obvious), or they die. The conditions for a virus to spread widely are thus that the symptoms are typically mild (so the carrier is not quarantined quickly), it is contagious, and the mortality rate is low. This would appear to be the case for COVID-19, as for many the symptoms are mild, and the mortality rate is estimated at 2% (high, but not dramatically so).

¹ It is worth pointing out that an estimated 14% of flu carriers are asymptomatic.

The highest mortality rates are amongst the elderly, those with high blood pressure and individuals with compromised immune systems. Some estimates are that 20% of the sick will need to go onto a respirator if they are to recover.

Given the above characteristics, COVID-19 may indeed spread widely. Professor Marc Lipstich, a Harvard epidemiologist, suggests that some 40% to 70% around the world will be affected by the virus that causes COVID-19. He emphasises that many of the individuals will experience mild illness or may be asymptomatic.¹ Relevant here is the initial statistic that each individual that contracts COVID-19 will infect an estimated 1.5 to 3 other individuals. With such a high transmission rate, the virus only need to infect a small number of individuals initially (estimated as 200), before it spreads widely.

There are, of course, many other variables that may impact on the transmission rate; some experts predict that warmer weather will cause the virus transmission rate to slow significantly. Finding a vaccine would of course be the answer, but the indications are that such a solution will take between twelve to eighteen months to develop.

We are acutely aware of the behavioural error of assuming one knows more than you actually do. Nevertheless, based on the above information, our view is that on the balance of probabilities the disease will spread widely and with a fatality rate around 1% to 2%.

This death rate is almost certainly high enough to cause individuals to change behaviour, by for instance avoiding high density areas such as airports, public transport, sporting events and shopping malls.

The concept of avoiding contact with others is called “social distancing”. The Chinese Communist Party took social distancing to the extreme by imposing stringent quarantine conditions (e.g. locking down cities) in an attempt to limit the spread of the virus. The Party did so despite the fact that they must have known that such quarantine would have a materially negative impact on Chinese economic growth, at least in the short term.

Our sense is that it is very unlikely that the Western World countries will look to (or be able to) impose such harsh quarantine conditions. However, some form of social distancing will be required if the virus indeed spreads. For instance, a study of seventeen USA cities during the 1918 “Spanish” flu epidemic found that swiftly banning public events and closing schools and churches cut death rates by half.

Based on such evidence, the Western World governments are likely to impose such milder conditions pre-emptively if the view is that COVID-19 may spread widely. Furthermore, many employers are concerned about the virus spreading, and have encouraged staff that show symptoms of cold and flu to stay at home for up to fourteen days. In some instances, employers are also stopping airline travel. Citizens are also likely to “self-quarantine” themselves to some extent, if local prevalence rises sharply.

We synthesise the above to reach the simple conclusion that there will be a slowdown in global economic activity at least in the short term; the difficult bit is predicting the extent (severity and duration) thereof. This slowdown will, in turn, result in lower short-term profitability, arising from lower revenue growth and in some instances higher costs (e.g. supply chain breakdowns). There will be both demand-side and supply-side contributions to the slowdown.

Naturally, the critical question is whether markets have priced the impact more or less correctly.

In this regard we take the view that investment markets are an “Expectation Machine” with expectations being driven by fundamental analysis, human behaviour, and a relatively new phenomenon which may be termed “narrative economics”.

The term “narrative economics” was coined by Nobel laureate Robert Schiller and relates to the tendency of social media and the Internet to drive stories that go “viral” often with little regard to the facts. Narrative economics will exacerbate behavioural errors.

In relation to the virus, our view is that human behaviour will almost certainly err on the side of caution. Whilst this fear is likely to cause a sharper economic decline than necessary under rational decision-making, it may well have a positive effect, in that the extent of the social distancing will limit the spread of COVID-19, resulting in a sharp but temporary decline. This may be what the markets are already reflecting, but narrative economics may drive markets down even further.

While it is interesting to mull over whether Mr Market has priced the coronavirus risk correctly, this remains a “low probability of getting it right” game, especially as many elements of the future course of the virus are unknown. Rather, we believe it is more productive to consider some of the possible second-order effects and tail risks that may follow.

Second-order effects

It is worth pointing out that China is the only major economy in the world that has undergone an industrial revolution, without this being preceded by an agricultural revolution. The novel coronaviruses spread to humans via the food chain. Consequently, we posit that the Chinese government may decide to direct some of its inevitable stimulus spending towards an agriculture revolution, as opposed to pouring more money into infrastructure. It is clearly in the interests of the Communist Party to provide a secure food supply that is subject to high health quality standards. Clearly, such a policy would favour sectors of the market that deliver products and services to agricultural and food sectors.

The virus exposed the high level of dependency created by global supply chains. In this regard, a key benefit of globalisation is that it has driven inflation down, because companies have been able to source the components and products they require at the lowest cost. However, the flip-side of globalisation is to make the world more connected. We believe that there is a reasonable chance that, going forward, companies will look to build in more resilience into their supply chains, which may be a positive for South Eastern Asian countries other than China.

Nevertheless, such diversification may have the effect of increasing aggregate costs.

More widely, globalisation, together with technology (and in some cases ageing populations), has been a major contributor to the very low inflation rates observed in many countries today. Not only has globalisation allowed companies and consumers to source low cost components and products, it has also provided an immigrant population that has been prepared to work for low wages. Thus, the current wave of nationalism seen in some Western World countries (for instance “America First”) may be one of the triggers that causes inflation to surprise on the high side. Having said this, the case for continued low inflation remains in place, but we believe that the market is too sanguine about this - there are tail risks which, when aggregated, may result in inflation being higher than the expectations baked into current asset pricing.

