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The Effects of an Epidemic of Disease on the Global Market: A Coronavirus Disease Case Study

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Abstract

The study's subjects are the novel coronavirus illness, also known as COVID-19 universal, and its effects on the bread and liquid refreshment sectors. It examines the pandemic's short-, medium-, and long-term consequences and makes recommendations for reducing any potential drawbacks. To do this, we employ a qualitative, multi-case study approach to collect facts from fourteen respondents spread among eight sample bread and liquid refreshment businesses within Bangladesh. The results indicate that this pandemic will have major limited consequences, for instance, outcome termination, a shortage of working money, and constraints, whereas the medium- to long-term focus on dealer functioning consequences are anticipated to be compound and unexpected. Indicators show that over time, factors like staff count, return on investment, and share of GDP will decrease. A company might also need to update its supply network and find new distributors and trading partners. The research makes a number of recommendations for managers in this sector to improve their capacity to adjust to shifting circumstances both during and after the COVID-19 timeframe. In spite of the fact that this research is creative and improves both theory and practice, it does not take into account the smaller and larger firms in the bread and liquid refreshment industry. As a result, smaller organisations might not be affected by the consequences and actions we find.

Keywords: *GDP; COVID 19; Drawbacks*

Introduction

According to Lelieveld *et al*., (2020), infectious diseases account for approximately 25% to 30% of global mortality. In spite of significant improvements to the medicine part, the dissemination of communicable disorders is increasing because of several causes, such as development, packed towns, expanding commerce and travel, revived antibodies, inaccurate microbecidal use, and development. COVID-19, the most recent virus outbreak, illustrates how swiftly contagious diseases can grow owing to unregulated trade and imperil the fiscal security of entire nations. Like the Black Death, SARS, H1N1 flu, and swine flu, the initial epidemics had a similar impact on the global economy (Shang, Li & Zhang, 2021). COVID-19 is more challenging to control because of its higher communicability and propensity for persistence on surfaces. It spreads among people more quickly than contagion and swine influenza, making it more contagious. Since the first infection results in substantial economic harm and high mortality, the second characteristic is the delay in the research and licensing of treatment drugs. Germs are a constant and recurring threat due to their continual evolution and antibacterial agent resistance, which is another feature of COVID-19. Since the latest COVID-19 outbreak is believed to be the first

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severe acute respiratory syndrome subtype, that is occurred in 2002 - 2003, has a second strain, the majority of outbreaks are reoccurring (Piret & Boivin, 2021).

The coronavirus infection has brought up the issue of alleged dysfunction in capitalism, which is thought to have been exacerbated in part by prioritising commercial interests over those of consumers. Drug manufacturers would have long since begun if society hadn't advanced coronavirus vaccine research and accepted individualism. The newly discovered coronavirus, a member of the well-known coronavirus family, is rapidly spreading throughout the economy. If research on coronavirus vaccines and treatments had started much earlier, the most recent coronavirus outbreak might have been partially prevented. Despite this, the treatment did not seem to be commercially viable enough for pharmaceutical companies to start this research. To combat COVID-19, researchers will need 12 to 18 months to develop a vaccine (Thompson, 2020).

Background of the Study

A recently discovered coronavirus known as SARS-CoV-2 is related to bats, pangolins, and SARS-CoV (Nie *et al*., 2021). The first known outbreak in China's Hubei province, Wuhan, started in November of that year. However, it's likely that transmission from person to person began earlier (Pekar *et al*., 2021). Many of the early cases were linked to individuals who visited the neighbouring Huanan Seafood Wholesale Market, as stated by Worobey *et al*., (2020).

According to scientific opinion, the virus most likely originated in close proximity to bats or another similar beast (Yang *et al*., 2023). Despite this, there has been a lot of discussion concerning potential alternate beginnings. Geographical divides widened as a result of the origin debate, particularly between China and the United States.

The first known affected person started feeling unwell on December 1, 2019. That individual had nothing to do with the later wet market cluster. On November 17, though, there might have been a previous incident. In the initial case cluster, the market was related to two-thirds of the cases. According to molecular clock analysis, the infection in the index case of 2019 most likely occurred between mid-October and mid-November.

The COVID-19 epidemic has had a severe influence on the world economy. Given the pandemic, industry will shut down repeatedly, disrupting world supply chains and placing pressure on the global economy in particular. The Economic Co-operation and Development Organization anticipates the economies of South Korea, Australia, and Japan to experience the steepest decreases in growth. More generally, COVID-19 advised people to maintain "social distance," which had a detrimental effect on the travel and tourism industries' bottom line. The International Air Transport Association estimates that by the year 2020, the pandemic will have cost international airlines somewhere between $63 billion and $113 billion. The COVID-19 outbreak has had a major impact on tourism and hospitality, food processing, education, fashion and textile, leather, and other retail businesses (Andam *et al*., 2020).

