



Perspectives on the New Normal:  
Post COVID-19

An Anthology of Research Papers written by  
Graduate Students in the MBA and MAPA Programs  
At Saint Mary's University, Minneapolis, MN

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Dr. R. Don Keysser, editor  
Associate Professor, Saint Mary's University

## Introduction

The research papers collected in this Anthology were written by graduate students in the Masters of Business Administration (MBA) and Masters of Public Administration (MAPA) programs at Saint Mary's University, in Minneapolis, MN, for the Summer semester of 2020. These students are professionally employed, and at an early-middle level stage in their careers. As such, they have enough experience and industry knowledge to offer meaningful insights into their professions and employers.

In general, students in these courses are required, among other tasks, to write a semester-long (eight weeks) research paper. The topic is usually up to them, as long as it reflects the application of the topics discussed in our course to their company and industry. For the Summer 2020 semester, they were assigned a more specific topic, this time regarding their perception of the impact of the COVID-19 pandemic on their companies, and more importantly, on their professions. Below is an excerpt from the syllabus presented to them:

*It has been noted by many observers that the coronavirus pandemic is an international existential crisis that will become the defining moment of your generation.*

*The coronavirus pandemic will profoundly affect and change almost everything about your lives, and not just in the short-term, but likely for the very long term: our social structures and customs; levels of government intervention in the economy; the nature of our capitalist system; the power of the federal and state governments versus individuals; the international economic system; global trade and supply chains; business management practices; the health care management and delivery system - the list is endless. Unlike other major crises (the Great Depression, World War 2, 9/11, the 2008 financial crisis), this one literally affects every corner of the world, and all people, with no specific end-point in sight. It has been suggested that in the future, we will refer to the world as BC (before coronavirus) and AC (after coronavirus).*

*I am going to challenge you to use this perspective in developing the topic for your research paper. Specifically, think*

*about the impact of the coronavirus pandemic, and the differences between BC and AC, as it relates to (a) your current job; (b) the company and industry in which you work; and (c) tying those into the Corporate Finance topics we discuss in this course. For example, if you work in health care or health technology, think about the AC impact on your own position (other than being forced to work from home for a while); the impact of AC on the health care delivery system and health technology research and development and funding (including the role of the government in those decisions); and then how these relate to such Corporate Finance topics as capital budgeting and NPV; financial analysis; investment banking and M&A; international trade; supply chain; and/or investment analysis.*

*Expressing this differently: what will likely be the New Normal in your professional world?*

This Anthology is being made available at no charge to the professional community, to add to the growing literature on the impact of this pandemic to our lives and professions. Recipients are welcome and encouraged to forward this on to any of their colleagues.

Note: The students were informed that the best 20 papers (out of a total of 36) would be collected into an Anthology, and made available within Saint Mary's and to the general professional community. The students were also informed that (a) they could opt-out of this Anthology; (b) their names would be redacted to maintain privacy and confidentiality, unless they specifically requested to have their names mentioned; and (c) references to their employers would be redacted, or the name changed, if requested, again to respect data privacy.

For further information on Saint Mary's graduate programs, please go to [www.SMUMN.edu](http://www.SMUMN.edu), or contact Dr. Michelle Wieser, Dean of the Graduate School, at [mwieser@smumn.edu](mailto:mwieser@smumn.edu).

For further information about this Anthology, you may contact me at: [rkeysser@smumn.edu](mailto:rkeysser@smumn.edu)

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**Financial Mitigation Strategies Employed by the Healthcare Industry  
in Response to the COVID-19 Pandemic**

by Rebecca Gusmer

[The author is a physical therapist at a regional hospital]

## Introduction

The COVID-19 pandemic brought a shock to the world as the health crisis quickly turned into an economic crisis. The virus first surfaced in December 2019 in Wuhan, China and rapidly spread worldwide (Mann, 2020, p. 45). The COVID-19 virus is a highly contagious pathogen caused by a novel strain of the coronavirus from the SARS species (Ozili & Arun, 2020, p. 2). The virus spreads through respiratory droplets when an infected person coughs, sneezes, speaks and/or contaminates a surface which makes uninfected individuals highly susceptible if they are near the infected respiratory droplets (Kumar, 2020). Furthermore, some individuals can be asymptomatic and unknowingly spread the virus. The virus affects the respiratory system and can be fatal, especially for individuals with respiratory and other comorbidities.

There is not currently a vaccine or any treatments for the virus making the only methods to contain the virus being trying to control the spread and providing symptomatic relief to those affected (Farooq & Ali, 2020, p. 1). As a result of the quick spread and lack of treatment, hospital systems have been overwhelmed due to the exponential number of infected individuals needing specialized care compounded with certain health care supplies becoming scarce. As a result, the initial public health response was to help flatten the epidemiologic curve to avoid bottlenecks in the healthcare system (Mann, 2020, p. 11). The public health response included measures such as public quarantine, social distancing, and the shutdown of businesses, financial markets, offices, and events were enforced (Ozili & Arun, 2020, p. 20). As part of these measures all elective healthcare services were cancelled including surgeries. For instance, the United States Surgeon General made an announcement on March 14, 2020 urging the halting of all elective surgeries and procedures (Vaccaro et al., 2020, Abstract).

While the public health response helped contain the spread, the initiatives caused a financial crisis for various industries, especially in healthcare. The healthcare industry incurred crippling financial losses due to the elimination of elective surgeries, procedures, and appointments. Furthermore, the hospitals had to function on thin operating margins to provide care to patients infected with COVID-19 in an environment with disrupted supply chains due to scarce medical resources (Khot, 2020, p. 2). Therefore, the purpose of this paper is to identify and analyze the short term and long term implications of cancelling elective healthcare services due to the COVID-19 pandemic on the healthcare industry. Key recommendations for mitigating financial losses and promoting viability within the healthcare industry in a new normal will be discussed.

## **Research and Analysis**

### ***COVID-19 Pandemic***

When the virus first surfaced in December 2019 in Wuhan, China, there were 44 cases-patients who were diagnosed with pneumonia of unknown etiology (World Health Organization, 2020). In January 2020 Chinese authorities identified the new type of coronavirus and shared the genetic sequence of the novel coronavirus for other countries to use to develop diagnostic tests (World Health Organization, 2020). The virus quickly spread over the next few months infecting people at staggering rates with 3,090,445 confirmed cases worldwide by April 30, 2020 (See Appendix A for global epidemiological graphs). A projection by Dr. Syra Mada of the NYC Health and Hospitals predicts 40-70% of the world's population could be infected (Mann, 2020, p. 10). These staggering numbers give insight into the essential need to reduce the spread.

### ***Public Health Response***

The risk for an increase in number of deaths due to COVID-19 is due to insufficient isolation centers, limited number of hospital beds, a shortage of medical supplies and drugs, and a lack of a vaccine to cure patients (Ozili & Arun, 2020, p. 13). Therefore, numerous measures have been implemented to try and flatten the epidemiologic curve to avoid overloading the healthcare system (Mann, 2020, p. 11). For instance, a public quarantine was enforced to reduce person-to-person contact with initiatives such as social distancing to keep people at least six feet apart and quarantining individuals infected with COVID-19 from the population. Human control measures included shutting down of air, land, and sea borders. Schools were shutdown requiring all teachers and students to engage in online learning. Travel bans were implemented restricting people from traveling and spreading the virus. Military enforcement was used when needed during the COVID-19 stay-at-home lockdown (Ozili & Arun, 2020, p. 15).

For the healthcare system, measures included cancelling all non-essential healthcare services which consisted of elective surgeries, procedures, and appointments (Khot, 2020, p. 4). The only urgent services provided were if a patient's life was at risk if a surgery was not performed, if there was risk of metastasis or progression of staging for patients with cancer, or if



there was a risk of rapidly worsening severe symptoms (Khot, 2020, p. 4). Before any urgent healthcare services were provided comprehensive screening was completed.

Policy makers noted a challenge with deciding on the best public health responses to implement was the tension between saving the people before saving the economy versus saving the economy before saving the people (Ozili & Arun, 2020, p. 19). The uncertainty of how COVID-19 would spread and how the economy would be affected made the decisions difficult (Mckibbin & Fernando, 2020, p. 3). As a result, there were criticisms against policy makers. These criticisms were that the policies were implemented too fast, prematurely, insufficiently, and that the policies contradicted each other (Ozili & Arun, 2020, p. 21). Critics noted the quick decisions were made with good intentions but there were insufficient responses. For instance, federal stimulus packages tried to encourage economic activities but economic activities were halted due to government imposed social distancing restrictions (Ozili & Arun, 2020, p. 20).

### ***Economic Impact***

The COVID-19 non-financial health crisis rapidly turned into an economic catastrophe across various industries triggering financial meltdowns (Kumar, 2020, p. 4). The public health measures to contain the spread of COVID-19 required quarantines and resulted in the shutdown of businesses, financial markets, offices, and events. Furthermore, the exponential rate of the virus spread led to consumers decreasing their consumption of products and services.

The economic impact is multifactorial affecting manufacturing, supply chains, tourism, transportation, service relationships, financial markets, and healthcare (Kumar, 2020, p. 4). Supply chains were disrupted due to the direct impact on production and shutdowns in global areas that affect exports (Kumar, 2020, p. 4). Furthermore, there were uncoordinated decisions made in the movement of people and goods as over 100 countries closed their borders (Kumar, 2020, p. 5). Financial markets also took a toll. For example, within one week from February 24 to February 28, 2020 the stock markets lost \$6 trillion in wealth and the S&P 500 Index lost over \$5 trillion (Ozili & Arun, 2020, p. 2). The long term effect is a global recession as the measures to help stop the spread resulted in a decrease in consumer spending and business operations (Fernini, 2020, p. 1). Predictions are that the COVID-19 pandemic could cost the global economy up to \$2 trillion in 2020 (Kumar, 2020, p. 4).

## ***Healthcare Impact***

The cancellation of non-essential procedures was initiated to promote the health and safety of healthcare workers, patients, and society and protect the hospital systems from being overloaded in treating patients with COVID-19. However, this had harmful implications on healthcare systems globally because a financial crisis surfaced. This was revealed through evaluating trends of the healthcare sector's financial picture and financial ratios over time. Due to COVID-19, the healthcare sector's financial position was weakened. For example, the total debt to equity ratio is the ratio of total debt divided by total equity (Ehrhardt & Brigham, 2019, p. 115). The total debt to equity ratio of the healthcare sector increased from 0.08 at the end of the fourth quarter of 2019 to 0.11 at the end of the first quarter of 2020 indicating as a whole the sector had incurred more debt (see Appendix B Figure 3) (CSIMarket, 2020). Additionally, the healthcare sector's stock performance significantly dropped beginning in early March 2020 reaching a low on March 22, 2020 of – 21.24% (see Appendix B Figure 4) (CSIMarket, 2020).

The ensuing financial crisis resulted in hospitals having to operate on small operating margins (Ferneini, 2020). The hospitals were faced with trying to preserve finances for the treatment of patients with COVID-19 while not having income from elective services (Farooq & Ali, 2020, p. 1). In areas where COVID-19 was ubiquitous, hospitals were overwhelmed with the number of patients infected with COVID-19. Furthermore, the effect of government payers and insurance companies cutting reimbursement for healthcare services compounded the crisis.

The disruption of supply chains and imbalanced supply and demand of scarce resources resulted in a shortage of medical supplies. Distribution networks were impacted due to cross-border travel and shipping restrictions (Khot, 2020, p. 3). Distribution centers had limited reserves and the shut-down of international flights resulted in the inability to restock the centers. Furthermore, there was an increased demand of personal protective equipment such as gloves, masks, gowns, N95 respirators and ventilators due to the high number of patients infected with COVID-19 needing treatment. For example, one 24 hour shift providing treatment to one patient infected with COVID-19 in the intensive care unit required 36 gloves, 14 gowns, 3 goggles, and 13 N95 respirator masks (Khot, 2020, p. 3). Some hospitals had 100% of beds filled with patients infected with COVID-19 which made these medical supplies limited (Khot, 2020, p. 3). The high demand and low availability of the medical supplies resulted in a dramatic increase in prices. For example, hand sanitizer increased from \$1000 to \$2160 per metric ton (Khot, 2020, p. 2).

The pharmaceutical supply chain was also disrupted due to the increased demand in the number of patients with acute respiratory illnesses (Khot, 2020, p. 3). In March 2020, the orders for medications such as albuterol increased by 53%, midazolam increased by 70%, and fentanyl increased by 100% (Khot, 2020, p. 3). Specifically in New York City the orders for albuterol increased by 1870%, midazolam increased by 553%, and fentanyl increased by 4100% (Khot, 2020, p. 3). The increased demand combined with the decreased supply of pharmaceuticals resulted in an upheaval.

Additionally, the pandemic posed risks to the healthcare workers. If healthcare workers treated a patient infected with COVID-19 then the healthcare workers are at risk for infection. For example, in Spain 15,000 of health care workers were infected representing 14% of the total COVID-19 case burdens (Khot, 2020, p. 7). The healthcare workers had additional difficulties as some staff providing direct patient care had longer working hours placing them at risk for burnout and further illness while other staff previously involved with elective healthcare services experienced reduced work hours, decreased pay, furloughs, and/or layoffs.

## **Discussion**

### ***Mitigation Strategies to Progress towards a New Normal***

With financial crises rampant in the economy, financial mitigation strategies were necessary, especially in the healthcare field to progress back towards a new normal. The focus for hospitals hurting from the cancellation of elective healthcare services is to restore financial stability. This restoration of financial stability must be resumed with revenue generating operations that are safe and that follow federal and state executive orders as well as the Center for Disease Control guidelines which will change the way the healthcare system operates operating in a new normal living with COVID-19. Any practice reactivation strategies must fall within the scope of accepted guidelines. The ultimate goal is to create maintainable operations with negligible revenues to optimize infrastructure for long term sustainability (Vaccaro et al., 2020, p. 6). As the healthcare industry prepares for mitigating the effects of COVID-19 capital budgeting, including the process of analyzing projects and determining if the projects should be accepted, becomes paramount (Ehrhardt & Brigham, 2019, p. 413).

The combination of improving economic stability while also ensuring the health and safety of healthcare workers, patients, and society requires strategic measures must be developed and implemented. For example, universal masking to help reduce the spread,

ensuring adequate supplies by having a robust supply chain, enhancing protocols for minimizing transmission, and utilizing stringent screening processes are necessary long term. The combination of these factors will change patient care delivery. A new normal will be present and the healthcare system must be flexible and adapt to this new normal. Patient care delivery must minimize redundant patient contact (Khot, 2020, p. 5). New practices such as telemedicine should be used to meet these new needs to operate effectively in a pandemic.

Mitigation strategies recommended and employed by healthcare businesses to lessen the financial crisis of the pandemic have focused on reducing costs, maintaining a workforce, and strategically positioning hospitals for financial recovery. For reducing costs a primary focus is on suspending discretionary spending. For example, reducing costs can include closing offices that are not urgent to operations and deferring leases and mortgage payments. Delaying vendor payments has been implemented to improve a cash position (Vaccaro et al., 2020, p. 4). Deferring employer matches to 401k and 403b contributions has further assisted decreasing cash outflow. Utilizing certain programs such as the Centers for Medicare and Medicaid Services (CMS) Accelerated and Advance Payment Program provides those who qualify for the option to receive advanced payment up to 100% of Medicare payments from the prior three months and are set up to be paid back in the form of withheld payments from services billed (Vaccaro et al., 2020, p. 4). However, these programs have complicated accounting and recoupment payments so the 120 day bridge loan should be carefully considered before using it. Firms should analyze the optimal capital structure that minimizes the company's weighted average cost of capital throughout the process (Ehrhardt & Brigham, 2019, p. 602).

The employees of a healthcare organization are often the organization's greatest asset. Therefore, maintaining a workforce is of vital importance even if the workload to patient demand is temporarily reduced. For the organization to return to full production, healthcare workers will be necessary. During the interim providing transparency about the new procedures will be important. To balance the decreased revenue from cancellation of elective services with the increased demand for caring for and screening for patients affected with COVID-19, using worksite relocations can help maintain adequate coverage in urgent work areas. Strategic staffing can also include proactively training staff in urgent services such as offering ventilator management and basic critical care refresher courses (Khot, 2020, p. 7). Furthermore, hospital systems that are overwhelmed can horizontally integrate by collaborating with each other by sharing resources and allocating health care workers to the most needed areas (Khot, 2020, p. 6).

