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Coronavirus and the interplay of systemic, systematic risks, and *Catch-22* on business and economy at large

Failure to take risk of disruption seriously

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The corona virus induced economic crisis is different from economic downturns that most of us have seen during our lifetime. A virus has crippled 'super humans' and their Earth; Humanity is beseeching The Almighty to end this misery. This virus has sent seismic waves across the globe, halting economic activities, affecting financial markets after supply chains and businesses came to a screeching halt. The crisis of this nature is a magnum opus in itself but without a certain ending. This is the very reason why this crisis stands out amongst other economic crises since the Great Depression. Like other economic meltdowns, this did not have any preceding economic shocks or financial market jugglery. Oil shocks of the 1970s culminated into an economic crisis in the 80s. Asian financial crisis has its roots to the untenable peg to the US dollar. 2008 financial crisis, also called the Great Recession, was the result of the bursting of the asset price bubble. 1990s onwards the economic downturns did have an increasing contagion effect on global economy and financial markets, largely due to globalization. During these periods of crises, the talks on risks, its nature and type, and mitigation came to fore and discourse goes on until the end of the crisis, to begin again when the *Next* emerges. This article aims to explore the interplay of systemic, systematic risks and *Catch-22 scenarios* because of Covid-19 on business and economy at large.

Simply put, systemic risk is an event that causes a collapse of a company, industry or even economy. Thus the definition is broad and encompasses micro business events like trading platform outage of a brokerage house during trading hours, or a failure of payment systems of banks or even a trading algo gone rouge. But generally, it means a risk caused by an event at a company level that is severe enough to bring about instability in the economic and financial systems. The most glaring example is 2008 Lehman Brothers bankruptcy that triggered market-wide collapse and put brakes on global economies. Systematic risk, popularly known as market risk, is an all-permeating risk that crops up from a variety of factors such as economy, interest rates, corporate wellbeing, geopolitical issues etc. and cannot be diversified away.

This is not the first time that world has seen a virus outbreak. In the last couple of decades, we have witnessed dengue, Saars, swine flu, anthrax, ebola and zika. Goldin and Muggah (2020) in their article “The world before this coronavirus and after cannot be the same” tells us that previous virus outbreaks were a harbinger of coronavirus disaster as outbreaks of infectious diseases are accelerating.[15] However, we have not learnt from these outbreaks and are still underprepared. In a little over last two decades, we have also witnessed three major economic downturns. But this time it is different! Those were not virus induced economic crises. In these unprecedented times, many records on economic, financial, business and public health fronts have been broken for all wrong reasons, mostly. In the light of general concepts of systemic and systematic risks, it seems that a systemic risk, Covid-19 originating in China, has ballooned into a global systematic risk and spread across the world in no time. Supply chains are in complete tatters. The economic engines across the globe have come to a screeching halt. This time the contagion seems to be more serious. These are the spillovers of Covid-19. Thus, terming coronavirus as systemic risk beyond the traditional definition comes from the fact that this event and its spillover is causing severe distress in global economic and financial system and will have a systemic impact of world functioning order.

In today’s complex, globalized business environment, businesses are running in “all is hunky-dory” manner and paying little attention to the uncertainty and systemic risks that the flip side of globalization brings along with it. To reiterate, 2008 crisis can be referred in this context. While it is easy to blame globalization and its discontents, businesses are also operating in a manner that is emanating strong behavioral biases like overconfidence, hot-hand fallacy and representativeness. Excessive “animal spirits” are the mother of all crises. In spite of suffrage, businesses are yet to take this into cognizance. The tendencies of turning a blind eye to ‘signals’ are somewhat accelerating, putting the entire systems into threats at a much faster rate than earlier. The ‘risk-free’ attitude of the business exacerbates the risk further. Given the prevalent biases, the ‘cost’ of crisis is largely ignored.