The sector of bread and liquid refreshment is distinct among the numerous parts of the pandemic because it meets a few of the most fundamental conditions of humanity. Most of the sector has the quickest rate of worldwide growth. In the European Union (EU), cultivation and the industries that produce food, beverages, and tobacco account for 80% of all jobs and 75% of overall revenue in the region's bioeconomy. More than 40% of India's packaged goods (CPG) market is made up of the food sector, which is expanding at unprecedented rates (Meotto, 2021). In Bangladesh, the study's setting, the food-processing growth rate in 2010 was 6.1%; just five years later, in 2015, it was 12.5%, in line with the expansion of the sector of food and drink internationally. According to Lelieveld *et al*. (2021), there are 1.3 million individuals working in this industry as a whole, which accounts for 10.27% of all the people employed worldwide. In a nutshell, the bread and liquid refreshment industries play a significant role in the economies of other nations as well as Bangladesh. The COVID-19 epidemic, which has led to considerable waste in numerous other sectors of the global economy, has had considerable negative effects on the bread and liquid refreshment industries, as it has on other parts of

the economy as well. Investigating the COVID-19 pandemic's consequences for the industry and coming up with appropriate mitigation strategies are thus even more crucial.

Impacts on Health

Numerous other aspects of world health were touched by the pandemic. Hospitalizations declined. In the US and Spain, respectively, visits for symptoms of a heart attack fell by 38% and 40%. According to the director of cardiology at the University of Arizona, people with appendicitis and strokes were less likely to seek treatment. Some of these patients are dying at home because they are too afraid to visit the hospital, which worries me. Many people were impacted by a lack of medical supplies. Healthcare staff, patients, and those who were quarantined were all affected by the pandemic's effects on mental health, of which post-traumatic stress disorder, sadness, and anxiety are all on the rise.

Moreover, many contagious afflictions have long-lived effects that can worsen when pandemics occur. For instance, the patient's health is affected by the Zika virus's therapy in a chronic, long-term manner. Decreased funding for basic healthcare, declining childhood immunisation rates, and decreased access to healthcare due to travel restrictions are just a few of the indirect effects of pandemics on health. During the 2009 flu pandemic, hospital admissions for pneumonia and influenza-related illnesses increased, which resulted in a rise in mortality from heart attacks and strokes. As a result, it might be challenging to separate deaths brought on by the pandemic from those brought on by other illnesses that just so happened to occur during the same period. Healthcare providers' ability to provide care is also hampered by their own ailments, the need to look after themselves, and the fear of contracting the illness from their own family, their kids, or even themselves.

Financial Effects

The pandemic and its effects had a negative impact on the global economy. On February 27, 2020, worries over the epidemic caused the largest fall in US stock indices since 2008.

Tourism has decreased as a result of travel restrictions, the closure of public areas, including tourist attractions, and official travel advisories. Airlines cancelled flights, and regional British airline Flybe went out of business. The cruise line industry was severely impacted, and train stations and ferry ports closed. There was a delay or suspension of international mail.

The retail sector saw store closures or shortened hours. Retailers in Europe and Latin America saw a 40% decline in foot traffic. Retailers in the Middle East and North America saw a 50–60% drop (CEPAL, 2020). Compared to February, March experienced a 33–43% drop in foot traffic in shopping malls. Mall owners responded by enhancing hygiene, using heat sensors to gauge the body temperatures of customers, and delaying activities.

Among the hundreds of millions of individuals who lost their jobs were more than 40 million Americans. Approximately 60% of US companies that shuttered will do so permanently, according to a Yelp survey. The revenue from employment in the first nine months of 2020 decreased globally by 10.7%, or $3.5 trillion, according to the International Labour Organization (ILO) (Park, Villafuerte & Abiad, 2020).

Political And Social Effects

The main political and social impacts of pandemics involve war between nations, crowded dislocation, among others, and an increase in social unrest and discrimination. Numerous pre-modern pandemics brought about considerable alterations in the population, moral jolts, as well as social and political unrest (Duchêne *et al*., 2020). According to empirical data, pandemics can lead to political unrest and tensions, especially in countries with weak institutions. Government-issued quarantine and curfew regulations during the 2014 Ebola outbreak led to state-wide social and political unrest, which the populace mistook for a government plan and protested. Riots were started as a result of this problem and violent outbursts across the country, endangering medical personnel as well as medical infrastructure and supplies. Worry, social isolation, fear-based behaviour, and financial hardship are only a few of the subtle societal changes brought on by current pandemics (Olimat, 2020).