Preserving the workforce by using strategies can help prevent layoffs. These strategies include salary reductions with the greatest percentage of reductions tiered from top level management while maintaining benefits, decreasing work hours, and using furloughs instead of laying off staff. Furloughs can allow staff to access state and federal assistance programs such as the Coronavirus Aid, Relief, and Economic Security (CARES) Act (Vaccaro et al., 2020, p. 6). Granting employees a band of emergency paid time off (PTO) or work without pay can also assist.

Initiating new ways for employees to work by transforming the practice using telemedicine and remote work is also viable as healthcare systems adjust to a new normal. Telemedicine helps patient care employees deliver care while maintaining stay-at-home policies. The previous limitations in using telemedicine in the healthcare industry were a lack of payer reimbursement which was lifted until June 1, 2020 due to the pandemic for the same rate reimbursement (Vaccaro et al., 2020, p. 8). These initiatives can allow protection for the healthcare business's most valuable assets.

To position for recovery, strategic plans for how to add staff and clinicians back into the workforce safely as market demands increase is necessary. This would require the implementation of stringent screening procedures and social distancing policies. For example, having staff take their temperature twice daily, wear surgical masks and goggles, and have ongoing symptom assessments become routine in the new normal. Additionally, the hospital must ensure there are adequate medical resources such as gloves, masks, gowns, hand sanitizer, and cleaning supplies to protect healthcare providers and patients. These policies should be developed using macroeconomic and development policies.

Resilient systems to ensure the volume of healthcare supplies is able to meet the demand of the healthcare facilities are crucial for the short term management of the pandemic and long term sustainability. Innovation is required in the short term such as using ski goggles for eye protection, making masks from automotive cleaning cloths, and using plastic barriers for protection when the supply for these pieces of equipment is low (Khot, 2020, p. 7). The supply chains should be strengthened to be able to protect against future viral pandemics. This can be done through the collaboration of healthcare systems, members of the healthcare supply chain, and the government (Khot, 2020, p. 6).

## ***Future Recommendations for the New Normal***

Moving forward, the healthcare industry will operate in a new normal. Following a pandemic, credible testing confirming the population is virus free, strict quarantine of individuals' infected and effective treatments for the virus is necessary for the future (Mann, 2020, p. 79). Therefore, returning to the previous normal before the COVID-19 pandemic is not foreseeably feasible especially within the healthcare industry. Clinical activities are most likely to become closer to pre-pandemic functions when wide-spread initial and repeat serial testing is established, there is global immunity, and/or a widely available vaccine is developed (Vaccaro et al., 2020, p. 9). Developing initiatives that progress towards this new normal is vital and will change the way healthcare is delivered.

The new normal is predicted to have an exponential increase in use of telemedicine for delivering healthcare services by integrating virtual visits into regular practice and remote work for appropriate job positions (Ferneini, 2020, p. 2). Telemedicine can improve access for patients in a distant geographical location, decrease risks to providers with medical conditions, and reduce occupancy costs. With telemedicine being a component of the new normal, the implementation of telemedicine requires healthcare businesses to invest in high quality technology and training for the health care providers. Additionally, initiatives focusing on the acceptance of telemedicine by providers and patients, governmental approval, and increased insurance reimbursements for telemedicine will be necessary (Ferneini, 2020, p. 2). For instance, Bestsenny et al. (2020) addresses the massive acceleration of telehealth resulting from COVID-19 such that the percent of users of telehealth increased from 11% in 2019 to 76% in 2020 of consumers now interested in telehealth. The annual revenue from telehealth is anticipated to increase from \$2 billion in 2019 to about \$250 billion (Bestsenny et al., 2020). Furthermore, regulatory agencies such as the Centers for Medicare and Medicaid services approved more than 80 new services (see Appendix C Figure 5) (Bestsenny et al., 2020).

The pandemic necessitates the allocation capital requirements for hospital systems to prevent becoming overwhelmed if the number of infected individuals needing specialized care increases as hospitals operates in a new normal. Firms must analyze projects to determine their necessity and cost saving opportunities (Ehrhardt & Brigham, 2019, p. 413). For instance, negative pressure rooms with high quality filters must be a consideration in a hospital's capital budget (Fernieni, 2020). Additionally, close screening procedures of COVID-19 related symptoms and taking temperatures of patients and employees before being allowed on site will be part of the new normal. Furthermore, enhanced preventative measures such as having all

employees involved in direct patient care wear facemasks and eye protection and having patients wear masks are necessary. Healthcare firms operating in the new normal may also benefit by looking for opportunities to consolidate with other businesses. This collaboration can improve negotiation clout with insurance companies and medical suppliers and assisting in allocating medical supplies when they become scarce (Fernieni, 2020).

### **Conclusion**

The COVID-19 pandemic shocked the world as the health crisis quickly turned into an economic crisis. The healthcare system was significantly impacted as the system became overwhelmed with the number of patients infected with COVID-19 needing treatment while healthcare supplies were dwindling. Concurrently, all elective healthcare services were cancelled resulting in financial distress. Strategies to mitigate the healthcare system's financial losses were initiated which include reducing costs, maintaining a workforce, and positioning the healthcare system for recovery. While the pandemic brought forth tremendous hardship, the pandemic also brought forth opportunities to make lasting reforms in the public health sector by improving shortcomings and preparing for long term sustainability in a new normal (Ozili & Arun, 2020, p. 21).

## References

- Bestsenny, O., Gilbert, B., Harris, A., & Rost, J. (2020, May 29). *Telehealth: A quarter-trillion-dollar post COVID-19 reality?* McKinsey & Company. Retrieved June 17, 2020 from <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>
- CSIMarket. (2020, June 16). Healthcare sector financial strength information. Retrieved June 17, 2020 from [https://csimarket.com/Industry/industry\\_Financial\\_Strength\\_Ratios.php?s=800](https://csimarket.com/Industry/industry_Financial_Strength_Ratios.php?s=800)
- Ehrhardt, M. & Brigham, E. (2019). *Corporate finance: A focused approach*, 7th edition. Mason, OH: Cengage Learning.
- Farooq, I., & Ali, S. (2020). COVID-19 outbreak and its monetary implications for dental practices, hospitals and healthcare workers. *Postgraduate Medical Journal*.
- Ferneini, E. M. (2020). The Financial Impact of COVID-19 on our practice. *Journal of Oral and Maxillofacial Surgery*.
- Khot, U. N. (2020). Navigating healthcare supply shortages during the COVID-19 pandemic: A cardiologist's perspective. *Circulation: Cardiovascular Quality and Outcomes*.
- Mann, C. L. (2020). 8 Real and financial lenses to assess the economic consequences of COVID-19. *Economics in the Time of COVID-19*, 81.
- McKibbin, W. J., & Fernando, R. (2020). The global macroeconomic impacts of COVID-19: Seven scenarios.
- Mishra, M. K. (2020). The world after COVID-19 and its impact on Global Economy. <http://hdl.handle.net/10419/215931>
- Ozili, P. K., & Arun, T. (2020). Spillover of COVID-19: impact on the global economy. *Available at SSRN 3562570*.
- Vaccaro, A.R., Getz, C.L., Cohen, B.E., Cole, B.J. & Donnally III, C.J., 2020. Practice management during the COVID-19 pandemic. *The Journal of the American Academy of Orthopaedic Surgeons*.
- World Health Organization. (2020). Coronavirus disease (COVID-2019) situation reports. Retrieved June 10, 2020 from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>



## Appendix A

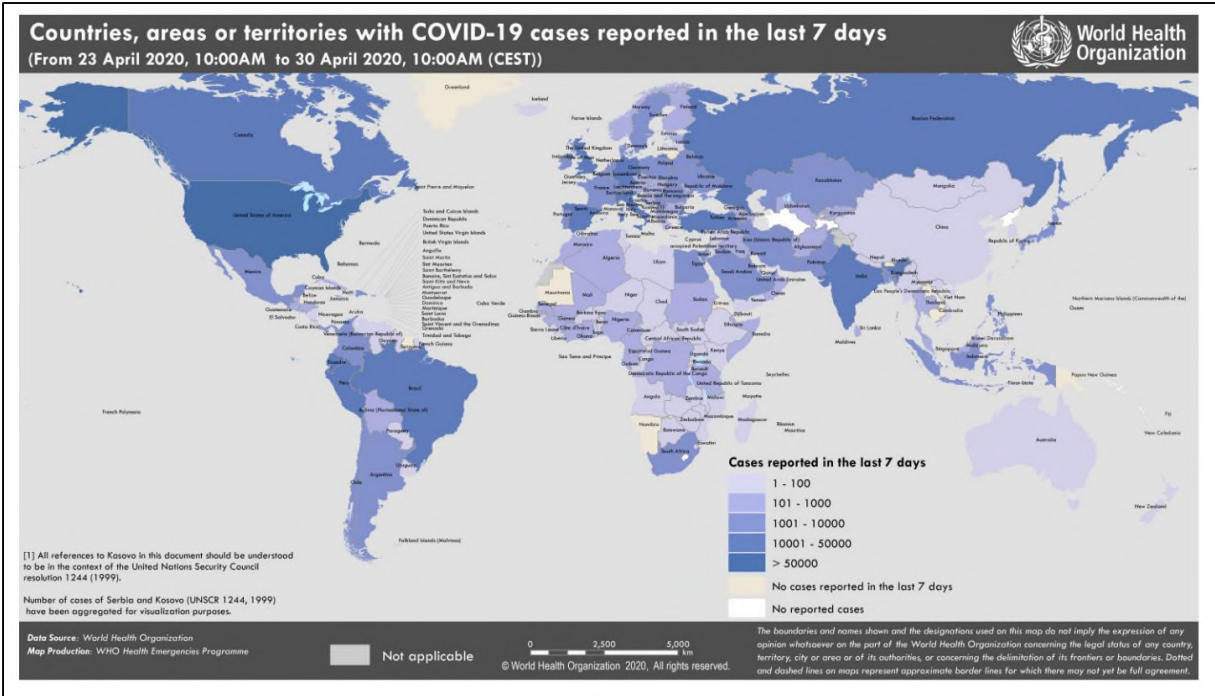


Figure 1 Countries, areas or territories with COVID-19 cases reported confirmed cases of COVID-19, 30 April 2020 (image from World Health Organization, 2020)

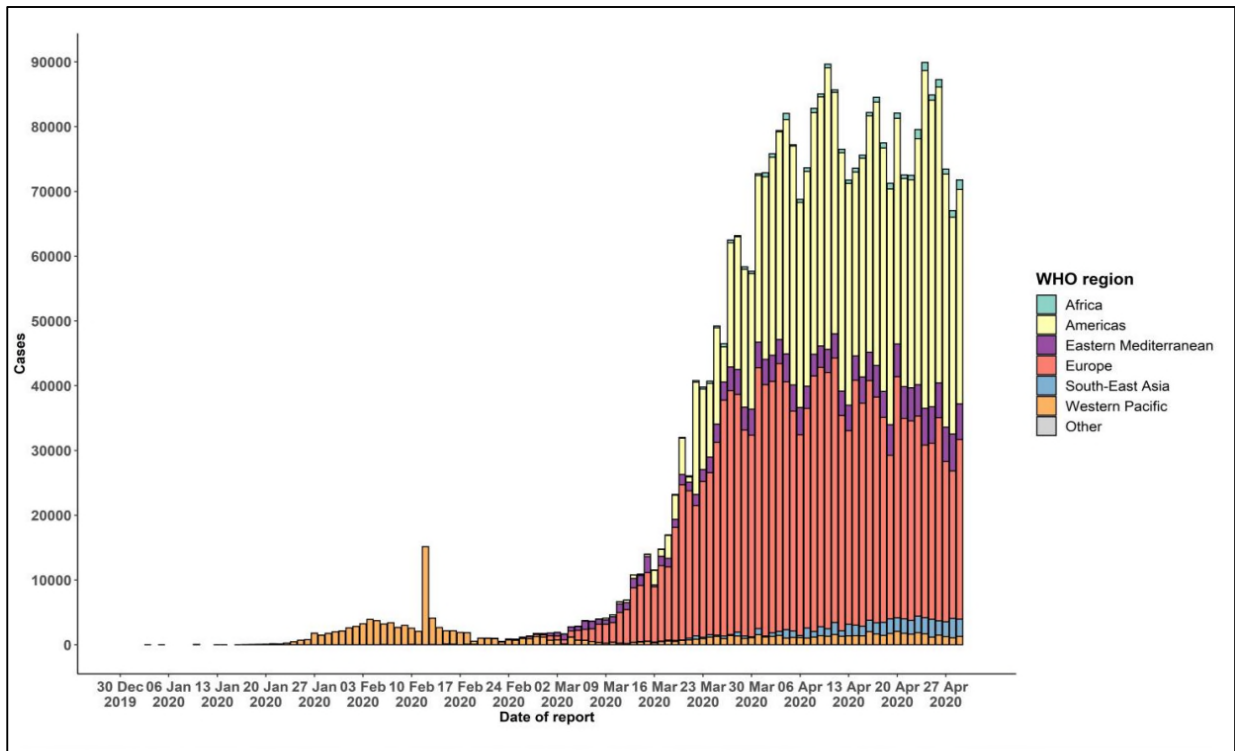


Figure 2 Epidemic curve of confirmed COVID-19, by date of report and WHO region through 30 April 2020 (image from World Health Organization, 2020)

## Appendix B



Figure 4 Healthcare sector stock performance (image from CSIMarket, 2020)

## Appendix C

### How has COVID-19 changed the outlook for telehealth?

#### 1 Consumer

Shift from:



To:



While the surge in telehealth has been driven by the immediate goal to avoid exposure to COVID-19, with more than 70 percent of in-person visits cancelled,<sup>1</sup> 76 percent of survey respondents indicated they were highly or moderately likely to use telehealth going forward,<sup>2</sup> and 74 percent of telehealth users reported high satisfaction.<sup>3</sup>

#### 2 Provider

Health systems, independent practices, behavioral health providers, and others rapidly scaled telehealth offerings to fill the gap between need and cancelled in-person care, and are reporting



In addition, **57%**

of providers view telehealth more favorably than they did before COVID-19 and

**64%**

are more comfortable using it.<sup>5</sup>

**50–175x**

the number of telehealth visits pre-COVID.<sup>4</sup>

#### 3 Regulatory

Types of services available for telehealth have greatly expanded, with the Centers for Medicare & Medicaid Services (CMS) temporarily approving more than

**80 new services**

and lifting restrictions on originating site, allowing Medicare Advantage plans to conduct risk assessments via telehealth, and adding other regulatory flexibilities to increase access to virtual care.<sup>6</sup>

<sup>1</sup> McKinsey COVID-19 Consumer Survey, April 27, 2020.

<sup>2</sup> McKinsey COVID-19 Consumer Survey, May 20, 2020.

<sup>3</sup> McKinsey COVID-19 Consumer Survey, April 13, 2020.

<sup>4</sup> Ibid.

<sup>5</sup> McKinsey COVID-19 Physician Survey, May 2020.

<sup>6</sup> Medicare telemedicine health care provider fact sheet, March 17, 2020, cms.gov.

Figure 5 How telehealth has surged under COVID-19 (image from Bestsenny et al., 2020)

## **Impact of COVID-19 on Telehealth**

By Mohammad Battah

[The author is a respiratory therapist at a regional hospital]

## Abstract

The coronavirus pandemic swept the world by surprise and into a frantic motion of survival. On Jun 22<sup>nd</sup> of 2020, the World Health Organization (WHO) confirmed nearly 9 million coronavirus cases, 469,600 deaths, and 216 countries & territories affected with coronavirus (World Health Organization, 2020, para. 4). The purpose of this paper is to examine the impact of coronavirus on telehealth in the health care industry. This paper will discuss how the coronavirus pandemic transformed modern health care into the virtual world. This paper gives an overview of telehealth legislation before and after the coronavirus pandemic, investments, and financial impact of the implementation of a telehealth system in the HealthPartners organization.

## Introduction

In the 21st century, health care systems around the world are dependent on numerous moving parts such as budgets, health care systems, i.e., National Health Insurance, Bismarck model, etc., policies, specific government legislation, regulation, and most of all the increasing demand for quality health care. The health care system implemented in a nation is one of the most significant influencers on health care in that country. For example, Canada has a National Health Insurance system, which is a single-payer system; the government-run insurance program covers all citizens (PNHP, 2010, para. 10). The Bismarck model is also one of the widely used by many countries such as Japan, Germany, and France. Bismarck model has health insurance plans that cover everybody in the country and options for private plans in addition to the government-run program (PNHP, 2010, para. 8).

