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How the "perfect storm" influences on modern economy and management

It took only a few months of the new 2020, and the world has already changed beyond recognition. One after another, events that no one could have predicted follow, and together they add up to the so-called "perfect storm".

The Cambridge English Dictionary defines this phenomenon as "an extremely bad situation in which many bad things happen at the same time" [1]. The Oxford English Dictionary has published references for "perfect storm" going back to 1718, but the first use of the expression comes from the issue about the meteorological circumstances in Texas in 1936. [2].

Nowadays scientists tell about a combination of problems such as extreme weather, climate breakdown, species loss, water scarcity and a food production crisis. Each of these crises individually could be dealt with, but they all complement each other. Moreover, a crisis in one area leads to problems in another. For example, excessive heatwaves can increase the global heating, because they release huge amounts of stored carbon from affected ecosystems. It has been clearly seen in the Australian bushfires, which are already substantially influencing the amount of carbon in the atmosphere. The interconnections do not stop there: as the heatwaves damage natural ecosystems, killing off wildlife and flora, they also bring to greater water scarcity, and in turn damage agriculture. These combined effects exacerbate the harm done to people struggling with food and water shortages, in a vicious cycle [3].

Another important factor affects both political, economic and environmental issues: Saudi Arabia — the largest oil exporter in the world — cut its prices to levels not seen in 30 years after it could not convince Russia to decrease their oil production. The 13 members of OPEC (the Organization of the Petroleum Exporting Countries) along with some non-members had met to deliberate on how to react to the falling demand caused by the spreading coronavirus. When airlines do not have passengers, for instance, planes do not need fuel and oil companies lose revenue from some of their biggest purchasers.

After conversations fell apart, Saudi Aramco, the Saudi state-owned oil company, said it would give great discounts to win over buyers. It is planning to increase its own production to more than 10 million barrels a day to undermine competitors. Oil prices lost more than 20% on Monday, March 9 because of the unexpected supply shock. Due to the oil surplus on the market at a price that is too low, other manufacturers will not be able to compete with Aramco; smaller firms could even fail [4]. During flagging demand, the price of WTI crude oil plummeted 25% on March 9th to $30/bbl. Although this will be good for customers, it will substantially damage shale oil producers [5].

Perhaps the main factor in this "perfect storm" is the coronavirus COVID-19. The unease in the market has been growing since at least February when concerns around the coronavirus began to strengthen. A few weeks ago, it looked like the impact of the virus would be restricted to enterprises with exposure to China where business activity in factories and retail shops had stopped. Starbucks, for example, closed all its stores in the region for a period.

Now though, the virus has got around to more than 100 countries, infected more than 114,000 people all around the world and killed more than 4,000 so far. That public health crisis has now hurt the world stock market and economy [4].

Since the coronavirus began late last year in Wuhan, China, global commerce has slowed down substantially as factory closing causes supply chain failures, nervous tourists and business travelers stop flying, and customers stop eating out, shopping, and going to the movies.

United Airlines began suggesting flight cancellations, and Delta, American, and JetBlue have refused fees. Airlines have cut or reduced flights to cities affected by the outbreak. According to the International Air Transport Association, the spread of the virus could cost the airline industry $113 billion.

Hundreds of companies have also published warnings that the virus spread may affect their financial results this year. Apple closed factories in China in February (they've since reopened), as did Honda. According to Dun & Bradstree, more than 51,000 companies all over the world have at least one supplier in the region affected by the virus. In February, Wynn Resorts said the epidemic was costing the company $2.6 million per day. However, this question is rather ambiguous. The fact is, the regular (ho-hum) flu kills about 4,000 Americans per week during "flu" season. Nevertheless, because the media does not make a sensation of the ho-hum flu, only 5%-20% of U.S. residents even bother to get a flu shot. The Coronavirus is not a joke, but the response to it seems quite exaggerated comparing to the annual flu.

On a daily basis, we see the total number of cases (118,905). Although this data is nice to know, it is not the information that is significant. Some of those cases originated in December and January. Most of those who had it then have recovered and are no longer infectious. The relevant data is the number of "active" cases, and worldwide it reached 58,747 on February 17th and, by March 4th had fallen to 38,501. As of March 11th, active cases stood at 49,521. This is about 42% of the headline number. Only 6,046 (12%) of those active cases are severe (43,475 are mild). It is also important to know that the quantity of recoveries in China are much higher than the quantity of new cases there, and most of China is now back to work. New cases numbered 26 in China on March 10th, and only 7 on March 11th. On the other hand, because the virus which permeated to other countries originated much later than in China, now new cases in the rest of the world are higher than recoveries.