International Development And COVID-19

The COVID-19 highlights the requirement to comprehend current global concerns instead of emphasising a narrower global development plan. While a global progress perspective identifies the operations and problems pertaining to the countries, the paradigm for international development concentrates on aid-based bilateral relationships with one another. The focus of global international development has been on shared challenges and matters, such as trouble, epidemics, world warming, etc. World evolution is focused on recognising that an equal society is produced via cooperation and shared ideas, as opposed to merely creating a mature economy out of a developing one. According to Jewell *et al*., (2020), the global development model is built on three key principles. First, there are connections among modern capitalist nations that transcend national borders. Second, the entire planet is contending with a number of problems at once. Third, helping one another overcome common challenges and end global unfairness is a crucial part of global development. The international Sustainable Development Goals (SDGs), as well as other conventions and treaties, acknowledge and include these goals. Given COVID-19, it is critical to use a global development strategy to solve the shared problems and challenges. Because of how connected everything is, COVID-19 has quickly spread. It is a good illustration of the problems that the nations share and the failure of the global public good. The distressing economic, physical, and social effects of the epidemic have been felt everywhere. The effects of COVID-19 cannot just be measured economically. It has exceptionally high fatality rates in the US and northern European nations. High infection rates are also seen in China, Brazil, Mexico, Africa, and other southern nations.

Management Techniques for Addressing the Effects

The COVID-19 pandemic's short- and medium-to-long-term effects on the bread and beverage sector, as well as prevention measures for managing or responding to these effects, were discussed in the interviews with respondents. When the responders mentioned the universal's effects, they were questioned about potential countermeasures. While these tactics cannot entirely eliminate the effects, they might lessen how severe they are. By doing this, the strategies can improve the ability of the businesses to adapt to a fast environmental change.

People of Chinese and East Asian heritage have been the target of increased discrimination, xenophobia, and racism in countries all over the world. Racist opinions towards Chinese people "deserving" the virus were mentioned in reports from February 2020 (when the majority of reported cases were limited to China). For people of Asian descent, including Chinese, abuse and violence have reportedly increased in the United States and the United Kingdom. Former US President Donald Trump referred to SARS-CoV-2 as the "Chinese Virus" and "Kung Flu," phrases that others believed to be xenophobic and racist.

Age-based prejudice against elderly people has risen. Their perceived vulnerability led to measures of isolation both physically and socially, which, when combined with their decreased social interaction and increased reliance on others, made them more prone to loneliness, sadness, and isolation.

In a communication that was published in The Lancet on November 20, 2021, it was proposed that stigmatising unvaccinated people, who include our patients, colleagues, and other citizens, would be beneficial. The letter emphasised vaccine recipients' high rates of viral loads and illness, as well as their crucial role in transmission.

The limitations included immunisation requirements for those over 50 and for those who wish to use public transit. Amnesty International demanded that Italy alter these anti-COVID-19 limitations in January 2022, adding that "the government must continue to ensure that the whole public may enjoy its fundamental rights."

Product rotation has been identified as a crucial method for reducing the likelihood of expiration. Typically, items from prior dates are placed in front of the rack, while those from earlier dates are placed farther back. Older products are therefore being used up before being replaced while new ones are

being offered. Respondents recommended using product-rotation strategies to boost sales, which involve shifting products from low-traffic areas to those with greater sales volumes or from the back to the front of the shelf within the same store. One provided the following example: "When we go to a market, we work with the vendors to shuffle the shelves so that the products that are about to go bad earliest are at the front. If a retailer is unable to sell a product before it runs out of stock, we move it to a high-traffic retail area to lessen the likelihood that it will go bad.

Given that future sales are unknown, and that sales income has dropped notably during the pandemic, the management may ultimately opt to implement employment layoffs, as was discussed in the previous part. The interviews also demonstrated that organisations could use a partial compensation sacrifice plan that has the support of both employees and employers as an alternative to eliminating jobs. The respondents' comments frequently make reference to this strategy. R1 continued, "We understand that a family will suffer as a whole if an employee loses their job during the crisis period, but we must temporarily lower compensation in order to maintain our staff resources." For instance, one claimed that "With the agreement of both employers and employees, remuneration may be cut in order to maintain the entire workforce."