Through the rapid advancements of technology in the past two decades, more and more nations, health care systems, and organizations have worked to use the ever-growing power of technology to deliver higher quality health care. In her book *Benchmarking Telemedicine: Improving Health Security in the Balkans*, Stone states that telehealth is the next step for the health care industry, specifically rural areas around the world (Stone, 2017, p. 102). Stone also discusses how telehealth has the potential to change how health care is delivered across the globe. She continues to explain how telehealth has already developed to the point where it's use can become commonplace (Stone, 2017, p. vii). Due to the limited resources available for expenditure on innovation and development in health care, investments in health care is crucial. Selecting an investment that has low risk and high revenue

is essential. The investment in a telehealth system will mitigate any loss of cash flow and decrease long-term financial strain on the HealthPartners organization during and after the coronavirus pandemic.

### Overview of Telehealth

**Before COVID-19:** Lauren Cranford explains that telehealth is a “broad range of technologies and services to provide patient care and improve the healthcare delivery system as a whole” (Cranford, 2020, para. 2). Expressly, telemedicine defined as any “health care services and education [provided] over a distance” (Cranford, 2020, para. 1). The use of telemedicine in the early 21<sup>st</sup> century implemented for rural areas with minimal access to a health care facility “for follow-up visits, management of chronic conditions, medication management, [and] specialist consultation” (Cranford, 2020). In 2017 the North Atlantic Treaty Organization “developed a multinational telemedicine system, enabling medical specialists to provide real-time recommendations to first responders at emergency scenes or in combat zones” (NATO, 2017, para. 1). North Atlantic Treaty Organization (NATO) believes that the “telemedicine system[s] can be used both by the military and civilian” personal to help treat patients across the world (NATO, 2017, para. 2). The American Medical Association (AMA) conducted a comprehensive study looking at the adoption of digital clinical tools. The AMA found that between 2016 to 2019, a trend showing a significant increase in interest and use of telehealth services by both patients and health care providers (AMA Digital Health Research, 2020, p. 8).

Telehealth can improve health care delivery around the world, increasing access to medical staff such as general care, medical specialist, diagnostic, and treatments at a faster rate than in person (NATO, 2017, para. 3). The use of telehealth “allow[s] first responders at the scene to connect to the system, receiving expert advice from medical specialists” to better diagnose and treat patients (NATO, 2017, para. 3). Having the ability to receive quality and timely health care in a disaster or emergency has the potential to save countless lives (NATO, 2017, para. 3). In a 2005 multicenter study in Nova Scotia, Canadian Province concluded that telehealth consultations for telepsychiatry and teledermatology services are “similar to those of conventional face-to-face consultations” (Persaud, Jreige, & Skedgel, 2005, p. 3). Coronavirus is both a disaster and crisis, which has affected the whole world; telehealth is established for this exact situation.

**After COVID-19:** Telehealth will continue to be integrated into most hospitals and clinics along with the new reimbursement regulations (Ellimootil, 2020, 13:45). Delaying patient care is not an option during the pandemic because the number of patients would reach overwhelming amount; the best option would be to use telehealth to treat and diagnose patients during the pandemic and observing with social distancing. Forms of telemedicine include video visits and phone calls (Ellimootil, 2020, 14:00). Video visits with live audio in actual time are a substitute for an in-office appointment and currently reimburse as such (American Medical Association, 2020, pp. 6). After the implementation of telehealth, hospitals and clinics will construct a new workflow, which will increase productivity and efficiency (Ellimootil, 2020, 13:00). Telemedicine is an excellent addition to most services in the clinic, and hospital setting, which should continue to be used after the pandemic is over (Ellimootil, 2020, 15:22). In early March Dr. Gina Tobalina of El Dorado Hills, Calif., interviewed by American Academy of Family Physicians (AAFP) News affirmed that following up until June “all acute care and routine follow-up visits will be done by 100% video visit” (Crawford, 2020, p. 1). ). Dr. Tobalina is joined by many clinics around the country that moved to a virtual health care visit.

Due to the high demand for telehealth communication technology, technology firms have jumped at the opportunity to enter the telehealth market. Firms such as Zoom, Google, Skype for Business, VSee, Microsoft teams, American Well, and Epic have already put out new software to capture a part of the new market (Crawford, 2020, p. 1; Boehm, et al., 2020, p. 2). All the telehealth communication technology used for telehealth will need to meet minimum requirements to ensure HIPPA compliance (Ellimootil, 2020, 13:15)

### **Federal, State, and Local Law**

**Before COVID-19:** Telehealth was slowly moving through reform at every level, policies and legislation in congress had been taking years to pass new regulations into law. Before 2019 telehealth visits were reimbursable for rural patients that did not have access to nearby 50-mile radius health care, and most of those patients had to be established patients at that clinic (American Medical Association, 2020, p. 2). Many requirements must be met before appointment approval, and reimbursement will be awarded to the clinic. Such requirements include the “real-time video component of the visit” (Crawford, 2020, p. 1). Patients and physicians had a limited number of visits that could be considered as telehealth for reimbursement (Crawford, 2020). Licensure between states was not approved, creating a more significant issue when patients saw doctors in a different state than they lived in (American

Medical Association, 2020, p. 20). In addition to all the hurdles of approving a telehealth visit, clinics may receive a lower reimbursement in comparison to an in-office appointment (Cohen & Linneman, 2020, p. 47; Crawford, 2020, p. 1).

**After COVID 19:** The United States Medicare and Medicaid health insurance announced it “will pay physicians for telehealth services at the same rate as in-office visits for all diagnoses, not just services related to COVID-19” (American Medical Association, 2020, para. 5). Changes in coding each visit include adding a modifier to ensure “telehealth services billed ... will be paid at the facility rate” (American Medical Association, 2020, para. 6). Medicare also granted new and established patients, irrespective of their location, rural area, city, and across the country approval to receive telehealth services (American Medical Association, 2020, para. 6). In addition to granting authorization for telehealth use by physicians, “practitioners such as licensed clinical social workers, clinical psychologists, physical therapists, occupational therapists, and speech-language pathologists will have expanded access to telehealth, virtual check-ins, e-visits, and telephone calls during the crisis” (American Medical Association, 2020, para. 8).

The updated policies, legislation, and procedures newly implemented to help facilitate the ease of providing health care services. Most private insurance, such as Blue Cross Blue Shield, had already approved of all the changes that Medicare made on March 1<sup>st</sup> 2020, in preparation for an influx of billing requests (Boehm, et al., 2020, p. 1). Medicare Advantage organizations (MAO’s) have expanded telehealth coverage due to the changes to “Medicare Part C regulations” (Cohen & Linneman, 2020, p. 47). The new regulations, along with the new legislation in the Social Security Act (SSA) through the Budget Act of 2018, Medicare coverage expanded to include telemedicine services (Cohen & Linneman, 2020). “Under the new telemedicine rule, MAOs have considerable freedom to cover a much wider variety of telemedicine services as part of the “basic” Medicare benefit than what currently is payable under traditional Medicare” (Cohen & Linneman, 2020, p. 48).

Due to the pandemic, the federal communications commission has instated a COVID-19 telehealth program. This program funded with \$200 million to help support eligible health care providers to purchasing “telecommunications services, information services and devices necessary to enable the provision of telemedicine services” (American Medical Association, 2020, para. 10). The COVID-19 program provides funding for eligible health care organizations limited to nonprofit and public organizations to increase the success of telehealth services offered (American Medical Association, 2020, para. 9). In addition to the COVID-19 program, a



COVID-19 relief bill for CARES ACT added a total of \$484 billion. The \$484 billion was allocated as grants and loans to help fund paycheck protection programs, “Coronavirus Economic Stabilization Act (CESA). The CESA created the Main Street Lending Program and authorizes the Federal Reserve to make loans, loan guarantees, other investments, and subsidies,” for Emergency Economic Injury Disaster Loans (American Medical Association, 2020, para. 13).

### **Telehealth Investment**

**Before COVID-19:** New technology investments take a lot of forward-thinking and research to ensure success. An essential part of a manager of a firm is to increase the value of the organization (Brigham & Ehrhardt, 2020, p. 409). Ways to increase the value of an organization include diversifying consumer base, scaling operations, and continuous progress to efficacy and productivity (Stevenson, 2018, p. 273). An investment in telehealth will increase revenue by billing for uncompensated phone calls, increase patient demographics with an increase of convenient care, increase competitive edge, reduce patient’s no-show and the associated cost, optimize efficiency and workflow, and potentially increase hours of service (Wade et al., 2010, p. 3). In 2010 Wade, Karnon, Elshaug, and Hiller completed a systematic search of 36 articles for an economic analysis of the clinical use of telehealth services using real-time video communication. An overwhelming 61 percent of the studies concluded that using telehealth was at a less cost than the non-telehealth alternative (Wade et al., 2010, p. 6). Of the 22 studies, 11 found a higher cost for telehealth services than non-telehealth (Wade et al., 2010, p. 6). The systemic review also found that 91 percent of patients had better or the same health outcomes and no compromise in any patient safety (Wade et al., 2010, p. 6).

Snoswell, Taylor, and Caffery conducted a sub-analysis in 2019 to find “the breakeven point for implementing a telehealth service; that is the point after which the initial investment is recouped, and the cost savings have become tangible” (Snoswell, Taylor, & Caffery, 2019, p. 530). The study concluded “that telehealth is cost saving for the health system,” some systems showed an immediate return on investment. In contrast, others took up to nine years due to the substantial investment in video conferencing services (Snoswell, Taylor, & Caffery, 2019, p. 531). In this study, the investment reduced cost and, in turn, increased profits. The multicenter study in Nova Scotia Canadian province completed by Persaud et al. performed a threshold analysis that concluded, “above a certain patient workload, telehealth services would be more cost-effective than face-to-face services from a societal perspective” which was achieved in the Nova Scotia province (Persaud, Jreige, & Skedgel, 2005, p. 530).

## HealthPartners Overview

**Before COVID-19:** In the past five years, HealthPartners has grown into the second largest provider of health care in Wisconsin and Minnesota. As an organization, HealthPartners provides both health insurance and health care services at locations such as Regions hospitals, Park Nicollet, and Hudson Hospital & Clinics across Wisconsin and Minnesota (HealthPartners, Inc., 2020). The audit completed by KPMG in 2017, 2018 HealthPartners organization gives a comprehensive overview of the financial structure and health of the organization. As indicated in figure 1, HealthPartners had an increase in assets from 2017 to 2018 by \$215,380 (4.4 percent), with no significant changes in liabilities and net assets (KPMG LLP, 2019, p. 6). In 2018 HealthPartners reported record revenue of over \$7 billion (KPMG LLP, 2019, p. 4).

**After COVID-19:** In response to the coronavirus pandemic, HealthPartners has created new ways for patients to access care, such as increasing the use of telehealth services such as video and phone visits (HealthPartners, 2020, para. 1). Policies and procedures video

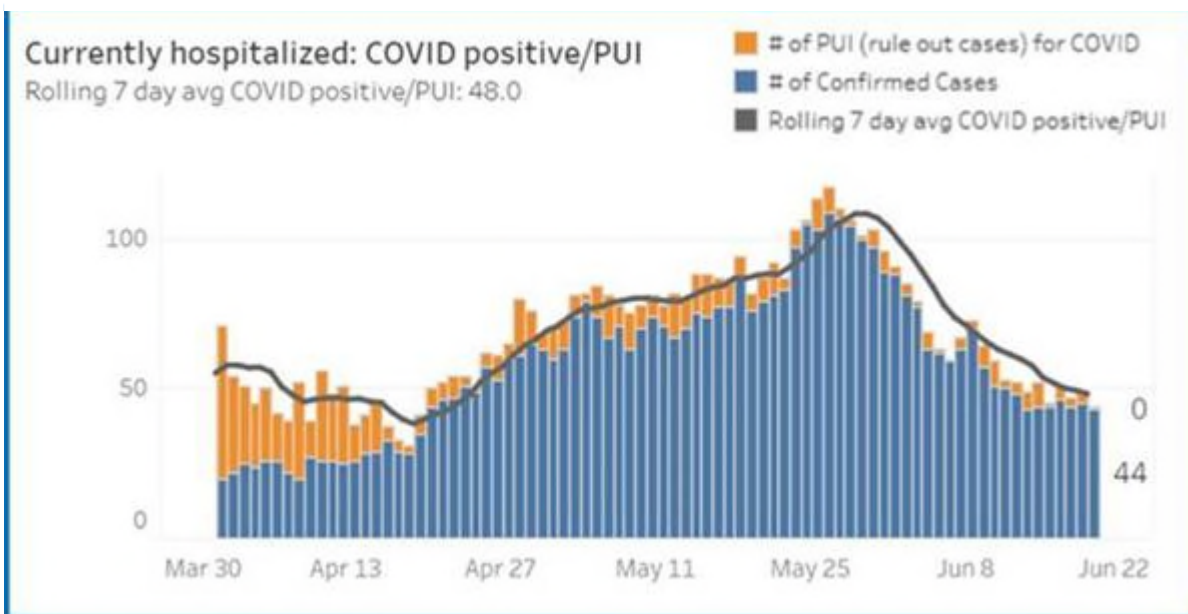
Assets	2018	2017
<b>Current assets:</b>		
Cash and cash equivalents	\$ 1,003,945	762,895
Investments, at fair value	757,647	727,345
Investments whose use is limited, at fair value	9,669	9,839
Accounts receivable, net	557,984	508,384
Other current assets	105,451	140,756
Total current assets	2,434,696	2,149,219
Investments whose use is limited, at fair value	40,755	41,881
Other investments, at fair value	1,024,810	1,126,121
Property, plant, and equipment, net	1,323,024	1,295,362
Deferred compensation	86,677	87,434
Goodwill and other intangible assets	20,493	20,771
Other	106,245	100,532
Total assets	\$ 5,036,700	4,821,320
<b>Liabilities and Net Assets</b>		
<b>Current liabilities:</b>		
Unpaid medical claims	\$ 218,750	212,750
Accounts payable	336,977	356,070
Provider payable	92,146	77,550
Salaries and employee benefits payable	334,175	321,391
Accrued real estate taxes, income taxes, and interest	26,685	31,588
Deferred revenue	124,682	127,455
Current portion of long-term debt	36,455	33,986
Total current liabilities	1,169,870	1,160,790
Long-term debt – less current portion	702,348	645,201
Deferred employee benefits	95,898	99,485
Postretirement benefit obligation	11,127	11,578
Other	103,637	93,707
Total liabilities	2,082,880	2,010,761
<b>Net assets:</b>		
Without donor restrictions	2,897,326	2,759,162
With donor restrictions	56,494	51,397
Total net assets	2,953,820	2,810,559
Total liabilities and net assets	\$ 5,036,700	4,821,320

and phone 2020, para. 1). Policies and procedures tailored to adapt to changes from face to face care to telehealth visits, and, most of all, ensuring patient safety (HealthPartners, 2020, para. 3). Policy effective Mar 17<sup>th</sup>, 2020 outlined the transient response to the public emergency and how telehealth services would be utilized, coverage, billing, visit type, and available service (HealthPartners, 2020, para.

Figure 6: HEALTHPARTNERS, INC. Consolidated Statements of Financial Position December 31, 2018 and 2017. (KPMG LLP, 2019, p. 3)

2). Across the state, “Minnesota’s hospitals are projected to lose \$2.9 billion” between April to June, which is \$31 million each day (Reilly, 2020, para. 5). The loss in revenue is due to the cancellation of non-critical surgeries and other adjustments to minimize the financial impact. “Hospitals are also spending \$13.3 million each day to prepare for an expected surge in patients by expanding their capacity and buying personal protective equipment” (Reilly, 2020, para. 5). Financially HealthPartners reduced compensation of salaried employees up to 30 percent and 40 percent reduction for Andrea Walsh CEO, which will continue for the rest of the year (HealthPartners, 2020, para. 2). A hiring hold, in addition to furloughing nearly 2,600 (10 percent) of employees across the organization to reduce the unnecessary expenditure of capital in departments that no longer provided services for the foreseeable future (Reilly, 2020, para. 2). Figure 2 shows the increase of coronavirus patients within the HealthPartners system. The rise in coronavirus patients adds to the operations that challenge its capacity. Patients requiring respirator support requires a mean of 13 days in an ICU on a high level of care (Cavallo, Donoho, & Forman, 2020, p. 1). The increase of patients that requires a high level of care will

Figure 2: Number of COVID-19 cases at HealthPartners hospitals, March 30th through June 22nd. Retrieved from internal update *The Daily Brief*, by Corporate Communications HealthPartners



place stress on resources within the system (Cavallo, Donoho, & Forman, 2020, p. 1). “Many hospitals have mass casualty protocols for catastrophic events; the COVID-19 response could require an equal mobilization of staff and resources but during a sustained period” (Cavallo, Donoho, & Forman, 2020). HealthPartners reported that it was near 90% capacity in some of their hospitals in mid-June and taking precautions to elevate its response to ensure patient safety (HealthPartners, 2020).