Moreover, the media inform, sometimes hourly, the number of deaths (4,270). Should we suppose that all age groups are equally receptive? There are almost no dooms in younger populations with most of the danger being in the elderly cohorts, those over 70. Not only is the chance of contact low, but the death rate in the working age population from the virus is also rather low. The public reaction appears to be "overreaction" [5].

The probability that markets will survive the coronavirus without going into a financial crisis and recession is minimal. The situation is aggravated by the fact that everyone has long been waiting for the crisis. Now the effect of a self-fulfilling forecast can work. Economics is to a large extent psychology. Moreover, if a critical mass of economic agents decides that the time has come for a crisis, they will begin to make decisions that will make this crisis inevitable.

At the same time, due to the same problem, interruptions in the supply of goods began. First of all, we are talking about antiseptics for hands, cleaning products and some food products. People do not go to work, so factories close. That is why the supply of goods by default will decline.

While demand is not slowing, but growing, the appearance of empty shelves in stores indicates a panic among the population buying up goods in larger quantities than required. Empty shelves in stores are explained by the disproportionate reaction of the population to what is happening. When you come to the store and do not find something, you begin to react inadequately. Since you are now worried that you will not find this product in the future, go ahead and buy more. People do not need so many goods, but they are worried that they may not be available in the future, so they want to buy as much as possible now before the situation worsens. This complicates matters.

After the collapse of oil prices and a sharp drop in quotations on the European and Asian exchanges, trading on the New York Stock Exchange opened with a fall of more than 7%, and they even had to be suspended so that the players could "recover."

It is important to understand that we are not responding to a specific event, but to a whole set of factors that led to a widespread fall in market asset prices: global stocks lost more than $2.5 trillion over Monday. In 2019, international trade declined for the first time since 2009, largely due to US duties, and the trade war exacerbated the situation in China and other export-oriented economies [7].

Against this backdrop, the impact of these factors is going to differ across companies depending on their business model. Oil-producing companies are likely to suffer; fracking companies with high leverage are highly defenseless. On the other hand, this may come as a respite to the airlines. Lower fuel prices will naturally provide them with some ease while collapsing travel demands since the COVID-19 outbreak.

Unluckily, the positive and negative effects are not symmetric, and they do not cancel out. Those who get affected by the price fall are likely to file for bankruptcies, and that may create a chain of cascading events: unfavorable events are amplified. If there is a wave of corporate default and bankruptcies, it will reflect through the whole economy through inter-linkages in the financial sector and supply chain. It is this anxiety of systemic collapse that firms need to map out.

How should an enterprise think about its corporate financing policies in a time like this? Maybe it is a good time for every manager to overestimate the company's corporate leverage policy. Despite the embarrassment in assessing the costs and benefits of debt financing in today's uncertain world, some basic factors should help to make decision. A determinative such factor is the operating leverage of the firm. Operating leverage, roughly defined as the extent of fixed cost in a firm's cost structure, exposes companies to large fluctuations in cash flows as the demand for their product changes [8]. Finding a firm's optimal leverage is not an easy goal in the best of times. It is greatly more difficult when macroeconomic uncertainty is high. Managers have a troublesome job, no doubt. Nevertheless, adhering to the basics of value creation can go a long way in making a provident leverage decision.

Faced with these problems in nature separately, it could be possible to fix the problems causing them. However, collided with various interlinked emergencies that in total amplify one another's impacts, people are facing unprecedented hazards and many communities cannot manage. Trying to solve the problems individually, without taking account of the "cascading" impacts, was likely to be inefficient, the scientists said [3]. While the risks are intensified when they are interconnected, the solutions are related, too. Every time when action is taken to eliminate environmental problems, the benefits also cascade: for example, nurturing wildlife and flora in a wetland can also reduce soil erosion and water pollution, and protect crops against storm damage, decreasing water scarcity and enabling more food production.

There are also social problems that scientists identified as potential major risks for the future. These included the rise of populism and fake news, trends in migration and the rise of artificial intelligence.

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