As a way to ensure distributor survival both during and after the crisis, short-term distributor incentives have been proposed. Additionally, they can improve cash flow, allowing businesses to pay for overhead expenses, make up for a lack of working capital, and open LCs to satisfy upcoming demand. One of them stated, for example, "We have given the distributors short-term incentives based on the volume of merchandise. As a result, sales and cash flow are anticipated to increase. The same is true for distributors, as per R2, who added that "during this crisis, they are given short-term incentives, which act as a motivator to get them to supply goods even when demand is low. It facilitates the company's ability to manage operating expenses by increasing cash inflow. Companies might also lessen the need to establish new supplier relationships by maintaining distribution operations. Finally, as previously mentioned, if their current partners stop working with them, they may not need to find new partners as long as they continue to operate.

Misinformation

WHO has emphasised the need to follow the policies and recommendations of the scientific community, including the use of protective masks, social distancing, and personal hygiene. Conspiracy theories, false information, or unscientific views about the disease - these intrusive tactics have given the origin of the disease and its spread, which harm public health, a criminal character in several nations. Mass media and social media are now spreading a variety of questionable information.

A report that American investigators were looking into the potential that the Wuhan Institute of Virology, a Chinese laboratory, was where the coronavirus was secretly "produced" and/or "escaped.", was one of the more challenging issues. These views are not supported by scientific evidence. These claims have already been debunked by coronavirus genome sequencing and analysis, which show that bats are a more likely source of COVID-19 than people. The viral genome, in the finest detail, mimics an existing separate genome found in Hunan Province's horseshoe bats at the molecular level. Bats are particularly good at harbouring viruses, according to numerous studies, and they have been associated with earlier SARS, MERS, and Ebola outbreaks. The virus may have travelled from bats to an intermediary mammal before infecting humans, but this is not yet known. The fact that the early COVID-19 cases were linked to an exotic species live animal market in Wuhan provides strong support for these findings.

Our data clearly suggest that a laboratory does not host the SARS-CoV-2 invention or an infection that has been purposely modified, according to a new study that was published in Nature Medicine. It is commonly known that the Wuhan Institute of Virology and other institutes have been studying coronaviruses and bats ever since the SARS outbreak in the early 2000s. However, there is no proof that this research was conducted with malice; rather, it was done to learn more about the pathophysiology and epidemiology of SARS. In light of previous outbreaks as well as suggestions from academic experts and former presidents, high containment research was crucial.

For trying to cover up the previous SARS outbreak in 2003, the Chinese government was justifiably criticised, which led some to question how openly it would respond to the SARS-CoV2 outbreak in 2019. China's Premier Xi has acknowledged requests for an investigation into SARS-CoV2 and the pandemic's causes from more than 100 nations, with the proviso that it happen "after the virus is under control." There is still much to discover about the pandemic's early phases, China's response, and other nations' actions. Only if everyone is aware of the nature and requirement of an instant response during these critical days from an epidemiologic standpoint will the world be better prepared for the next epidemic.

Conclusion

This study examines the COVID-19 pandemic's effects on Bangladesh's bread and liquid refreshment industries as well as potential solutions. According to the research, the COVID-19 epidemic will have a short-term effect on the number of products that go bad, the difficulty of covering operational costs due to a shortage of working money, the postponement of LC openings, and the stoppage of distributor activity. These tactics include using the FEFO method, rotating products within and between retail locations, reducing trade promotion costs, extending office hours, having a portion of operations open on weekends and holidays, offering short-term incentives to distributors, and creating the necessary infrastructure to increase online sales in the post-COVID-19 era.

This study is significant because it is the first to examine in detail the effects of the COVID-19 pandemic on the bakery and beverage industries and to suggest workable solutions for reducing those effects. The study's conclusions are highly relevant to both theory and practice. We add to the body of knowledge on the disruptions in the bread and liquid refreshment industries as well as this sector in the context of emerging nations by focusing the study on Bangladesh. The findings give managers in the food and beverage sector a thorough understanding of the COVID-19 pandemic's effects as well as suggestions for how to deal with them.

There are some areas where our research falls short, despite the fact that the study considerably advances these domains. First, a case-study methodology was used in the study, and interviews were used to acquire data. The study lacks generalizability because of the nature of the research technique we used, despite the fact that all necessary steps were taken to improve the accuracy and reliability of the findings during the research design stage. To increase the generalizability of the results and to validate the methods mentioned in this study, in the future, a sizable poll might be carried out. The study also makes use of data acquired from important companies operating in Bangladesh's food and beverage industry. Due to the operational and strategic differences between small and medium-sized businesses (SMEs) and big organisations, the results might not fully reflect the reality among SMEs. Therefore, a future study may compare the outcomes for large firms and SMEs or evaluate the effects and procedures in the context of SMEs. Given that the industries of the pandemic vary by industry, future studies could examine the effects particular to each business to see how the COVID-19 epidemic has impacted them.