## Revenue

Forecasting revenue in a pandemic can be one of the hardest corporate financing tasks because of the vast uncertainty. The impact will vary depending on the sector in the health care industry. Revenue gained from the increased patient census can be lost due to “spending on Covid-19 preparations and surge capacity, including above-normal rates for clinical labor, may erode that margin” of profit (Egan, 2020, para. 8). Revenue has been used to help “preserve personal protective equipment and other resources, most hospitals have delayed or canceled an overwhelming portion of procedures deemed “elective” (Egan, 2020, para. 11). Revenue can be recuperated by taking advantage of the new legislation that was passed, which allows hospitals and clinics to get reimbursed the same as a face to face doctor visit. Table 1 shows that reimbursement can be gained during Caronavirus through telehealthcare visits (HealthPartners *Administrative policies*, 2020, para. 6). The financial impact is significant for the majority of hospitals, but especially HealthPartners, the upcoming second-largest health care organization in Wisconsin and Minnesota. Egan explains that elective procedures are a substantial source of funding and can be thought of as cash cows for a firm (Egan, 2020, para. 12). Egan continues to say that “In response, systems have begun to furlough staff, but the heavily fixed-cost nature of hospital operations means there are limited options to preserve

*Table 1 Preventive care/ office visit cost. Retrieved from HealthPartners <https://www.healthpartners.com/hp/doctors-clinics/billing-financial/cost-of-health-care/index.html>;*

margins in the short term” (Egan, 2020, para. 12).

### Preventive care for new patients

Description	CPT	Average	Range	Medicare	MHCP	Self-Pay
Infant less than 1 year	99381	\$297	\$284 - \$305	n/a	\$86	\$319
Age 1-4 years	99382	\$310	\$297 - \$319	n/a	\$90	\$333
Age 5-11 years	99383	\$322	\$309 - \$332	n/a	\$94	\$346
Age 12-17 years	99384	\$364	\$349 - \$375	n/a	\$106	\$391
Age 18-39 years	99385	\$353	\$338 - \$363	n/a	\$102	\$379
Age 40-64 years	99386	\$409	\$392 - \$421	n/a	\$119	\$440
Age 65+ years	99387	\$443	\$425 - \$457	n/a	\$128	\$477

## **Conclusion**

The coronavirus has crippled the health care industry around the world. In the past six months, HealthPartners has already taken actions to help reduce the impact on the organization with furlough and pay cuts. Telehealth investment can bring back revenue, open services, re-employ thousands of employees, and take HealthPartners to the next step in delivering exceptional health care. Applying for the federal communications commission COVID-19 telehealth program would get funding to help take some of the risks and burden off HealthPartners. During the coronavirus pandemic, revenue losses can be recovered by seeing patients through telehealth visits. As staff is becoming more comfortable with the use of technology in their practice, new workflows can be created to serve patients and the organization better. It is evident through many case studies and literature review that if implemented correctly, telehealth can be profitable and increase the value of the firm.

## Bibliography

AMA Digital Health Research. (2020, February). *Physicians' motivations and requirements for adopting digital health*. Retrieved from American Medical Association: <https://www.ama-assn.org/system/files/2020-02/ama-digital-health-study.pdf>

American Medical Association. (2020, May 18). *CARES Act/COVID 3.5: Loans & other financial assistance for physician practices*. Retrieved from American Medical Association: <https://www.ama-assn.org/delivering-care/public-health/cares-actcovid-35-loans-other-financial-assistance-physician>

American Medical Association. (2020, April 27). *Public Health*. Retrieved from American Medical Association: <https://www.ama-assn.org/delivering-care/public-health/cares-act-ama-covid-19-pandemic-telehealth-fact-sheet>

Boehm, K., Ziewers, S., Brandt, M. P., Sparwasser, P., Haack, M., & Willems, F. (2020). Telemedicine Online Visits in Urology During the COVID-19 Pandemic—Potential, Risk Factors, and Patients' Perspective. *European Urology*.

Brigham, E. F., & Ehrhardt, M. C. (2020). *Corporate Finance: A Focused Approach* (7th ed.). Mason, OH: Cengage Learning.

Cavallo, J., Donoho, D., & Forman, H. (2020, March 20). Hospital Capacity and Operations in the Coronavirus Disease 2019 (COVID-19) Pandemic—Planning for the Nth Patient. *Journal of the American Medical Association*. Retrieved from <https://jamanetwork.com/channels/health-forum/fullarticle/2763353>

Cohen, A., & Linneman, T. (2020). Expanding Telemedicine. *Journal of Health Care Compliance*, 22(1), 47-52.

Cranford, L. (2020, May 1). *Telemedicine vs. Telehealth: What's the Difference?* Retrieved from Chiron Health: <https://chironhealth.com/blog/telemedicine-vs-telehealth-whats-the-difference/>

Crawford, C. (2020, March 23). *Inside Look at Using Telemedicine During COVID-19 Pandemic*. Retrieved from American Academy of Family Physicians: <https://www.aafp.org/news/health-of-the-public/20200323covidtelehealth.html>

Egan, Y. (2020, May 08). *Health Care Advisory Board*. Retrieved from Advisory Board: <https://www.advisory.com/research/health-care-advisory-board/expert-insights/2020/covid-19-financial-impact>

Ellimootil, C. (2020, March 30). Telehealth During COVID-19. *Lumenis Urology*. Retrieved from <https://www.youtube.com/watch?v=Kx09-tuXUuw>

HealthPartners. (2020, March 17). *Administrative policies*. Retrieved from HealthPartners: <https://secure.compliance360.com/Common/ViewUploadedFile.aspx?PD=PbRt%2bA78MS72%2fHG%2fzBA67K%2b6%2biNLUiLV6y9yMrysAhbWz4Umus%2bRYMkZFRcQDrw3YWq5O%2b52D%2bPkQmDi7GZrmulbCQEJwTzV95OkzA%2fqZqlyboQoJ%2fwqT%2fvzpXETiDUzrhemylnzT4uKDR5YzSekGga1jBNspVX0r%2fibMn>

HealthPartners. (2020, April 23). *Press Releases*. Retrieved from HealthPartners: <https://www.healthpartners.com/hp/about/press-releases/healthpartners-continues-to-respond-to-covid19-pandemic.html>

HealthPartners, Inc. (2020). *HealthPartners, Inc. 2019 and 2018 HMO Financial Information*. Retrieved from [https://www.healthpartners.com/ucm/groups/public/@hp/@public/documents/documents/cntrb\\_009358.pdf](https://www.healthpartners.com/ucm/groups/public/@hp/@public/documents/documents/cntrb_009358.pdf)

KPMG LLP. (2019). *HealthPartners, INC. Consolidated Financial Statements and Additional Consolidating Information and Uniform Guidance Audit*. Minneapolis: KPMG LLP.

McCue, M. (2006). Making the Business Case for Telemedicine: An Interactive Spreadsheet. *telemedicine and e-Health*, 12(2), 99-106. Retrieved June 3, 2020, from <https://doi.org/10.1089/tmj.2006.12.99>

NATO. (2017, February 24). *News*. Retrieved from North Atlantic Treaty Organization: [https://www.nato.int/cps/en/natohq/news\\_141822.htm](https://www.nato.int/cps/en/natohq/news_141822.htm)

Persaud, D., Jreige, S., & Skedgel, C. (2005, March). An incremental cost analysis of telehealth in Nova Scotia from a societal perspective. *Journal of Telemedicine and Telecare*, 11(2), 77-84. doi:10.1258/1357633053499877



PNHP. (2010). *Health Care Systems - Four Basic Models*. Retrieved from Physicians for a National Health Program:

[http://www.pnhp.org/single\\_payer\\_resources/health\\_care\\_systems\\_four\\_basic\\_models.php](http://www.pnhp.org/single_payer_resources/health_care_systems_four_basic_models.php)

Reilly, M. (2020, April 24). *HealthCare*. Retrieved from Minneapolis / St. Paul Business Journal: <https://www.bizjournals.com/twincities/business-of-pride/2020/04/healthpartners-will-furlough-2-600-to-cope-with.html>

Schaafsma, J., Pantazi, S., Moehr, J., Anglin, C., & Grimm, N. (2007). An Economic Evaluation of a Telehealth Network in British Columbia. *Journal of Telemedicine and Telecare*, 13(5), 251-256. doi:10.1258/135763307781458877

Snoswell, C., Taylor, M., & Caffery, L. (2019, October). The breakeven point for implementing telehealth. *Journal of Telemedicine & Telecare*, 25(9), 530-536. doi:10.1177/1357633X19871403

Stensland, J., Speedie, S., Ideker, M., House, J., & Thompson, T. (1999). The Relative Cost of Outpatient Telemedicine Services. *Telemed J*, 5(3), 245-256. doi:10.1089/107830299311998

Stevenson, W. J. (2018). *Operations Management* (Thirteenth ed.). New York, NY: Mc Graw Hill Education.

Stone, C. S. (2017). *Benchmarking Telemedicine: Improving Health Security in the Balkans* (Vol. 49). Clifton, VA: IOS Press, Inc.

Wade et al. (2010). A systematic review of economic analyses of telehealth services using real time video communication. *BMC Health Services Research*, 233. doi:10.1186/1472-6963-10-233

World Health Organization. (2020, June 22). *Coronavirus Disease 2019*. Retrieved from World Health Organization: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>



**Healthcare Systems Rapid Increase of Telehealth in the Face of COVID-19:  
Veterans Health Administration's Telehealth Services**

[The author is a health-care administrator in the VA system]

## Introduction

On January 5, 2020 the World Health Organization (WHO) published a report on a new virus (2020). This highly contagious virus originally named coronavirus, rapidly spread from the Wuhan province of China across the globe and by mid-March 2020 had spread to all 50 states in the United States (Centers for Disease Control and Prevention [CDC], 2020d). On March 11, 2020, the WHO confirmed that the world was facing a pandemic. The virus named coronavirus (later to be referred to as COVID-19) did not discriminate. Persons of all ages, race, sexual orientation and socioeconomic status are vulnerable and impacted. At the beginning, limited information was known about this novel virus. Scientists and health experts around the world began researching, learning, and disseminating information as fast as they could.

The spread and the aggressiveness of the virus on the elderly is not like any other that recent generations have faced. According to the CDC (2020a), people 65 years and older, persons with underlying medical conditions such as chronic lung disease, moderate to severe asthma, serious heart conditions, immunocompromised, severe obesity, diabetes, liver disease, persons with chronic kidney disease undergoing dialysis and those living in nursing homes or other types of long-term care facilities are at higher risk. Approximately 15.2% of the U.S. population or over 49.2 million people are 65 or older; that's one out of every seven Americans (U.S. Department of Health and Human Services [HHS], Administration for Community Living [ACL], Administration on Aging [AoA], 2018). Of those 65 and older, approximately 1.5 million (3.1%) lived in institutional settings with 1.3 million in nursing homes; those living in nursing homes dramatically increase in age, 3-9% for persons age 75 and older (HHS, ACL, AoA, 2018).

Based on age alone, this is a high number of high at-risk Americans. This doesn't account for the compounding underlying medical conditions that would increase a person's risk if they were to be exposed and contract COVID-19. According to the Johns Hopkins Coronavirus Resource Center (2020), on June 12<sup>th</sup>, the U.S. has had 2,048,989 confirmed cases with 114,699 deaths with a case-fatality rate of 5.6%. Compared to similar nations, the U.S. case-fatality ratio is significantly lower than the United Kingdom (14.1%), France (15.2%), Italy (14.5%) and Canada (8.2%) (Johns Hopkins, 2020). The case-fatality ratio is lowered when more testing is available and more people with milder cases are identified as well as the number of elderly within a population and the level of hospital resources (Johns Hopkins, 2020). The positive situation for the U.S. is that we are better equipped with critical care beds than many of

the other countries; total number of beds per 100,000 people, the U.S. has 34.7 compared to United Kingdom's 6.6, France's 11.6, and Italy's 12.5 (Halpern & Tan, 2020). The U.S. capacity of critical care beds is important as the severity of COVID-19 requires up to 25% patients that are hospitalized requiring intensive care unit (ICU) admission (Anesi, 2020).

As the U.S. responded to the first cases, the government planned for the spread and the capacity of the healthcare system to care for patients requiring hospitalization. The State and Federal governments responded independently. On March 13<sup>th</sup>, President Trump declared a National emergency and by March 16<sup>th</sup>, every State had declared an emergency (Schwellenbach, 2020). From travel bans to "social distancing" orders and stay-in-place orders, schools and many businesses closed. The U.S. watched this reality unfold in Italy and other countries as healthcare systems were overwhelmed with critical care patients as well as a lack of personal protective equipment (PPE) for healthcare workers. The U.S. healthcare systems had a lot to consider. While some systems may have had emergency plans, the speed of spread, severity of symptoms along with the quickly depleting supplies of PPE was a nightmare scenario. Healthcare systems needed to quickly adjust all medical care delivery in order to balance demand, create processes for urgent and non-urgent needs, create COVID-19 testing resources and systems, protect hospital and clinic patients, and protect healthcare workers (Hick & Biddinger, 2020).

The big question became, how do healthcare systems minimize the spread? How does a healthcare system provide care in the face of a fast, easily person-to-person spreading virus? The CDC recommended persons not living in the same household not have contact within 6 feet in order to avoid respiratory droplets such as talking, coughs, and sneezes (2020b). This no close contact became a primary direction from the State and Federal governments to "flatten the curve." The concept of "flattening the curve" for the COVID-19 pandemic was to reduce the number of new cases or infections to prevent overwhelming the healthcare system (Johns Hopkins, 2020). This effort didn't have a lofty goal of stopping the virus but rather to slow the spread so that the healthcare infrastructures could meet the demands for critical care beds and reduce the impact on human lives. In reality, the normal demand for critical care wasn't going to change; people were still going to have accidents, cardiac events and other life-threatening health events.

## Telehealth

To reduce person-to-person contact and still deliver healthcare, healthcare systems across the nation, rapidly increased or implemented telehealth services. While telehealth platforms are not new, it has not been a widely adopted and utilized platform until now. Fair Health data reports that telehealth claims increased nationally 4,347% from March 2019 to March 2020 (Gelburd, 2020). These numbers will be even higher in April and May following the loosening of Medicare and Medicaid regulations on telehealth services. The Centers for Medicare and Medicaid Services (2020), expanded telehealth services: by waiving the limitations on the types of clinical providers than can provide telehealth services, hospitals can now bill for telehealth services from the hospital or other remote locations, reimburse for phone visits that were not covered in the past as well as increasing the reimbursement for phone visits that were previously covered, cover telehealth services covered by rural and other qualified health clinics, and waive video requirements for certain evaluations due to the limitations on access to technology (Centers for Medicare and Medicaid Services [CMS], 2020). This was an important change that supported the use and expansion of telehealth by reimbursing or increasing reimbursements to healthcare professionals.

These changes in CMS regulations for telehealth also fuel and support ongoing efforts to provide quality healthcare visits through the use of smartphones, tablets, computers and phones. While in-person visits are the gold standard and required in many circumstances, telehealth platforms provide comparable healthcare services in many situations. In response to COVID-19, the CDC outlined many benefits and potential uses of telehealth: (2020c)

- Screen patients for COVID-19 symptoms
- Provide low-risk urgent care for non-COVID conditions; identify those with higher risk needs.
- Access primary care providers and specialists
- Provide coaching and support for chronic health conditions
- Participate in occupational, physical and speech therapies
- Monitor chronic medical conditions
- Case management
- Follow-up post hospitalization
- Advance care planning and counseling
- Provide non-emergent care to long-term care residents
- Provide education and training for health care professionals

Telehealth is allowing hospitals and clinics to manage normal operations and emergent COVID-19 needs all the while protecting the patients, healthcare workers, and decreasing the utilization of personal protective equipment (PPE).