Debate is on regarding the shape of recovery – whether it will be a V-shaped or a W-shaped one, when the light at the end of the tunnel is yet to be seen. It may be futile to procrastinate what the future will be when we do not have any comparable historic parallel. Pundits have compared this epidemic to Spanish Flu of 1918. However, this comparison needs to be looked at with a different lens. Francois Velde (2020) mentions that agriculture and manufacturing in the USA accounted for 61% of employment as compared to current 10%.[16] Velde (2020) concluded that in the US, the pandemic coincided with and very likely contributed to a mild recession from which

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[15] Goldin Ian and Muggah Robert, *“The world before this coronavirus and after cannot be the same”*, The Conversation, https://theconversation.com/the-world-before-this-coronavirus-and-after-cannot-be-the-same-134905#:~:text=The%20world%20Before%20Coronavirus%20and,face%20the%20threat%20of%20pandemics. Accessed on 16th July 2020

[16] Velde, Francois R., *“What happened to the US economy during the 1918 influenza pandemic? A view through high frequency data”*, Federal Reserve Bank of Chicago working paper (WP 2020-11), Revised July 7, 2020

the economy quickly rebound.[17] The world economy and businesses were not so interconnected, integrated and complex at that time. When we compare Covid-19 with Spanish Flu, we see that there are large contradictions on both health and economic fronts. On the health front it seems that Covid-19 so far has been less severe than Spanish Flu in terms of mortality, thanks to advancement of medical science, while on the economic front it is far more severe than its lethal predecessor, considering the tremendous speed and severity with which business activities declined and unemployment rose. Moreover, we do not know whether there will be any further waves like Spanish Flu.

Another aspect that exacerbates the problem is the uncertainty that was prevalent before Covid-19. Intermittent tremors were felt with respect to, inter alia, geopolitical issues, an imminent full-blown US-China trade war, creeping up of inflation, stock market volatility. In the midst of these uncertainties, when an uncertainty of this magnitude strikes, the system starts to get paralyzed. In addition to this, a hidden coronavirus is in the anvil – (deflation/stagflation?).[18] Although (deflation/stagflation?) is a problem of tomorrow, it needs a well-thought-out plan to avoid the vicious circle. Uncertainties do not augur well with the economy. Starting with individuals, it moves to the business level and ultimately engulfs the entire economy. Certain level of "animal spirits" is required to keep the engine of the economy chugging along. Uncertainty makes the consumers and businesses 'cash' conservative, cautious and puts breaks on expenditure, investment and job creation. Thus, before being too optimistic about the shape of the recovery, the pertinent debate should be as to when the workers will return to production. In developing economies, where social security benefits and public healthcare are for namesake, labour supply is abundant, cheap, and expendable, and workers stay afloat from payday to payday, they may return early for subsistence. This may create further risks of infection spread. A perfect *Catch-22* situation.

Another *Catch-22* scenario that is in play is with China and global supply chain's 'dependency' on China. Tsunamis of 2004 and 2011 in South East Asia and Japan or floods in Thailand in 2011 had disrupted productions of many big firms. Recent threat of USA-China trade war is sending jitters. It is being argued that in spite of experiencing disruption and threat, the firms have done little and are still 'dependent' on South East Asia, especially China. Before we go into discussing this *Catch-22* situation and its possible mitigation – as resolution of *Catch-22* is not possible, let us discuss briefly, once again, why China and SE Asia is playing a dominant role in the global supply chain.

China has created a unique position for itself in the global economy. Mid-1985s onward they focused on domestic production. Focus on developing human capital in earlier periods augured well with this. Huge population, cheap

[17] Ibid

[18] The jury is still out on whether the epidemic will lead to deflation or stagflation. The conclusion, if drawn now, may be inconclusive due to lack of continuous and quality data – at least for three to four quarters. Moreover, the economic scenario may be different for developed economies and emerging economies, like India, as well. It may futile to procrastinate at this juncture.

labour paid social dividend. Domestic consumption increased. Domestic consumption is created by effective demand in the economy, which in turn, is a result of increasing standard of living. This solidified China's economic base and prepared the ground for further economic expansion. They started looking forward to becoming the 'manufacturer of the world'. Private capital seeks low cost input materials in a timely manner to keep the cycle of capital formation going. Private capital saw this as an opportunity, started flocking and became 'reliable' on China. This is pure economics. All the animated conversation on 'dependency' on China has political innuendos attached to this. There was an economic necessity and China fulfilled that necessity. Western developed countries at different points of time in their economic history did this. China replicated that but more efficiently and gained competitive advantage. Excluding China from the firm's supply chain was costlier. Earlier supply chain shocks of SE Asia were short-lived and hence the debate on 'dependency' died down slowly. But not this time.