In the first week of March the Federal Reserve Bank (“the Fed”) cut US short-term interest rates by 0.5% p.a. as a signal of support to the market. This action suggests that the Fed is deeply concerned about the negative effect the coronavirus could have on US economic growth. Some market commentators have made the strong point that cutting interest rates is unlikely to stimulate demand when the cause of the slowdown is behavioural, with consumers concerned about their health. Thus, the net effect may be largely wasted firepower, with the Fed having even less wiggle room to cut rates to deal with any downturn driven by fundamental factors.

Arguably, a better policy response to the virus is fiscal spend directed (for instance) towards infrastructure development. As noted above, in our view China is likely to go the fiscal spending route, which we believe may be directed to significant agriculture spend.

Tail event risks

Some market commentators have argued that global equity markets are already very expensive, and that impact of the coronavirus will be the catalyst for a sharp market downturn. We concur with the view that the US equity market is largely priced for perfection, but we are unconvinced that the coronavirus, whose impact is likely to be temporary, will be the trigger factor. Nevertheless, there is the tail risk that COVID-19 has deeper and more long-lasting effects than we are assuming, in which case it may indeed be the “canary in the cage” which exposes the unrealistic expectations baked into current equity prices, particularly in the USA. Much closer to home is the

tail risk that the virus could clearly expose the fault-line in social cohesion in South Africa. Persons with compromised immune systems (e.g. users of anti-retroviral drugs and TB sufferers) are particularly vulnerable to becoming very ill or dying from COVID-19. South Africa does not have a deep health care system to deal with a high incidence of very sick people needing access to respiratory machines. In the extreme, there is the risk of public anger that the government is not doing enough for the sick, particularly if the perception is that it is only the wealthy that have access to adequate (private) health care.

We point out that social distancing is even more difficult to implement in a country like South Africa. Many people have little option but to go to work even if they are feeling ill, simply because they need the money. The consequence of this increased interaction, particular on public transport, would have the effect of virus spreading more widely.

The scenario described above would clearly be a major setback for the already fragile South Africa economy.

How should our clients respond?

There are, of course, three possible responses:

- Buy on the dips” – the thesis here is that the market has over-reacted to the virus, and current prices reflect a buying opportunity. We are unpersuaded by this view, because we consider equity markets to be on the expensive side. However, at stock-specific level there may be some mispricing; this is more likely to be in sectors that have been most priced down by the virus, such as airlines, hotels and tourism companies. Naturally, any response here would be an investment manager decision.
- De-risk the portfolio, with the implicit belief being that (even after the recent sell-off) the market is too sanguine about the impact of COVID-19. However, our key point is that the more concerned everyone becomes about the virus, the less widely it is likely to spread. Thus, an over-reaction to the virus (in our view the most likely outcome, given behavioural biases and narrative economics) may cause a sharp short-term dip in economic activity, but the virus is unlikely to have a long term impact on markets.
- Having said this, we are a bit more concerned about the South African tail risk. Accordingly, we believe it remains appropriate for clients to have the maximum invested offshore, as a hedge against poor outcomes locally.

- Take a long-term view and make no adjustment to the portfolio. This would be our counsel. Although this may seem like the easy way out, the evidence points to most investors over-reacting to news flows and consequently trading excessively, to their detriment. Even those investors that de-risked their portfolios when the news of the virus first broke, now face the difficult decision of when to go back into the market. Getting this timing right is extremely difficult, as the evidence shows that being out of the market on the few “big days” when the market goes up sharply can significantly impair your long-term performance.
- If we were to advise our clients to make significant changes to their asset allocation, this would be based on our assessment that the market is significantly mispriced, and that the odds strongly favour this mispricing being reversed.

Summary

The first critical insight is that COVID-19 is a problem because it is not that serious a sickness. If the virus was associated with severe illness and a high mortality rate it would self-eliminate itself quickly. The factors that cause COVID-19 to be a problem are its high transmission rate and the fact that most who catch the virus experience mild symptoms, and in some cases are asymptomatic. However, its fatality rate at 1% or 2% is high enough to cause fear.

This leads to the second productive insight, namely that the fear of contracting the virus will result in many individuals actively choosing to engage in social distancing. They will be supported in this regard by their employers and the local community. This response has the consequence that the epidemic will die out sooner. However, this line of argument does not sustain itself fully in poorer countries like South

Africa, where many people have to go to work each day simply to get by.

Based on the above, our view is that the most likely outcome is a sharp but temporary decline in economic growth, which explains the sharp decline in equity markets in the last week of February 2020. We don't know whether the markets have priced the impact correctly, but we make the point that anyone making such short-term forecasts has a low probability of being right!

Accordingly, we believe it is more productive to consider the possible second-order effects and tail risks. The second-order effects we identify are the possibility of the Chinese government switching policy, with significant spending going into the agricultural sector, and the possible effect of supply-chain diversification on the pricing of components and products. We are also concerned that the Fed may be wasting some of their already limited fire-power by reducing USA short-term interest rates by 0.5% p.a. in an attempt to stave off the negative effects of the virus.

The tail risk that worries us the most is the clear exposure of the fault-line in social cohesion in South Africa if the virus were to spread widely. As argued above, this could result in significant social upheaval, with the government being accused of doing too little for the poor. Such an outcome would be a significant setback for South Africa's already fragile economic growth.

Our counsel is for clients to adopt a long-term horizon and not change their strategy. However, we believe that it is important for clients to maintain their full offshore exposure, as a hedge against the tail risks the country faces, including the significant negative impact of COVID-19 spreading widely.



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