## **Veterans**

As healthcare systems across the nation responded to the pandemic, the largest integrated healthcare system in the U.S., the Veterans Health Administration (VHA) began a rapid response. With over 9 million Veterans enrolled and 1,255 health care facilities which includes 170 VA Medical Center and 1,074 outpatient sites, the VA had a unique and significant responsibility to act and respond with speed and seriousness (U.S. Department of Veterans Affairs, Veterans Health Administration, 2019). The Veterans served within the VA are a unique demographic in comparison to other healthcare systems. In 2018, 48.8% of enrollees were 65 years of age or older (Wang, Cidade, Larsen, Pearman, Schimpf & Dhanireddy, 2019). This is a significantly large number of veterans in the high-risk category for complications from COVID-19. As well as the reality that older populations are more likely to have diagnoses of diabetes, cardiac disease, pulmonary diseases and renal failure. The VHA has a great responsibility as a leader in the healthcare industry but first and foremost, in caring for America's heroes. All eyes would be on how the VHA responded to the pandemic.

The VA healthcare systems are not isolated to one region of the country nor are the Veterans only managed within one hospital network. Veterans have access to and receive care within their state, regional networks and across the nation. As such, all Veterans across the nation should be provided the same quality care and services. Unlike other isolated hospital systems, the VA has a large network of resources and supports. In the midst of the pandemic, VA hospitals and clinics across the nation needed to respond in a coordinated effort on a national level and activate its emergency management plan across every state and U.S. territory. The VHA-Office of Emergency Management prepared a 4-phase approach: (U.S. Department of Veterans Affairs, Veterans Health Administration, Office of Emergency Management (2020)

- 1) Contingency planning and training
- 2) Initial response
- 3) Establishing Alternating Sites of Care
- 4) Sustainment and recovery

In both phase 1 and phase 2 where the VA's primary focus was on veteran healthcare and to mitigate the impact of COVID-19 on veterans, employees, visitors and the healthcare systems, a primary strategy was to maximize telehealth services for all non-urgent medical care (U.S Department of Veterans Affairs, Veterans Health Administration, Office of Emergency Management, 2020). This turn to telehealth as the primary modality for clinical outpatient care was a change for the VA and the veterans though not as significant as other healthcare systems.

### **VHA Telehealth**

Prior to the pandemic, the VA was already operating telehealth services across its networks. The VA national telehealth system under the Office of Connected Care was established in 2016; the primary goal is to increase Veteran's access to healthcare through technology health solutions (Elliot, 2019). Using technology health solutions grew out of the VA's changing and continuing challenges for meeting veterans varied and complex healthcare as well as a need to cover large geographical areas (Elliott, 2019). This was important for delivery of healthcare; in 2019, approximately 33% of Veterans enrolled in the VA were considered rural, which of those rural veterans, 56% were over the age of 65 (Elliott, 2019). The three programs under the Office of Connected Care; My HealthVet, VA Telehealth and VAMobile provide different levels and engagement of healthcare.

The VA already had a jumpstart on telehealth services. By 2018, the VA was already the largest U.S. provider of telehealth services providing 2.29 million telehealth episodes to 782,000 veterans (Elliott, 2019). In 2018, approximately 13% of all veterans receiving care from the VHA, had utilized some form of VA telehealth (Connected Care, 2019). The above-mentioned benefits and potential uses of telehealth highlighted by the CDC in response to COVID-19 were already well underway in VA healthcare systems prior to the pandemic. The VA had telehealth programs established for general services such as primary care, women's health, mental health, and rehabilitation to specialty services such as chaplain, dermatology, amputation care and weight management. While not all VA hospitals and clinics offer all the services, frameworks for establishing the services and collaboration across the systems is a benefit. The establishment of the Connected Care programs, specifically VA Telehealth has been instrumental in the VA's COVID-19 response to quickly increase utilization of telehealth in lieu of in-person visits.

The three Connected Care programs are benefiting Veteran's during this pandemic. My HealthVet is an interactive website geared toward easy access and management of a

veteran's benefits and healthcare. Through this portal, veterans are able to track appointments, refill and track prescriptions, send secure message to their healthcare team, view medical records, check disability records, educational benefits, and manage their personal record (MyHealtheVet, n.d.). During stay-at-home and social distancing precautions, this platform has been beneficial for veterans. The ability to refill meds from home, message their healthcare teams, and manage their healthcare from their computer or smartphone has provided veterans and caregivers with alternative means to meet healthcare needs while protecting themselves, their families, healthcare workers and their communities.

VA Mobile is the VA mobile applications (app) store. This app store provides specifically designed VA Apps to meet the unique needs of veterans that integrates with the VA information technology platforms. For example, the app store offers Rx Refill, a prescription refill app, Virtual Care Manager for video healthcare visits, VA Online Scheduling, Pain Coach App which offers helpful tools to track and manage pain, and PTSD Coach which offers education, tools and support (VA Mobile, n.d.). The Annie App for Veterans, an automated text messaging app sends reminders and health information. During the COVID response, the Annie App is being utilized to send COVID-19 precautions protocol messages and a new COVID Coach app offers resources on self-cares and mental health during the pandemic (VA Mobile, n.d.).

VA Telehealth services offers healthcare visits to the home, from clinic to clinic, hospital to hospital and from VA to DOD. Telehealth can occur in many different ways. The VHA utilizes three modalities for telehealth: (Connected Care, 2019)

- Synchronous: use of real-time, interactive video conferencing including use of supportive peripheral equipment. For example: Veteran has an appointment with a primary care from the comfort of the Veteran's home.
- Asynchronous: use of technologies to acquire and store clinical information. For example: a dermatologist at the Minneapolis VA reviews pictures and provides a consultation to a Veteran in Sioux Falls, SD.
- Remote Patient Monitoring: a program for Veterans with chronic conditions that provides coordinated care using disease case management and health informatics to reduce complications and hospitalizations. For example: Veteran with uncontrolled diabetes has weekly check ins with a team that monitors and manages all of his healthcare.

Telehealth has been an important option for Veteran healthcare. According to the VHA, improved patient outcomes through telehealth have reduced use of inpatient care in FY18 (Connected Care, 2019). There was a 53% decrease in VA bed days of care for Veterans that were enrolled in Remote Patient Monitoring as well as a 33% decrease in VA hospital

admissions (Connected Care, 2019). Veterans that were provided mental health services via synchronous TeleMental Health decreased Acute Psychiatric VA bed days of care by 40% and VA hospital admissions by 34% (Connected Care, 2019).

As Telehealth services have increased over the years, the VHA has also been monitoring the Veteran satisfaction. Veteran satisfaction and utilization of services is important to the VHA, federal government and the public. In FY18, Remote Patient Monitoring satisfaction scores were 89%, at time of appointment, synchronous score were 90% and home/mobile synchronous scores were 88%, and asynchronous (store-and-forward) scores were 88% (Connected Care, 2019). Veteran satisfaction and acceptance have been crucial in the advancements and push forward for Telehealth services. It has never been more critical than it is now in the midst of a pandemic that Veterans, caregivers, and healthcare providers embrace telehealth platforms and technologies.

Telehealth didn't shift to the forefront simply because it was available. In the face of the pandemic, telehealth become the "preferred delivery system" of care when the VA's COVID response plan leaned heavily on telehealth for outpatient services (Eddy, 2020). Telehealth services provided a way to protect Veterans and staff from contracting COVID-19 by allowing physical distancing while continuing to provide quality healthcare. Telehealth has allowed for fewer Veterans having to go out into the community to access healthcare as well as track and manage mild illnesses from the Veteran's home (Eddy, 2020). This remote monitoring would be especially important in cases where Veterans are quarantined or at home with COVID-19 infections and need to avoid having to come into a medical facility.

The VA's COVID-19 response efforts to utilize and expand telehealth have been successful. Since the pandemic, the VA has had an 800% increase in telehealth visits with nearly 20,000 telehealth visits daily (Mendoza, 2020). With the increased demand, more resources are needed to keep up with the demand. The VA made a \$1.2 billion request for funds to information technology systems (Goldstein, 2020). This resource allocation request was to increase bandwidth as more employees teleworked, invest in laptops, iPads and other devices to improve telehealth services. Also, as part of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), the bill allocated \$19.6 billion in funds for the VA for increasing telehealth and telemental health services. (The American Legion, 2020). This is vitally important because in order to provide quality telehealth services, healthcare professionals and Veterans need the appropriate equipment and structures to support the expanding services.

As mentioned above, VA virtual mental health services were a focus of funding and expansion. Mental health is a priority for the VA, and it is of utmost importance during this time.



Veterans may be living alone, isolated from support systems, and/or experiencing increased emotional, physical and financial stress. Providing Veterans with mental health access and services critical. The great news is that, TeleMental Health services expanded quickly. In March, VA TeleMental Health visits dramatically increased by 70%, completing 34,000 appointments through VA Video Connect, telehealth group therapies jumped 200% and phone consultations rose 280% (U.S. Department of Veterans Affairs, Office of Public Affairs Media Relations, 2020). This increase in utilization has great implications for continued TeleMental Health applications.

The programs through Connected Care have been an important part of a Veterans healthcare experience. This does not mean that these services don't have their barriers or drawbacks. Like many other healthcare systems, the VA healthcare system was not telehealth ready in all of its services. Veterans experienced different levels of telehealth services within the same hospital. For example, a Veteran's dermatology clinic may have offered telehealth appointments, but their primary care physician may not have. Or their primary care team had secure messaging, but their audiologist didn't. This inconsistency would be especially highlighted during the pandemic response when most medical visits are being completed via phone or telehealth video visit.

Rural Veterans may also face barriers with access to technology that may impact their ability to utilize telehealth. Lack of high-speed internet, resources for data packages, access to computers or smart phones may prevent access to telehealth video visits. If a veteran doesn't have video capability, there may be alternative VA programs that offer use of VA furnished equipment mailed out to the veteran for the appointment. For rural Veterans, telehealth access would be vitally important with stay-in-place orders and also due to the reality that many Veterans don't live close a VA hospital or clinic. This leads to increased health disparities and inequity for rural and/or low-income Veterans.

In the past, another barrier to telehealth services was Medicare regulations and insurance coverage for services was variable. As mentioned earlier, during the pandemic, regulations have loosened, and reimbursement rates have improved but only time will tell if these will stay in place and give telehealth a stronger foothold for the future. Also, use of telehealth was a change for healthcare providers and veterans alike. Healthcare providers are having to learn new technologies and systems along with the Veterans. They are having to work through technical difficulties and finding different ways to implement their practice.

Finding different ways to implement practice to reduce the risk to the Veteran in coming to a medical facility may be first screening them by phone or a telehealth video visit whereas

before, a provider would have seen them in person. Healthcare providers may have to risk stratify the medical needs and the medical history of the Veteran to determine if they should be seen in person, choosing who can come and who can't. Elective surgeries and in-person non-urgent medical visits were postponed and physical access to hospital and clinics were limited. These are all barriers that healthcare providers have faced in the VA.

When we return to a world post-COVID-19, the healthcare systems will look different. In the VA, telehealth will continue to play a larger role in access and delivery of healthcare. Telehealth has shown a great utilization in connecting patients and healthcare professionals, sometimes in ways people may not have considered. With advancing technologies and increased access, telehealth capabilities will only improve in its interface and utilization. We are just on the frontier of what telehealth services can be. In the face of all the newness of telehealth, it isn't the answer for everyone. There are medical services that will require in person evaluations and interactions. In person interactions are important in our human connections and bonds. Healthcare systems and healthcare professionals are there for the people. As we return to our post-COVID-19, the VA and other healthcare systems have a unique challenge to plan for a future of integrated, innovative technologies and person-to-person connections.

## References

Anesi, G. (2020, June 4). Coronavirus disease 2019 (COVID-19): Critical care and airway management issues. *UpToDate*. Retrieved from <https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19-critical-care-and-airway-management-issues#H4080233186>

Centers for Disease Control and Prevention. (2020, May 14-a). Coronavirus disease 2019; People who are at higher risk. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html>

Centers for Disease Control and Prevention. (2020, June 1-b). Coronavirus disease 2019: How it spreads. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>

Centers for Disease Control and Prevention. (2020, June 10-c). Coronavirus disease 2019; Using Telehealth services. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/telehealth.html>

Centers for Disease Control and Prevention. (2020, April 17-d). Geographic Differences in COVID-19 cases, deaths and incidence-United States, February 12-April 7, 2020. Retrieved from <https://www.cdc.gov/mmwr/volumes/69/wr/mm6915e4.htm>

Centers for Medicare & Medicaid Services. (2020, April 30). *Trump administration issues second round of sweeping changes to support U.S. healthcare system during covid-19 pandemic*. [Press release]. Retrieved from <https://www.cms.gov/newsroom/press-releases/trump-administration-issues-second-round-sweeping-changes-support-us-healthcare-system-during-covid>

Connected Care (2019). *VHA telehealth services* [Fact sheet]. U.S. Department of Veterans Affairs. Retrieved from [https://connectedcare.va.gov/sites/default/files/OT\\_va-telehealth-factsheet-2019-01.pdf](https://connectedcare.va.gov/sites/default/files/OT_va-telehealth-factsheet-2019-01.pdf)

Eddy, N. (2020, March 30). VA COVID-19 response plan stresses telehealth, virtual services. *HealthcareITnews*. Retrieved from <https://www.healthcareitnews.com/news/va-covid-19-response-plan-stresses-telehealth-virtual-care-services>

Elliott, V. (2019, July 26). Department of Veterans Affairs (VA): A primer on telehealth. R45834. Congressional Research Service. Retrieved from. <https://fas.org/sqp/crs/misc/R45834.pdf>

Gelburd, R. (2020, June 2). The coronavirus pandemic and the transformation of telehealth. *U.S. News & World Report*. Retrieved from <https://www.usnews.com/news/healthiest-communities/articles/2020-06-02/covid-19-and-the-transformation-of-telehealth>

Goldstein, P. (2020, April 28). VA expand telehealth services with new device purchases. *FedTech*. <https://fedtechmagazine.com/article/2020/04/va-expands-telehealth-services-new-device-purchases>

Halpren, N & Tan, K. (2020, May 12). United States resources availability for COVID-19. *Society of Critical Care Medicine*. Retrieved from <https://www.sccm.org/getattachment/Blog/March-2020/United-States-Resource-Availability-for-COVID-19/United-States-Resource-Availability-for-COVID-19.pdf>

Hick, J. & Biddinger, P. (2020, March 25). Novel Coronavirus and old lessons-preparing the health system for the pandemic. *The New England Journal of Medicine*. Retrieved from <https://www.nejm.org/doi/full/10.1056/NEJMp2005118>

Johns Hopkins (2020b). Coronavirus Resource Center; How does mortality differ across countries? Retrieved on this date June 12, 2020 <https://coronavirus.jhu.edu/data/mortality>

Mendoza, N. (2020, May 22). 800% surge in VA telehealth visits during COVID-19 pandemic with boost from T-Mobile. *TechRepublic*. Retrieved from <https://www.techrepublic.com/article/800-surge-in-va-telehealth-visits-during-covid-19-pandemic-with-a-boost-from-t-mobile/>

MyHealthVet. (n.d.). U.S. Department of Veterans Affairs. Retrieved from <https://www.myhealth.va.gov/mhv-portal-web/home>

Schwellenbach, N. (2020, May 6). The first 100 days of the U.S. government's COVID-19 response. *Project on Government Oversight (POGO)*. Retrieved from <https://www.pogo.org/analysis/2020/05/the-first-100-days-of-the-u-s-governments-covid-19-response/>

The American Legion. (2020, April 9). VA expands telehealth services in response to covid-19 pandemic. Retrieved from <https://www.legion.org/veteranshealthcare/248753/va-expands-telehealth-services-response-covid-19-pandemic>

U.S. Department of Health and Human Services, Administration for Community Living, Administration on Aging. (2018, April). *2017 profile of older Americans*. Retrieved from <https://acl.gov/sites/default/files/Aging%20and%20Disability%20in%20America/2017OlderAmericansProfile.pdf>