Whether to rely on China or create an alternative source is the *Catch-22* scenario for most of the firms. Joseph Heller in his eponymous book introduced us to the concept.[19] Yossarian, the protagonist, is a bomber in the Second World War. He tries to find different ways and means to avoid combat missions. These combat missions have the potential to kill him in the long run. Only if a bomber is insane, he is relieved from his duty. However, "there was only one catch and that was Catch-22, which specified that a concern for one's safety in the face of dangers that were real and immediate was the process of a rational mind." If Yossarian is crazy, he is grounded. He just have to ask for it. But the moment Yossarian asks, he will no longer be crazy and is fit to fly more combat missions.

For a firm to be profitable it needs an efficient supply chain that is lean, cost effective and can replenish the inventory in a timely manner. When global competition is largely based on price competition rather than product attributes, an efficient hub for input materials that keeps the input and inventory holding cost low becomes the panacea. Thus, when a tragedy strikes at this strategically important node questions are raised. Shocks are likely and cannot be weeded out; at maximum, it can be mitigated.

It can be a matter of great debate whether or not traditional and contemporary risk management techniques have any effects on risk mitigation in black swan events like this or *Catch-22 scenario*. However, practice in risk management can at least prepare businesses for managing systemic risk that crops up due to the 'uncertainty' and may preserve financial and human capital to a large extent. A simple risk management technique in this type of situation will be to avoid concentration risk and diversify. But diversification requires that large firms build manufacturing plants across regions, source raw materials differently – use multiple suppliers, carry more inventory in hand than is necessary. This again contradicts the essence of an efficient supply chain and creates the risk of a bloated supply chain – another *Catch-22* situation. A contingency plan – an actual one and not a tick-

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[19] Heller, Joseph, Catch-22, Simon & Schuster, USA, 1996

in-the-box, at every node of the supply chain, on the modalities of what to do when a plant goes down under or a source of input material is compromised is required. The scenario planning, stress testing of revenue-at-risk against breakage of raw materials lines or manufacturing plants, using early warning signals may help in avoiding a stock-out situation and dry plants. Nodes that are strategically critical – a plant or raw material source, and put significant revenue-at-risk, to have alternative fallback options.

To cite another fallout of this broken supply chain is the disrupted trade finance engine that will further increase the supply chain problem. The so-called mundane, unglamorous trade finance is an extremely critical piece of the global business and financial system. According to certain estimates, the size of global business debtors is about a fifth of global GDP. With supply chain being broken, the increased risk averseness by trade financiers in extending new credit lines out of fear that existing facilities have turned sour, has further complicated the problem. This has become a vicious circle. When credit quality is in question and the economy is slowing down, the financiers are also in a Catch-22 situation. If banks do not extend credit, there is a risk of collapse of businesses – that can create an economy-wide systematic risk. In the fear of it, if they extend wanton credits, there is a risk of bank failure, maybe later. The collapse of a bank is a systemic risk that can turn into a systematic risk in no time. A delicate balance of creditworthiness and credit growth is required to tide over this *Catch-22.* This may be taken care of, inter alia, by mitigating the equity risk, collateral risk, cash flow risk - tight monitoring/ring-fencing of cash flows, volatility of cash flows, using early warning system (EWS) to identify risks before cash flow stress. But before all these, an introspection into actual risk and perceived risk of giving credit is required.

So, what happens *Next*? Only time will tell whether the conspicuous affair with China will continue or not, or whether there will be a second wave or not. Nevertheless, the ultimate question that comes up is whether global business will understand the importance of risk preparedness and mitigation for one last time. Risk management has largely been a tick-in-the-box in the past for many firms. Business strategy was in the fore. With this epidemic, business strategy has made way for operations and business continuity now. Business continuity and disaster management policies were in place but rendered ineffective when Covid-19 struck.

It is for the managers to believe whether risk management, business continuity, disaster management as policies is to be activated when the lightning strikes or the risks can be mitigated by how the systems and policies are designed in the first place. Efficient methodology actually presupposes that a design is such that crisis can be broadly mitigated. Building nimble footed, change-friendly, less complex, and resilient organization is now the order of the day.

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