Last but not least, it seems that some of the short- and long-term impacts are interconnected. For instance, ROI is undoubtedly impacted by decreased sales and a spike in products that have expired. The study does not address this issue, and its objectives do not include knowing how the variables it considered are interconnected. Future research should consider these relationships because they might offer insightful guidance for creating effective action strategies. Additionally, the impacts and strategies are not attempted to be arranged in the current study. An upcoming study analysing the relative applicability of the techniques would be valuable in helping the firms, along with the rest of the industry, decide where they should spend their early efforts as they strive to recover from the pandemic.

Conflict of Interest

The authors declare that they have no conflict of interest.

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References

Andam, K., Edeh, H., Oboh, V., Pauw, K., & Thurlow, J. (2020). Impacts of COVID-19 on food systems and poverty in Nigeria. In *Advances in Food Security and Sustainability* (Vol. 5, pp. 145-173). Elsevier. https://doi.org/10.1016/bs.af2s.2020.09.002

CEPAL, N. (2020). The effects of the coronavirus disease (COVID-19) pandemic on international trade and logistics.

Duchêne, S., Ho, S. Y., Carmichael, A. G., Holmes, E. C., & Poinar, H. (2020). The recovery, interpretation and use of ancient pathogen genomes. *Current Biology, 30*(19), R1215-R1231. https://doi.org/10.1016/j.cub.2020.08.081

Jewell, N. P., Lewnard, J. A., & Jewell, B. L. (2020). Predictive mathematical models of the COVID-19 pandemic: underlying principles and value of projections. *Jama, 323*(19), 1893-1894. https://doi.org/10.1001/jama.2020.6585

Lelieveld, J., Pozzer, A., Pöschl, U., Fnais, M., Haines, A., & Münzel, T. (2020). Loss of life expectancy from air pollution compared to other risk factors: a worldwide perspective. *Cardiovascular Research, 116*(11), 1910-1917. https://doi.org/10.1093/cvr/cvaa025

Meotto, M. (2021). Implications of COVID-19 on fast-moving consumer goods and electronics supply chains: a systematic review of secondary materials.

Nie, J., Li, Q., Zhang, L., Cao, Y., Zhang, Y., Li, T., ... & Wang, Y. (2021). Functional comparison of SARS-CoV-2 with closely related pangolin and bat coronaviruses. *Cell Discovery, 7*(1), 21. https://doi.org/10.1038/s41421-021-00256-3

Olimat, S. N. (2020). COVID-19 pandemic: euphemism and dysphemism in Jordanian Arabic. *GEMA Online J Lang Stud, 20*(3), 268-90. http://doi.org/10.17576/gema-2020-2003-16

Park, C. Y., Villafuerte, J., & Abiad, A. (2020). *An updated assessment of the economic impact of COVID-19* (No. 133). Asian Development Bank. http://dx.doi.org/10.22617/BRF200144-2

Pekar, J., Worobey, M., Moshiri, N., Scheffler, K., & Wertheim, J. O. (2021). Timing the SARS-CoV-2 index case in Hubei province. *Science, 372*(6540), 412-417. Web: https://doi.org/10.1126/science.abf8003

Piret, J., & Boivin, G. (2021). Pandemics throughout history. *Frontiers in Microbiology, 11*, 631736. https://doi.org/10.3389/fmicb.2020.631736

Shang, Y., Li, H., & Zhang, R. (2021). Effects of pandemic outbreak on economies: evidence from business history context. *Frontiers in Public Health, 9*, 632043. https://doi.org/10.3389/fpubh.2021.632043

Thompson, S. A. (2020). How long will a vaccine really take. *The New York Times*, 30.

Worobey, M., Levy, J. I., Malpica Serrano, L., Crits-Christoph, A., Pekar, J. E., Goldstein, S. A., ... & Andersen, K. G. (2022). The Huanan Seafood Wholesale Market in Wuhan was the early epicenter of the COVID-19 pandemic. *Science, 377*(6609), 951-959. https://doi.org/10.1126/science.abp8715

Yang, J., Skaro, M., Chen, J., Zhan, D., Lyu, L., Gay, S., ... & Arnold, J. (2023). The species coalescent indicates possible bat and pangolin origins of the COVID-19 pandemic. *Scientific Reports, 13*(1), 5571. https://doi.org/10.1038/s41598-023-32622-4