U.S. Department of Veterans Affairs. (2020, May). VA Utilization Profile FY 2017. *National Center for Veterans Analysis and Statistics*. Retrieved from [https://www.va.gov/vetdata/docs/Quickfacts/VA\\_Utilization\\_Profile\\_2017.pdf](https://www.va.gov/vetdata/docs/Quickfacts/VA_Utilization_Profile_2017.pdf)

U.S. Department of Veterans Affairs, Office of Public Affairs Media Relations. (2020, April 13). *VA virtual mental health care use on the rise amid COVID-19*. [Press release]. Retrieved from <https://www.va.gov/opa/pressrel/pressrelease.cfm?id=5418>

U.S. Department of Veterans Affairs, Veterans Health Administration. (2019, July 14). *About VHA*. Retrieved from [https://www.va.gov/health/aboutvha.asp#:~:text=The%20Veterans%20Health%20Administration%20\(VHA,Veterans%20enrolled%20in%20the%20VA](https://www.va.gov/health/aboutvha.asp#:~:text=The%20Veterans%20Health%20Administration%20(VHA,Veterans%20enrolled%20in%20the%20VA)

U.S. Department of Veterans Affairs, Veterans Health Administration, Office of Emergency Management (2020, March 23). *COVID-19 response plan. Incident-specific Annex to the VHA High Consequence Infection (HCI) Base Plan. Version 1.6*. Retrieved from [https://www.va.gov/opa/docs/VHA\\_COVID\\_19\\_03232020\\_vF\\_1.pdf](https://www.va.gov/opa/docs/VHA_COVID_19_03232020_vF_1.pdf)

VA Mobile (n.d.). *Welcome to VA mobile*. U.S. Department of Veterans Affairs. Retrieved from <https://mobile.va.gov>

VA Telehealth (n.d.) *Welcome to VA telehealth services*. U.S. Department of Veterans Affairs. Retrieved from <https://telehealth.va.gov>

Wand, Z., Cidade, M., Larsen, M., Pearman, G., Schimpf, M., Dhanireddy, P. (2019, January 9). *2018 Survey of Veteran enrollees' health and use of health care*. U.S. Department of Veterans Affairs. Retrieved from [https://www.va.gov/HEALTHPOLICYPLANNING/SOE2018/2018EnrolleeDataFindingsReport\\_9January2019Final508Compliant.pdf](https://www.va.gov/HEALTHPOLICYPLANNING/SOE2018/2018EnrolleeDataFindingsReport_9January2019Final508Compliant.pdf)

World Health Organization. (2020, April 27). WHO timeline-COVID-19. Retrieved from <https://www.who.int/news-room/detail/27-04-2020-who-timeline-covid-19>

# **The Future of Telemedicine in the Healthcare Industry after Covid-19**

By Laura Lo

[The author is a revenue analyst in a health care management system]

## Introduction

It is no doubt that the internet has transformed modern living and continues to do so with advancements in technology. From staying connected and communicating with family and friends, to purchasing products and services, and with the economy how it is currently with the pandemic, internet and technology it has managed to be utilized in healthcare with telemedicine.

Telemedicine is a narrower scope compared to telehealth and refers to education over a distance, and the provision of health care services through the use of telecommunications technology (eVisit, 2020). Telehealth refers to health information services and education, in a more general and broad sense which all encompasses one. Telecare and Telemedicine are covered in Telehealth. Telemedicine uses information technology and electronic communications to provide clinical services remotely from physicians to patients. Telemedicine digitally transmits medical imaging, while providing remote medical diagnosis and consultations by video and telephone communications (eVisit, 2020).

Telemedicine was not as successful as was expected before Covid-19, as it was promised to make healthcare more accessible for patients without having to travel and eliminate the need to wait in a waiting room or a long line through virtual communication. A 2017 study showed in the U.S., only 82 percent of consumers did not use such services (The Medical Futurist, 2020). This can be due to lack of improper infrastructure and lack of awareness of this service for patients.

Telemedicine has confirmed that it is a critical tool to help slow the spread of the coronavirus as it provides electronic visits. There are three primary roles that telehealth technologies play during this crisis. The first is to screen patients remotely rather than visit the practice or hospital (Siwicki, 2020) . This also lowers the risk of transmission within the hospital and healthcare staff. The second role is to help provide routine care for patients with chronic diseases who are at high risk of exposure during this pandemic. Patients with immunocompromised health can utilize video visits to avoid exposure. The third role is that providers and staff are not immune to infection and are at an increased risk of contracting Covid-19 due to the constant exposure of infected patients. Once testing has been confirmed in a patient or exposure of a patient, quarantining will be needed for the provider and staff. Providers will have the option to continue to see patients via remote feeds as they are quarantined (Siwicki, 2020).



Telemedicine is a critical factor in the safe management during the pandemic and after for the care of all patients. There are a wide range of services and technologies that telemedicine provides for delivering care (American Medical Association, 2020).

- Real-time, audio and video communication tools that connect physicians and patients from different locations remotely.
- Store-and-forward technologies – collects images and data that can be interpreted and transmitter at a later time.
- Capability to remotely use patient-monitoring tools for blood pressure monitoring, digital scales using Bluetooth-enabled devices, wearable devices with biometric data to apps such as mHealth.
- Virtual check-ins through patient portals, messaging, and other technologies verbal and audio only.

With the unexpected pandemic reaching the U.S., hospitals were not prepared and had not adopted telemedicine services. This lead to an overload with stakeholders and patients scrambling to find telemedicine services on demand. Telemedicine companies, Plushwell was up by 70% and Amwell had increased by 158% in the U.S. since January (The Medical Futurist, 2020). Any infrastructure that experiences this type of demand and increase will also experience an impact on the services and technology with the capabilities and storage/data it can hold.

Hospitals can be overloaded by telemedicine services due to some hospitals not having the appropriate equipment, internet, and resources to deliver the provider-to-patient virtual communication. In a pandemic like this, where the medical staff may get infected and will need to be quarantined, the availability of providers grows even smaller.

### **Advantages**

Telemedicine is making a positive contribution and resource to the healthcare system as it is helping healthcare provider organizations and caregivers communicate with Americans who have contracted the virus and whom may need to touch base with their providers regarding their health. It is being used in a variety of ways. Telehealth is bridging the gap between people, physicians, and health systems, enabling everyone, especially symptomatic patients, to stay at home and communicate with physicians through virtual channels, helping reduce the spread of the virus to mass populations and the medical staff on the frontlines (Siwicki, 2020).

Both patients and physicians have money saving advantages with the use of telemedicine. For patients utilizing telemedicine, there is no need to leave work and physicians

will not lose time or money on cancellations or no-shows (EVisit Telemedicine Solution, 2018). In addition, telemedicine costs for cash-only is less expensive than an urgent or emergency care visit for patients. Physicians can also gain telemedicine reimbursement they may not see during off-hours consultations (EVisit Telemedicine Solution, 2018).

Routine visits, renewing prescriptions, and physical exams do not always require a doctor's visit and long commute. Telemedicine can save time by completing these via video. Patients can use telemedicine to find quick treatments and physicians will not lose patients to quick-care retail clinics (EVisit Telemedicine Solution, 2018).

Direct-to-consumer telehealth may increase access by making care more convenient for certain patients, but it may also increase utilization and healthcare spending (Roth, 2018). Nemours Children's Health System had the opposite experience, however, a peer-reviewed study published by Telemedicine and e-Health Journal in April found that direct-to-consumer pediatric telemedicine significantly reduced ED and urgent care utilization, along with the associated cost (Roth, 2018). The study showed that without telemedicine, 27.9% of parents would have visited the ED and this projected a savings to the Florida healthcare system of about \$113.9 million. In addition, 36.6% of parents would have gone to the urgent care center and only 6% would have done nothing without telemedicine (Roth, 2018).

Enhancing communication between nursing staff and physicians, as well as physicians with specialists can provide a better understanding of other specialties in healthcare. An example would be a physician seeking expertise in the emergency room for a specialty such as Telestroke, while providing services or oncology and behavioral consultations. The benefits of this are that it is inexpensive, HIPPA-compliant, and easy-to-use. As it uses the technology platforms from the cloud and can be setup through phones, laptops, and tablet interactions (Roth, 2018). Medical collaboration includes texting, phone calls, email, messaging, which is more than just video interaction.

### **Disadvantages**

Prior to Covid-19, reimbursement for telemedicine services by The Centers for Medicare and Medicare Services (CMS) have been slowly relaxing its restrictions from when it was first introduced for what Medicare would pay for (Ladika, 2020). It was only the beginning of this year that Medicare Advantage Plans were offering telemedicine as a basic benefit and Medicare started paying for virtual check-ins for patients with physicians that have an established relationship. In March due to the pandemic, CMS lessened the restrictions and agreed to pay

the telehealth visits as would an in-person visit. Rules were waived that had required in-person visits with nursing home residents, hospice and end-stage renal disease patients (Ladika, 2020).

Only 10 states had payment parity laws that required equal reimbursement for virtual visits for commercial payers in 2019. Some states were ordered to reimburse providers from private insurers during the pandemic. Additionally, some payers waived cost sharing for telemedicine visits and even some matched the same rate as the CMS policy (Ladika, 2020).

Widespread testing may have its limitation when it comes to telemedicine. There is a smaller subset of higher risk patients that the clinical course may not be as consistent as it is with conventional telemedicine. Those patients will present with a more serious condition that will require in-patient care and early testing (Siwicki, 2020).

Traditionally, telemedicine has not used in response to a public health crisis like COVID-19, The Centers for Disease Control and Prevention (CDC) and other organizations are calling for healthcare facilities to adopt telemedicine in their policies while promoting its use in a quickly manner to protect patients and staff. Private insurance companies and government payers are making changes also to promote this, but it is a constantly changing policy as this pandemic is passing through with many updates (Siwicki, 2020). Telemedicine training to providers and staff will need to be revised as processes change and updated such as tools, scheduling processes, triage procedure, payer telehealth policies, billing practices, and setting new guidelines (Siwicki, 2020).

Limited access to hardware is also another limitation. Providers would need to have access and training with the right technology for the types of exams such as camera quality, sound, and angles (Siwicki, 2020). This also would include limited access to broadband internet network with some quality connections at hospitals. This can vary as there are healthcare services being provided in different environments such as an outside ten or non-hospital equipped buildings. Other limitations to consider are Wi-Fi connections and room construction in different areas.

A recent survey indicated that patients were willing to use telehealth, but barriers do still exist (Portnoy, Waller, & Elliott, 2020). In a healthcare system and time of need, people still would rather go back to the way they were used to prior with interaction as it was normal and routine for them. Patients would prefer the convenience of seeing their own provider each visit and maintaining that established relationship. Some patients are also unaware of the telemedicine option that is available and how to access it (Portnoy, Waller, & Elliott, 2020).

## Telemedicine after Covid-19

During the rise of Covid-19 in the United States and when the President declared a major disaster under the Stafford Act and an emergency under the National Emergencies Act, there were certain actions that waived and modified certain programs such as Medicare, Medicaid, Children's Health Insurance Program (CHIP), and Health Insurance Portability and Accountability Act (HIPAA) that would provide services and items to meet the needs and are available to these individuals (Faget, 2020).

For Medicare, under the Coronavirus Preparedness and Response Supplemental Appropriations Act, indicated that it was now providing Medicare telehealth on March 6, 2020. The act permitted health care providers to furnish Medicare telehealth services during the public health emergency, which includes physicians; non-physician practitioners (nurse practitioners, physician assistants, and certified nurse midwives) can provide telehealth services in outside rural areas in addition to treating patients inside their homes. Pre-emergency requirements for telehealth services were that upon a beneficiary located in a qualifying rural area and are being located to a qualifying originating site (Faget, 2020). Medicaid updated practice standards for telehealth services by originating sites can be anywhere the Medicaid member is located.

There are three main types of virtual services for Medicare that physicians and providers can provide to Medicare beneficiaries, which are Medicare telehealth visits, virtual check-ins, and e-visits. Medicare patients may use telemedicine for office, hospital visits, and other services that can also occur as an in-person visit. Virtual check-ins or brief communication technology-based services for patients to communicate with doctors are paid by Medicare, while the patient must verbally consent to receive virtual services (Telehealth, 2020). E-Visits are for patients that generate the initial inquiry and communication over a 7-day period and a patient-initiated online evaluation and management is conducted over a patient portal.

Summary of Medicare Telemedicine Services:

TYPE OF SERVICE	WHAT IS THE SERVICE?	HCPCS/CPT CODE	Patient Relationship with Provider
<b>MEDICARE TELEHEALTH VISITS</b>	A visit with a provider that uses telecommunication systems between a provider and a patient.	Common telehealth services include: <ul style="list-style-type: none"> <li>• 99201-99215 (Office or other outpatient visits)</li> <li>• G0425-G0427 (Telehealth consultations, emergency department or initial inpatient)</li> <li>• G0406-G0408 (Follow-up inpatient telehealth consultations furnished to beneficiaries in hospitals or SNFs)</li> </ul> For a complete list: <a href="https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/Telehealth-Codes">https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/Telehealth-Codes</a>	For new* or established patients.  *To the extent the 1135 waiver requires an established relationship, HHS will not conduct audits to ensure that such a prior relationship existed for claims submitted during this public health emergency
<b>VIRTUAL CHECK-IN</b>	A brief (5-10 minutes) check in with your practitioner via telephone or other telecommunications device to decide whether an office visit or other service is needed. A remote evaluation of recorded video and/or images submitted by an established patient.	<ul style="list-style-type: none"> <li>• HCPCS code G2012</li> <li>• HCPCS code G2010</li> </ul>	For established patients.
<b>E-VISITS</b>	A communication between a patient and their provider through an online patient portal.	<ul style="list-style-type: none"> <li>• 99421</li> <li>• 99422</li> <li>• 99423</li> <li>• G2061</li> <li>• G2062</li> <li>• G2063</li> </ul>	For established patients.

## Recommendations

Improvement on telehealth apps with self-service will benefit telemedicine after the pandemic; the next generation of products is beginning to merge with some incorporating artificial intelligence into the process (Roth, 2018). Apps will not only guide patients through questionnaires and collection of data but it could also be generated from a bot and interpret those responses. In return, by the time the patient connects with the provider, a majority of the legwork will be completed and will provide clinical interaction more focus based and efficient.

Although hospitals do prepare for crises, they were not prepared for what telehealth technologies had in leverages. With the use of telemedicine during and after the pandemic, more and more hospitals will begin to integrate telehealth and find other benefits using the technologies to prepare for other crises or other efficient ways. Limiting exposure to the essential workers and protecting the staff and patients is a very important factor that telemedicine will play a part of in the future.

Introducing new ways to provide products and services via telemedicine can increase efficiency, cost, and patient-to-provider interaction. For example, hospitals in Israel have integrated Tyto Care's telehealth solutions to examine Covid-19 patients in quarantine wards, in addition monitoring patients that are isolated at home by delivering them a TytoHome kit (Siwicki, 2020). As telemedicine companies are enhancing and evolving their apps and technology, companies such as PlushCare and EverlyWell plan to release at-home Covid-19 testing kits. Telemedicine companies like Doctor on Demand and HeyDoctor also offer free

coronavirus risk assessments (The Medical Futurist, 2020). These will help direct higher risk patients for a video or phone consultation with a provider.

Continuation of treatment of patients through telemedicine at home, in the hospital, in nursing homes, in physician's offices, and other places can be a primary option if another pandemic has surfaced and space is a factor to consider. Designing of the space to configure telemedicine equipment such as cables and high-resolution cameras, speakers and monitors just like an eICU would be equipped today. Providing bedside care more conveniently for the patient as they would not have to travel and enable video communication with all parties involved in patient's care (Roth, 2018). This would also enhance patient's living in remote locations, limiting exposure and risk to pathogens and the need for transportation for patients with mobility issues.

Telemedicine is a \$29.6 billion industry with an expectation to grow 19% annually between 2017-2022 with the likelihood of preparation for another pandemic, shortage of physicians, government initiatives and more there will be opportunity for international collaboration (Research and Markets, 2020). Telemedicine projects with other countries that may have better knowledge and provide resources can be proven to be effective for the improvement of quality in the telemedicine services that are currently offered in the U.S. (Chellaayan, Nirupama, & Taneja, 2019).

