

Coronavirus Scenario 2: Enemy at the Gates

By Javier (Feb. 25, 2020)

Translated into English, crudely. Original in Spanish [here](#).

Early containment has failed. The declaration of a pandemic is imminent. It is time to prepare for the direct and indirect effects of the Wuhan Coronavirus pandemic.

My way of analyzing problems is to stick to what the data indicates and what the evidence shows. That's why I know that peak oil is imminent if it hasn't already taken place, and that's why I know that climate change doesn't pose a crisis. The advantage of sticking to the data is that if the situation changes the data indicates it and one immediately changes position instead of insisting on a position that has become wrong. In the case of **the Coronavirus the situation took a radical turn on February 19**, as I indicated in [this comment](#) on the follow-up page:

But the most worrying thing today are the two cases that have appeared in Iran. Both people have died shortly after the positives were announced, indicating that they had been infected probably weeks.

Until then I was cautiously optimistic because the data indicated that China's drastic move to quarantine 60 million people was meeting the goal of reducing the number of new cases dramatically. **However, the news confirmed my worst fears**, the epidemic had reached countries with more limited healthcare and had spread undetected for weeks. Cases soon became public in Canada and Lebanon of people who had arrived infected from Iran. At this point it is naïve to think that the disease is not spreading **undetected in several countries in Africa** where tests are probably not being done even in cases of severe pneumonia. The WHO is already slow **to declare the pandemic**. It is inevitable at this point with hundreds of cases in Iran and Italy, which in the case of the former will soon be thousands, if not already.

In the Article of January 31: [Scenarios and consequences of the Wuhan coronavirus pandemic](#), which some considered alarmist, we turn to scenario 2:

Scenario 2: Late containment

The intermediate scenario. The pandemic is contained with great efforts and after many months after having infected millions of people in many countries. The dead number in the tens or hundreds of thousands. A vaccine, which would take months to develop and produce, may be needed to finally contain the pandemic.

The economic losses would be very large and with the current state of the economy could cause a global recession. Stock markets could suffer a crash. With the decline in state revenues there could be multiple debt defaults that could add a currency crisis.

Unfortunately, it must also be said that the **chances of reaching scenario 3, in which the disease is not contained, are high.**

1. Our government's lack of action

There are two types of zonal quarantine. In the first it is about **preventing a contagious disease from reaching an area**, are the measures that for example were taken in [Western Samoa](#) that allowed them to be one of the few places in the world where there were no deaths from the flu pandemic of 1918. In the second, it is about getting a disease that is already present **to be transmitted as slowly as possible**, allowing us to try to eradicate it or at least not to saturate the health system. This rate is the one that has been applied in China and Italy.

Our government has decided that **it will not try to prevent the disease from reaching Spain**. The regrettable statements of the director of the coordination center for Health Alerts and Emergencies of the Ministry of Health, Fernando Simón, saying that **there is no reason for alarm** because in Spain there is no virus (third case in the Canary Islands) and our government has everything under control, do not hide that the government has not taken any effective measure to stop the virus at our **borders**. The only effective measure is to subject everyone who arrives in the country to a strict quarantine of several weeks during which they are tested for the presence of the virus. Everything else is a toast to the sun when there are asymptomatic infected people who transmit the disease.

As it is a drastic measure and with high political cost, it is not taken and therefore it is accepted that the disease reaches Spain and enters quarantines of the second type. This **has a cost in lives** that could range from several hundred to hundreds of thousands, for which obviously no responsibility will be accepted claiming that there were no recommendations from the WHO to close borders. And **to say that this disease has a low mortality rate is a criminal lie** that incites people not to protect themselves properly. The mortality rate of this disease is very high, hundreds of times higher than seasonal flu.

We can therefore assume that in a short space of time the disease will be in Spain. Of the four main tourism receiving countries in the world, three have cases and in one they already have tens of thousands of people in quarantine. Our anomaly will not last long and Fernando Simón knows it, but as I maintain, **the main source of fake news in the world is governments**.

2. Basic measures

In the face of the epidemic, measures must be taken to **protect oneself from the disease**, to **protect oneself from government measures**, and to **protect oneself from the reaction of others** who suddenly fall off the cherry tree all at once.