Making telemedicine a more standard method of healthcare and accepting telemedicine by the public along with medical professionals can also improve the healthcare system. In general, changing reimbursement guidelines by all payers not just by Medicare but to also include commercial and private can be benefit patients that use telemedicine services.

## **Conclusion**

In conclusion, telemedicine has proven to be a critical component during a pandemic and will most likely be needed if another occurs. Preparation from all aspects from regulatory, billing, reimbursement, patient awareness, and enhancements in technology will provide success in patient care and all healthcare systems to utilize telemedicine. Continuation of research, government initiatives for these services to be standardized in healthcare, and expanding in services both in products and international collaboration will help bring forth a better future for healthcare with telemedicine.

## References

- American Medical Association. (2020, April 23). *AMA quick guide to telemedicine in practice*. Retrieved May 14, 2020, from American Medical Association: <https://www.ama-assn.org/practice-management/digital/ama-quick-guide-telemedicine-practice>
- Boxer, R. L. (2019, May 13). *Advantages and utilization of telemedicine*. Retrieved May 29, 2020, from MHealth: <http://mhealth.amegroups.com/article/view/25626>
- Chellauyan, V., Nirupama, A., & Taneja, N. (2019). Telemedicine: New Technology, New Promises? *Indian Journal of Community Health: 31,4*, 437-441.
- eVisit. (2020, June 12). *10 Pros and Cons of Telemedicine*. Retrieved June 12, 2020, from eVisit: <https://evisit.com/resources/10-pros-and-cons-of-telemedicine/>
- eVisit. (2020, June 20). *What Is The Difference Between Telemedicine, Telecare and Telehealth?* Retrieved June 20, 2020, from eVisit: <https://evisit.com/resources/what-is-the-difference-between-telemedicine-telecare-and-telehealth/>
- EVisit Telemedicine Solution. (2018, May 26). *How Does Telemedicine Work*. Retrieved May 14, 2020, from EVisit Telemedicine Solution: <https://evisit.com/resources/how-does-telemedicine-work/>
- Faget, K. Y. (2020). Telehealth in the Wake of COVID-19. *Journal of Health Care Compliance 22(3)*, 5-66.
- Ladika, S. (2020). Opportunity Calling. Will COVID-19 Bring Telehealth Into the Mainstream of American Healthcare? . *Managed Healthcare Executive, 30(5)*, 19-21.
- Mahar, J. H., Rosencrance, G. J., & Rasmussen, P. A. (2018). Telemedicine: Past, Present, and Future. *Cleveland Clinic of Journal Medicine (85,12)*, 938-942.
- Mayo Clinic. (2020, May 15). *Mayo Clinic*. Retrieved June 2, 2020, from Telehealth: Technology Meets Healthcare: <https://www.mayoclinic.org/healthy-lifestyle/consumer-health/in-depth/telehealth/art-20044878>
- Modern Healthcare. (2020). Automated chatbots screen patients, employees for COVID-19. *Modern Healthcare (14)*.
- Park, A. (2020, March 30). PREVENTING THE NEXT PANDEMIC. *Time Magazine, 195(11)*, p40-43.
- Portnoy, J., Waller, M., & Elliott, T. (2020). Telemedicine in the Era of COVID-19. *The Journal of Allergy and Clinical Immunology*, 1489-1491.
- Research and Markets. (2020, May). *Global Telemedicine Market Outlook 2022*. Retrieved June 10, 2020, from Research and Markets:

<https://www.researchandmarkets.com/reports/3766749/global-telemedicine-market-outlook-2022>

Roth, M. (2018, August 28). *4 Ways Telemedicine Is Changing Healthcare*. Retrieved May 12, 2020, from Health Leaders Media: <https://www.healthleadersmedia.com/innovation/4-ways-telemedicine-changing-healthcare>

Siwicki, B. (2020, March 19). *Telemedicine during COVID-19: Benefits, limitations, burdens, adaptation*. Retrieved May 14, 2020, from Healthcare IT News: <https://www.healthcareitnews.com/news/telemedicine-during-covid-19-benefits-limitations-burdens-adaptation>

Telehealth. (2020, March 17). *Medicare Telemedicine Health Care Provider Factsheet*. Retrieved May 14, 2020, from Center for Medicare and Medicaid Services: <https://www.cms.gov/newsroom/fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet>

The Medical Futurist. (2020, March 31). *Covid-19-was-needed-for-telemedicine-to-finally-go-mainstream/*. Retrieved May 15, 2020, from The Medical Futurist: <https://medicalfuturist.com/covid-19-was-needed-for-telemedicine-to-finally-go-mainstream/>



**Non-Profit HealthCare Finance:  
Post Covid-19 in the New Normal**

[The author is a senior business analyst in a health care management system]

## **Introduction:**

This paper explores the perennial problem of non-profit health system finance, now exacerbated by health conditions and the new business climate under the Covid-19 Pandemic. The majority of organizations providing non-profit healthcare have little financial margin available for contending with anything but nominal business fluctuations. Significant financial disruption, such as changes in federal or state funding plans, economic slowing, or events causing significant national economic hardship caused by natural disasters, pandemics, etc. are sufficient to pose an existential threats to the financial survival of the organization, at least causing significant disruption in service delivery and failure to meet the mission objectives of the organization. This paper describes a number of tools available to enhance survivability during both normal economic conditions and during the current pandemic crisis and recovery, as well as develops resources for further exploration if the reader is interested.

## **Background:**

Common financial practice, for many years, in non-profit healthcare has been to tune operating margins to be very slim. In reviewing literature including, Becker's Hospital CFO Report and Modern Health Care, these margins are declining even more in recent years, frequently maintaining a net above EBITA of only 1% to 2% (Ayla Ellison, 2017) (Alex Kacik, 2018). The capital structure and working capital policies of the non-profit organization (NPO) are not designed to maintain truly healthy margins and savings, for several reasons to be discussed later, and this is still true in even large NPO health care systems. The Journal of Healthcare Finance cites Medicare Costs Reports data on all US hospitals indicating that few hospitals in general are well prepared for an enduring loss of cash (Dr. Upadhyay, 2020). Covid-19 has swept the world leaving no person unaffected financially or, more directly, through social changes and even illness, causing layoffs and furloughs in hospitals across the globe. Hospitals, in particular, need to remain financially healthy in order to deal with the added health and social burden resulting not only from the pandemic illness itself, but the extended actuarial and collateral fallout of the pandemic which has resulted in sweeping economic disaster for much of the world and which will have a long-term impact on tax basis, discretionary spending, charitable giving and investment, all of which non-profit hospitals have a particularly strong dependence for ongoing support, with few reserves to handle a long term economic impact.

## Limited Margin Patterns of the Non-Profit Health System

The Case for NPO low margins is legitimate. Investor Signaling and cases of Managerial Agency are a reality in the non-profit sector, every bit as much as they are in the for-profit business world. Where investors in the for-profit world may look for cues about a return on investment when considering making additions to balance their portfolio, non-profit supporters look for signs as well. The non-profit benefactor, whether an institution or an individual, wants to see a return, which may not necessarily be financially beneficial, but is still gratifying and satisfactory. Business Admin. Prof. John Zietlow in a Symposium discussion on NPO Capital Mgmt. states that the standards for an appropriate and mature financial strategy will look to ensure that funds are being controlled and spent appropriately and that cash management proficiency, and the reputation for being an accountable steward, enhances the likelihood of being granted more resources in the future for an NPO (Zietlow, 1995). Low margins may look more attractive to gain additional future funding: where a savings and investment portfolio are strong, supporters may be more likely to divert funds to apparently 'more needy' organizations. In addition, a marginal cash-on-hand financial profile means less capital waste and agency spending on the part of the organization, as it does in for-profit firms. Typical cash on hand for a non-profit healthcare system, as a guiding principle, is to only retain as little as three to six months of operating cash with an average holding of roughly seven months, at the most (Alex Kacik, 2018) (Ayla Ellison, 2017). However, average cash on hand in a recent study of the Covid-19 Epidemic found significantly less, around 70 to 100 days, and that this value was inversely proportional to Covid-19 cases in local populations, meaning reserves were depleted quickly in the most impacted areas (Sayeh S. Nikpay, 2020). As outlined in Ehrhardt's Corporate Finance textbook, close margins lead to unintended financial distress costs with additional potential inefficiency due to debt burden, loss of labor resources and assets, and even bankruptcy (Ehrhardt, 2020).

During the current Covid-19 pandemic, most hospital systems were shuttered from normal profit generating practice for nearly six months while incurring high-loss costs in preparation for and while treating the disease. According to the United Nations, overall global trade values fell by a whopping 3% in the first quarter of 2020, with an estimated 27% decline in Q2 and commodity prices falling by 20% (United Nations, 2020). As an example of losses, the Mayo Clinic projected losing \$3 Billion during the course of the year with 30,000 employees impacted by work time or job loss (HealthPartners, 2020). The US Federal government responded by issuing the CARES Act (Coronavirus Aid, Relief and Economic Security) act to

help offset economic impact, including the largest unemployment spike in US history since the great depression (Treasury Dept, 2020).

### **A Fundamental Change of Pace, neglecting Pandemic:**

At the root, even without the effects of Covid-19 on health care capacity and response planning, Non-Profit Health Care systems can safely, and ideally, change financial policies in order to maintain longer term reserves of cash on hand and overall availability of Free Cash Flow (FCF) with low debt leverage. Non-Profit Quarterly Review describes how Healthcare should have sufficient surpluses (profits) for the following activities, particularly in order to sustain hardship (Jain, 2017):

- Working capital for liquidity and reserves;
- Change capital (sometimes referred to as risk, growth, or innovation capital);
- Additional Capital campaigns for hard assets; and
- Endowments in perpetuity.

This means that opportunities for growth and creating sources that protect against fluctuations are curated well beyond regular expenses and maintenance. Surpluses designated for liquidity and operating reserves, as well as for change capital, should not be funneled into hard assets and capital campaigns and fund raising or other methods should be used to generate those funds as well as continuation and maintenance. Ongoing endowments and other revenue streams that have little to no risk of fluctuation under economic hardship should be sought. These can include revenue streams that synergize with the existing business. Examples include: Sports PT and Gym access for patients that concurrently provides community access for paid sports memberships; hospital extensions that dual purpose as teaching and educational resources, while extending spare capacity during catastrophic or surges in utilization. Additional investments, short and long term, as long as business activities stay within government guidelines, come with no requirement to pay taxes on profits, including on stock dividends or gains on sales. Additional tax sheltering can be obtained by combining business centers and administrative functions either within or supporting clinical settings which can reduce property and building taxes.

### **Developing Opportunities as a Result of the Current Pandemic:**

Non-Profits proficiency and a quick response in applying will facilitate capitalizing effectively on an extensive increase in current government funding in response to Covid-19. This includes an additional \$2 trillion in government grants and loans (Dean G. Smith, 2020). \$100 billion is designated for hospitals with increases in Medicaid and Medicare reimbursements, with an additional \$30 billion allocated to hospitals via Medicare revenues. It is anticipated more funding will become available. Additionally, benefactors will see increases in reserves as more justifiable both currently and under the 'new normal' of care, understanding that a pandemics potential to cause disruption is a real threat to business operations.

Portland Business Journal cites an article with cases of the wealthiest us hospitals receiving billions of dollars in bailout money intended for struggling providers, including those that have very plush reserves (New York Times, 2020). Of interest is that Providence of Seattle, a non-profit, maintains reserves of up to \$12B and received \$509M in Federal assistance in the spring of 2020. Providence is proficient in obtaining funding, but this is in the wake of a negative shift in investment income of over \$1.3B as a result of stock market volatility after Covid-19, and a \$1.1B net loss during the first quarter of 2020 alone (Shannon Muchmore, 2020). Much of the losses were long term investments and were offset by strong cash on hand reserves.

### **Longer Term Change Guidance under the New Normal:**

The Oregon Office of Emergency Management, states that recovery from Covid-19 could last a decade (Ben Botkin, 2020). Additionally, Covid-19 has left an indelible impression in changing social practices and expectations. Social distancing, and isolation practices will result in changes in capacity and methods of communication for the foreseeable future, perhaps ushering in a new era of expectation around remote working and telemedicine, patients and families waiting longer for hospital procedures, changes to the financial methods to raise money and a host of other factors that impact cost of operations and sources of income. New methods will need to evolve including direct fund raising, efficient surge capacity utilization, and adapting to new challenges that are compounded by the pandemic.

Direct fundraising methods of the past, based on gatherings and banquets with speaking engagements will likely be replaced by online and mailing campaigns. The following patterns in Fundraising will emerge of necessity: Indirect methods will need to be implemented including

effective online platforms that encourage contributions and facilitate an understanding of the needs and the mission of an organization, explain methods to contribute, market inspiring outcomes and patterns of ongoing giving. While these efforts may be informed by marketing experience and understanding historical habits in providing support and contributions, they of necessity need to be suited to learning under the new normal and understanding new ways to attract funding. Platforms of fundraising need to be targeted and algorithmic in design to assess the best pathways that create results. Methods need to find ways of being engaging in the new-normal - appealing while remote and indirect. Targeted firms and wealthy donors today can be sought out with the assistance of vendors offering data driven vendor analysis (see end listing of Fundraising Vendors).

Capacity utilization under the new normal is risky. As stated earlier, medical systems and hospitals need to be able to support surges of activity under pandemic or catastrophic events, yet, the financial capacity and resilience required can be challenging. Added unutilized equipment and space, as is needed for surge capacity, produces a burden of fixed expenses. Optimally, finding additional ways to provide expansion under new guidelines for social distancing and spacing requirements as well as justification for funding and ongoing support is ideal, while also finding utilization for spaces that can be readily adapted and repurposed situationally.

### **Adapting to New Challenges**

Challenges under the new normal include increased cybercrime, capacity planning, ongoing maintenance, and technology shifts such as telemedicine and telecommuting.

Cybercrime has spiked during the pandemic crisis according to the UN, with a 600% increase in incidents and particular focus on health care organizations and medical research, globally (Ellen Cranly, 2020). Per organization, cybercrime can range in the millions of dollars, with trillions of dollars lost annually around the world (Sam Smith, 2019). Ensuring implementation or adequate maintenance and training with a security being an integral part of newly developing online exposure is crucial. This includes protection for members and patients. Patients who are elderly and at risk are particularly vulnerable to the increasing number of online fraud opportunities.

Capacity Planning is more challenging under the Pandemic with concerns about spacing and treatment of patients while mitigating risk of infection. Hospitals historically carefully monitor placement and timing of shifts and patient to staff ratios in order to maximize returns

while providing quality care. The algorithms and planning practices under the new expectations of surge capacity, social distancing rules, space regulations, materials on hand including personal protective equipment (PPE), and expertise in dealing with cleaning, sterilization, and treatment of acute and elective patients, as well as considerations around separation and isolation will provide numerous challenges around learning and optimization in the near and distant future. Healthcare IT news describes new tools becoming available to help with just these matters including capacity planning under Covid-19 (Kat Jercich, 2020). Advanced and proactive learning will leave organizations in a good place for cost savings and planning for implementation under newly learned and shared practices from those on the forefront of these changes.

Ongoing maintenance cannot be deferred during the Pandemic and may increase due to capacity, cleaning, and other challenges incurred. It is important to plan on the added overhead of maintenance schedules increasing as well as costs. From a finance perspective, obsolescence and amortization schedules may adjust as well to account for changes in utilization and purpose of buildings and materials. The pandemic crisis is likely to have shifted patterns significantly and lack of planning for these changes can be costly.