As is obvious in the face of an imposed quarantine it is better to **catch us at home with everything we need**. It is necessary to have a reserve of non-perishable food for several weeks, cleaning and disinfection products, toilet paper, garbage bags, medicines and even cash in case there is a problem with the banks. **The time to do this is now**, not when supermarkets are under assault. In Italy, 50,000 people have been quarantined

overnight, and supermarkets have been raided in many other areas of the country hundreds of kilometres away. **No one is going to let us know in advance.**

Everyone who has the possibility of **teleworking** should talk about it with their company now, to prepare it in advance. In two companies with which I have a relationship, despite what happened in Italy in none had yet considered it, which seems inconceivable to me. **It is useless to panic**, what does help is to be worried and prepare as much as possible. About what is not in our hands we can do nothing.

3. The disease

Our knowledge about the disease increases and **it is an extraordinarily scumbag bug.** It is highly contagious by air through aerosols and small droplets that are increasingly expelled when breathing, talking, coughing and sneezing. The smaller the droplet (aerosol) the more difficult it is to avoid, but the less infective it becomes and the sooner it becomes inactivated. **Aerosols are very dangerous in enclosed spaces** where there are infected people and air is shared directly or through air conditioning and people are exposed to a constant bombardment of aerosols, such as in hospitals, taxis, or the famous death cruiser. **The larger the droplets, the more infective** they are, since they can contain tens of millions of virus particles. They are **very dangerous when you are less than two meters** from an infected person who is talking in our direction, or even more if you cough or sneeze. This is what infects us in bars, public transport and social events of all kinds. Face masks, even homemade ones, offer some protection against droplet infection (not sprays) if used correctly, maintained a distance of two meters, changed when moistened (every few hours, or when coughing or sneezing with them on).

The second route of infection is through the hands, when we touch a surface where the virus has been deposited (it can survive a day or two on a porous surface) and then we touch our face or hair and the virus ends up accessing our airways. The two measures to avoid this route are frequent hand washing and avoid touching your face and head with your hands. We can also wear disposable gloves in situations where it is not easy for us to wash our hands and gloves are a reminder not to touch your face.

Infected people pass the disease in many different ways. There are people who have a low level of virus and who give a **false negative** in the presence tests and despite this they have the ability to infect others. Others develop symptoms so mild (sore throat, cough) that they don't see the doctor and are also contagious to others. All these cases are not detected or accounted for. The cases that are counted are of people who are bad enough or worried to go to the doctor and the doctor decides to have a test. Among these, around 20% develop the severe form of the disease that evolves into pneumonia with respiratory failure. **Mortality among these severe cases is very high, between 5 and 50%.**

But the progression of the disease to the severe form is not random. The death of Dr. Li Wenliang who alerted his acquaintances to the disease shows that a healthy 34-year-old young person is not safe, but the odds worsen considerably with age and even more so

with risk conditions (respiratory, cardiovascular and diabetes diseases). Preliminary Chinese data show the following **age distribution**:

Age	Mortality rate*
80+	14.8%
70-79	8.0%
60-69	3.6%
50-59	1.3%
40-49	0.4%
30-39	0.2%
20-29	0.2%
10-19	0.2%
0-9	no deaths

* N° deaths/N° cases. It is a minimum, because deaths occur with respect to cases, so it could easily be double or triple.

Source: [The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases \(COVID-19\)](#) - China CCDC, February 17 2020

The six deaths from Italy (as of February 24) show that hypotheses that it could affect Asians to a greater extent because of its greater expression of the ACE2 receptor do not seem correct. **People over the age of 45**, and in particular those with risk factors, **face mortality rates above 10%** and morbidity rates (development of severe disease) above 40%. The recommended strategy is not to contract the disease, and for this **the more social isolation the lower the chances of contracting it**. The main route of contagion is always the people with whom we have the most contact, family and friends. Children do not suffer from the severe form of the disease, thank God, but they can transmit it as well. And with this disease the fact that our family and friends are well is no guarantee that they are not contagious.

Not even passing the disease is a guarantee. In China, patients are appearing who, after being discharged, are readmitted, and present the virus again, indicating that either they were not properly cured and have relapsed, or they have been re-infected, which introduces the worrying possibility that not enough immunity to the virus is generated unlike what happens with the flu. Time will clarify this matter.

4. The health system

In Spain [there are 158,000 hospital beds](#), and obviously there are other patients who also need them so most are usually occupied. Therefore, there are beds at best for 0.33% of the population, and at worst for less than 0.1%. If the coronavirus infects 40% of the population and 20% requires hospital admission, that is, 8% of the population, that is **between 25 and 80 times more patients than beds**. As you can imagine most people are going to send it home with a printed brochure, a couple of boxes of pills and

best wishes, no matter how serious they are or get. We are simply **not prepared for something of this magnitude**. The first ones receive bed and get assisted ventilation, the next ones go to the corridor and hopefully have an oxygen cylinder, and those who come behind to the house to ventilate as they can.

Hospitals quickly become centers of contagion for those who are not already, as the [Codogno hospital](#) in Italy has shown, where one patient is believed to have infected another in the waiting room, and quickly became the epicenter of infection in the area. The concentration of aerosols in hospitals means that surgical masks offer little protection, and health workers begin to contract the disease, which aggravates saturation. The virus can also act as a nosocomial (in-hospital) infectious agent, causing damage among people who are seriously ill in the hospital for other reasons.

From now on it is prudent to avoid hospitals, which are the places where there is a greater probability of coming into contact with infected people. And if the disease is unleashed with force, it does not make much sense to go, because they will not be able to attend to us. However, the nature of this disease means that if we live with someone infected, it is practically impossible to prevent us from getting infected. The experience of the Diamond Princess cruise ship indicates this. People were getting infected despite following the quarantine measures they had been given, but the virus was probably being distributed to staterooms in aerosol form by ventilation.

5. The origin of the virus

It is not possible at this point to know with certainty what the origin of the virus is. The Chinese don't tell everything they know and don't seem to want access to information from the outside. The Wuhan market hypothesis has fallen by its own weight. The case study shows that the virus came to the market brought by someone, it did not originate there. Despite having reacted late, the decision they made to quarantine 40 million people is surprising because on the one hand they criticized that restrictions were imposed on them from other countries, while they imposed very harsh **restrictions**, indicating that the Chinese were very aware of the danger of the virus.

The hypothesis that the virus may have escaped from a laboratory is not far-fetched. It is rare, though not impossible, for a virus that jumps the species barrier to show both high infectivity and high morbidity without first having gone through a period of adaptation to humans. However, viruses like this are created in Chinese laboratories. In November 2015, an article was published in Nature Medicine describing the **creation of a chimera virus in China** in which they put the SARS receptor on a coronavirus adapted to infect mice and showed that the chimera virus efficiently infected human cells.

[A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence](#)

A week later in a commentary in the journal Nature **the risks of this type of research** were highlighted.

[Engineered Bat Virus Opens Debate on Risky Research](#)

*... other virologists question whether the information obtained from the experiment **justifies the potential risk**. Although the extent of any risk is difficult to*

assess, Simon Wain-Hobson, a virologist at the Pasteur Institute in Paris, notes that researchers have created a new virus that "grows remarkably well" in human cells. "If the virus escapes, no one could predict the trajectory," he says.

Science is a double-edged sword, as the scientists who worked on the Manhattan Project were well aware. We may not know what the origin of the virus is, but the idea that it escaped from a laboratory, although it has no evidence, is not far-fetched in my opinion. It is a fact that research on the coronavirus was being carried out in Wuhan, and this virus only needs an oversight to be released.

6. The economy

As much as central banks print, my view is that **recession is inevitable**. If we were already on the verge before the virus, this is the tip. While the distribution chains of many components are affected, quarantine measures destroy the income of many companies. Hospitality, tourism, airlines experience a notable downturn. For states, revenues fall while health care expenses skyrocket. Our economy is too complex and interdependent to weather a pandemic like the 1918 flu without faltering. **Losses for the vast majority will be inevitable.**

The expression "**a skinny dog everything is fleas**" reflects that when things go wrong the problems pile up. This blog has been reflecting for a few years how a turning point for our civilization was approaching. **The economy is trapped in a situation of massive indebtedness** and zero or negative interest rates as a result of an unsustainable tendency to live at the expense of a future that one day ends up coming. **Central banks are forced to print money relentlessly** to sustain the economy. We reached the peak of industrial production, manifested by the [peak of cars that took place in 2017](#) and we are reaching the peak [oil that probably occurred in 2018](#). **Demography is a strong headwind** with an ageing population with which there are commitments that will not be fulfilled. It's no wonder that more negative factors like the coronavirus are added. CoViD19 is here to stay. In all likelihood **it has already established itself in humanity** and given its nature its eradication is not possible once it runs loose through multiple countries. Being an RNA virus its evolution will be rapid in the sense of reducing its mortality and in a few years it should be like another flu, with its annual toll in deaths, and with vaccines that partially protect against the strains of the previous year. Its mortality profile causes it to reduce life expectancy by partially correcting the population pyramid. **Children are safe and the elderly experience very high mortality rates.** I'm not saying it's by design, but I don't miss the demographic implications.

Update 26/02/2020:

For those who are overwhelmed by the lack of masks and consider paying the inflated prices of Amazon or eBay, this mask made by me in less than a minute is just as effective in protecting from large droplets 2 m away than a pharmacy surgery.