The attending technology shift, for most hospitals, has been a fairly seamless experience with IT departments shouldering much of the burden and adapting quickly to new needs of remote workers, online meeting infrastructure, and accommodating telemedicine needs. Efforts have included adapting inhouse resources to facilitate the telemedicine experience. In his book "Remote: Office not Required," Jason Fried describes telecommuting as a novel method to attract high performing employees and retain them, but also the risks of remote work, including productivity, over-working, available resources and other issues (Jason Fried and David Heinemeier Hansson , 2013). The book includes a toolbox of additional resources to assist in making telecommuting successful and cost effective. It is assured that hospital administration will need to find new ways of measuring productivity for knowledge workers and administrative staff that work remotely, including assessing effectiveness, removing barriers to productivity and recognizing employee agency to reduce inefficiency. Additionally, revisiting interaction and synergy within the organization is timely from a theoretical perspective to ensure proper cross support and business flows are appropriate, particularly from a quality perspective, to reduce patient risk, mitigate provider burnout and improve efficiency. Particular attention is given to this topic in Public Organization Review with studies showing how adaptation is critical in public healthcare delivery systems (Sambasivan, 2020). Details to attend to in adapting to remote work and telemedicine practices including abounding distraction

for employees, agency, ergonomic exposure to improvised offices and settings, and capturing efficiency and inefficiency with statistics over time. Preferably, companies have previous knowledge worker data for comparison, but will work to understand real barriers before implementing solutions or invoking a carrot and stick approach to worker productivity. Missing the mark on causality can be catastrophic for an organization already pressed for experienced and capable resources and then financially constrained. Losing employees is extremely costly, whether intended, well planned, or not. Provider and employee burnout are particularly challenging issues in the medical industry where the 'triple aim' of healthcare quality and financial outcomes has shifted to the 'quadruple' aim to include increasing focus on reducing provider burnout. This has been greatly compounded by the additional time, overhead, and stress of managing remote telehealth, patient fear, exposure to pandemic disease and the associated risks (Nathan Houchens, MD , Renuka Tipirneni, MD, MSc, 2020).

### **Conclusions:**

Non-profit medical care has significant advantages in savings and delivery opportunities that truly benefit the community in which they serve. The opportunities to act now, producing results proactively and not waiting for pressure to change under new forces applied in the current pandemic crisis will ensure much greater likelihood of financial success and continuation of the non-profit mission. The components of delivery in this paper have focused on several key areas requiring immediate attention under three key themes:

1. Adapting to new technology proactively, particular remote work efficiency and quality.
2. Adapting financial models for indirect technologies and increased financial reserves
3. Learning the new funding landscape quickly to gain as much resource advantage, now, as possible and not wait to respond to delayed learning.

Errors or sluggish responses to the immediate exigencies of nonprofit medical care under the new normal will be costly and represent an existential threat to most organizations in the immediate future. It is recommended that organizations respond by actively engaging in these practices to be best prepared for success over the next several years.



## References

- Alex Kacik. (2018, Sept 20). *Not-for-profit hospital operating margins continue to contract*. Retrieved from Modern HealthCare:  
<https://www.modernhealthcare.com/article/20180920/NEWS/180929982/not-for-profit-hospital-operating-margins-continue-to-contract>
- Ayla Ellison. (2017, Feb 21). *Becke's Hospital CFO Report*. Retrieved from 65 financial benchmarks for hospital executives:  
<https://www.beckershospitalreview.com/finance/65-financial-benchmarks-for-hospital-executives-022117.html>
- Ben Botkin. (2020, May 27). *Recovery From COVID-19 Could Last A Decade*. Retrieved from The Lund Report: <https://www.thelundreport.org/content/recovery-covid-19-could-last-decade>
- Dean G. Smith, P. J. (2020). Health Care Finance and Covid-19. *Health Care Finance*, 4(4).
- Dr. Upadhyay, D. S. (2020). Health Care Finance and COVID-19. *Journal of Health Care Finance*, 3.
- Ehrhardt, M. &. (2020). *Corporate finance: A focused approach* (7th ed.). Mason, OH: Cengage Learning.
- Ellen Cranly. (2020, May 23). Retrieved from Business Insider:  
<https://www.businessinsider.com/top-un-official-warned-of-cybercrime-spike-during-pandemic-2020-5>
- HealthPartners. (2020, April 23). *HealthPartners continues to respond to COVID-19 pandemic*. Retrieved from HealthPartners :  
<https://www.healthpartners.com/hp/about/press-releases/healthpartners-continues-to-respond-to-covid19-pandemic.html>
- Jain, H. H. (2017, Spring). How to Think Differently about Your Money: Capital Explored. *Nonprofit Quarterly*.
- Jason Fried and David Heinemeier Hansson . (2013). *Remote: Office Not Required*. New York, NY: Crown Publishing.
- Kat Jercich. (2020, May 5). *Modeling tool helps hospitals predict capacity timeline for COVID-19 patients*. Retrieved from Healthcare IT News:  
<https://www.healthcareitnews.com/news/modeling-tool-helps-hospitals-predict-capacity-timeline-covid-19-patients>
- Nathan Houchens, MD , Renuka Tipirneni, MD, MSc. (2020, June 17). Compassionate Communication Amid the COVID-19 Pandemic. *Journal of Hospital Medicine*. Retrieved from Journal of Hospital Medicine:  
<https://www.journalofhospitalmedicine.com/jhospmed/article/223583/hospital-medicine/compassionate-communication-amid-covid-19-pandemic>
- New York Times. (2020). Wealthiest hospitals got billions in bailout for struggling health providers. *Portland Business Journal*. Retrieved from  
<https://www.bizjournals.com/portland/news/2020/05/26/hospitals-bailout-billions-nyt.html>

- Sam Smith. (2019, Aug 27). *Business Wire*. Retrieved from Business Losses to Cybercrime Data Breaches to Exceed \$5 trillion by 2024:  
<https://www.businesswire.com/news/home/20190826005013/en/Business-Losses-Cybercrime-Data-Breaches-Exceed-5>
- Sambasivan, S. K. (2020, Jun). An Integrated Multitheoretical Perspective of Public Healthcare Services. *Public Organization Review*, 20 (2).
- Sayeh S. Nikpay, P. M. (2020). Hospital Financial Preparedness and COVID-19. *Journal of Health Care Finance*, 46(4), 49.
- Shannon Muchmore. (2020, May 26). *Providence, 1st to treat COVID-19 patient, posts \$1.1B loss* . Retrieved from HealthCareDive:  
<https://www.healthcaredive.com/news/providence-1st-to-treat-covid-19-patient-posts-11b-loss/578585/>
- Treasury Dept. (2020, Jun 21). *The CARES Act Provides Assistance to Workers and their Families*. Retrieved from US Department of the Treasury:  
<https://home.treasury.gov/policy-issues/cares/assistance-for-american-workers-and-families>
- United Nations. (2020, May 13). *COVID-19 triggers marked decline in global trade, new data shows*. Retrieved from United Nations Conference on Trade and Development:  
<https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2369>
- Zietlow, J. (1995). Working Capital Management in the Nonprofit Sector. *Proceedings of the 11th Annual Meeting, International Symposium on Cash, Treasury*,, (pp. 4-6). New York, NY,.

**United States University Enrollment Numbers  
During the COVID-19 Pandemic Recession**

By Andrew Dworak

[The author is a staff resource person in a higher-education institution]

## **United States University Enrollment Numbers During the COVID-19 Pandemic Recession**

The coronavirus disease (COVID-19) pandemic, brought on by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has caused unprecedented disruption across the globe, impacting individuals and businesses in ways we have not seen in the last century. In the United States alone, statewide lockdowns have forced businesses, schools, places of worship, and many other institutions to close their doors temporarily or have their work force operate remotely when capable. This is to follow social distancing guidelines put forth by the United States Centers for Disease Control and Prevention (2020). As a result, this has pushed nearly 21 million Americans into unemployment, as of June 2020, and has plunged the United States and the world into a global recession (Bureau of Labor Statistics, 2020). The future is uncertain in these trying times as businesses continue to wonder if they will be able to survive or adapt to what a “new normal” might look like until and after an effective vaccine or treatment is found for COVID-19.

Among organizations questioning their future during the pandemic and recession are universities. The pandemic spread globally at a time when most universities across the United States were already wrapping up their spring semester and students would either be transitioning into summer break or graduating. With students on break, universities have time to plan for their fall semester; a time when students would be enrolling and returning to classes, thus bringing in the revenue that these institutions rely on for their budget. Historically, universities have fared well during economic recessions, as people tend to take the time to go back to school or get a new education in an attempt to improve their career prospects in the future. However, this current recession is different than the others. Whereas recent recessions in the United States have been caused by market collapses or instability brought on by terrorism, the current recession stems from a novel coronavirus. This virus imposes a unique set of challenges that have not been observed on this scale since the 1918 flu pandemic that, similar to today’s pandemic, ravaged the globe. While there is good reason for universities to use historical data to try and make predictions of their financial future, it is evident that more thought must be put into how these institutions will approach reopening in the fall. This includes universities considering how they will keep their faculty, students, and workers safe, without losing out on student tuition, a large revenue driver that these universities rely on for their cash flows. Given these challenges, this paper will consider the history of previous recessions’ impact on enrollment and how universities may flourish or flounder due to the current pandemic.

## **A Brief History of Past Recessions**

### **Early Recessions**

In 1981, the United States entered the worst recession it had seen since the Great Depression. Although the 1981 recession only lasted a year, it brought the unemployment rate from 7.5% at the beginning of the recession to 11% in late 1982 (Bednarzik et al., 1982). This recession stemmed from the 1979 energy crisis and policies implemented by the Federal Reserve to combat high inflation. The hardest hit sector during this recession was manufacturing, which represented 90% of total job losses in 1982 (Urquhart & Hewson, 1983). Between 1981 and 1982, however, there was also a small, but noticeable increase in higher education enrollment as the unemployment rate rose (Barr & Turner, 2013). Similarly, at the end of the recession when unemployment rates fell, universities saw a decrease in college enrollment. These tendencies of enrollment fluctuating with unemployment rates were only foreshadowing the trend that would be seen in subsequent recessions.

### **More Recent Recessions**

In March 2001, the United States and other developed nations entered into a recession that would be relatively short compared to others, only lasting 8 months until November 2001. While it's debated what led to this recession, the most notable reason is the burst of the dot com bubble (Langdon et al. 2002). Further exasperating this recession within the United States were the ramifications of terrorist attacks. Near the end of the recession, the terrorist attacks that took place on September 11, 2001 caused the Dow Jones Industrial Average to experience its largest one-day point loss and largest one-week losses in history; at least up until that point (Popescu, 2019). During this time, unemployment rose from 4.2% at the start of recession to 5.6% at the end (Langdon et al., 2002). As witnessed during the 1981 recession, universities experienced a notable increase in student enrollment as the unemployment rate rose which was followed by a decline in enrollment as unemployment rates fell (Barr & Turner, 2013).

The last major recession began in December 2007 and ended in June 2009, marking the longest recession since World War II. The recession, commonly referred to as the Great Recession, was largely caused by the collapse of the housing market. The Financial Crisis Inquiry Commission reported the Great Recession could have been avoided if it weren't for some key factors. This included a lack of governmental regulation of the financial industry, too

many financial firms taking on too much risk, as well as excessive borrowing by consumers and corporations (United States Financial Crisis Inquiry Commission, 2011). According to the report, roughly 8.7 million jobs were lost, and the unemployment rate doubled to 10%. As before, there was a sharp increase in college enrollment as unemployment rose (Barr & Turner, 2013).

### **Current Recession**

This current recession, however, is not like the recessions of the recent past. The recession we now find ourselves in has been caused by a novel coronavirus only discovered late last year in China. This novel coronavirus, now known to science as SARS-CoV-2, quickly spread throughout China and caused the country to lockdown. Businesses were shuttered for nearly two months as the Chinese government tried to control the spread of SARS-CoV-2. While these businesses in China were closed, we began to feel economic pains in the United States, as manufacturing operations and supply lines that United States businesses rely on were suddenly non-operational. During this time, SARS-CoV-2 was swiftly spreading out from China and across the globe, hitting Europe next, which prompted more countries to begin enforcing lockdowns. It wasn't until late March, after the virus made its way to the United States, that the country followed suit and lockdown. Overnight in many states, businesses shut their doors, schools were closed, and only essential employees were allowed to continue working in person. By June 2020, the United States is only just beginning to reopen, after nearly two full months of lockdown. In that time period, millions of Americans filed for unemployment if they qualified, and the unemployment rate was at 13.3% (Bureau of Labor Statistics, 2020). The stock market plunged as investors began to panic (Zhang et al., 2020). As a result, many economists now agree we are firmly in a new recession that will rival or surpass the Great Recession of 2008.

### **Why the Pandemic Recession is Different**

As the recession and the pandemic continue with no current end in sight, university leaders are trying to finalize their budgets for the next academic year. As of June 2020, it is estimated the universities could lose up to \$19 billion in revenue losses from tuition alone (Kim et al., 2020). Some institutions are looking to the historical data of past recessions to forecast their potential revenue as previous recessions have exhibited spikes in enrollment numbers as unemployment rises (Barr & Turner, 2013). As of June 2020, with the unemployment rate at the

unprecedented level of 13.3%, the highest since the Great Depression, if you only use the historical data of past recessions it might be reasonable to assume that enrollment will skyrocket as a result (Bureau of Labor Statistics, 2020).

However, the cause of this recession, a pandemic, confounds and therefore complicates the use of historical data in forecasting enrollment. For starters, the three recessions previously mentioned were caused by mostly economic factors or direct human factors. The pandemic creates issues unique to itself, such as the safety of a population. Concerns for safety and the reasonable fear people might have venturing back out into public spaces without an effective treatment or vaccine is something that universities will have to take into account when finalizing their 2020-2021 academic year budget and estimating how many new students they can expect to get in the fall. Although China has been reopened for two months as of June 2020, their economy is not operating at full capacity. Retail sales in China for April 2020 were down 7.5% compared to the same period the year before (National Bureau of Statistics of China, 2020). This is likely due to patrons' apprehension to engage with public spaces that might not seem essential. Even the population in rural China, which was mostly protected from the spread of SARS-CoV-2, are feeling economic burdens, with 63% saying that the price of foodstuffs had increased (Rozelle, et al. 2020).

While one can argue that higher education is an essential organization that people would risk their health for, there are additional factors that must be taken into consideration. In the time following the 1981 recession the cost of tuition for most universities has drastically increased. In order to get a higher education, most students have to take out student loans and put themselves into debt, which on average is \$32,731 (Federal Reserve, 2017). Due to the current recession it is possible that certain industries will either be significantly changed or no longer exist once the pandemic ends. Individuals out of work might find going into debt or changing industries to be too risky when considering if they or their children should go back to school. This is especially true for those that might be out of work already. Jon Boeckenstedt, vice provost for enrollment management at Oregon State University, speculated that because the service industry has been hit particularly hard, parents who work full time or students that work part time in this industry will not be able to afford to go to university this year (Jaschik, 2020).

Apart from the challenges of keeping students, faculty, and staff safe from SARS-CoV-2 while on campus and the large upfront cost of moving courses online in a meaningful way, there is another large factor as to why this current recession might not continue the same trends as before. The Great Recession of 2008 was so devastating to the economy that it changed how public universities are funded and who foots the bill of rising tuition costs (Barr & Turner, 2013).

During the Great Recession states drastically reduced their funding of public four-year universities and community colleges. Furthermore, in the decade following the recession, states have not made efforts to fully reinstate the level of funding these universities had received previously. In reaction to receiving less state funding, universities and colleges have had to compensate by continually raising their tuition, thus placing the financial burden of higher education on their students.

The ramification of high tuition has already been seen during the current pandemic related recession as students struggle with the decision of whether or not they will enroll or in changing their first-choice school. For example, students that changed the rank of their top school most frequently reported this choice was due to the cost of attendance (Kim et al., 2020). This lends credence to the economic hardship faced by many students and families, as new students and families are more unlikely to take on a large financial burden of student loans. Due to the unprecedented number of unemployed workers in the current recession and with so much uncertainty about job markets in the future, students might feel that taking on so much debt to get a degree might be more detrimental in the long run. Without a successful vaccine or treatment for COVID-19, this uncertainty will continue to linger.

One final consideration is also how the current recession impacts international students. As countries continue to keep their borders closed from international travel from fear of foreigners bringing the virus back to the country, international students are left in limbo. Thus, some are left wondering if they will be able to continue their studies in the fall or if they will even be allowed to enroll for the first time.

### **Why Current Enrollment Trends Could Decline**

When forecasting enrollment in higher education programs, we must also consider the United States' political response and management of the pandemic. In times of crisis, it is useful to have leadership that has concise and consistent language and decisions. Unfortunately, the United States has seen neither, for two major reasons. The first, is that the virus itself is novel. This means that science has no prior information to this particular virus. New information about SARS-CoV-2 is coming out daily, with out of date facts being updated constantly about how it is spread, the symptoms it can cause, and its mortality. Any new information that comes out is incredibly valuable to leadership at universities, as the information can drastically alter their reopening plans. The second issue is that in the United States, the virus and pandemic response has become a political issue between the two parties and that each state enacts their



own pandemic response plan. As a result, rules vary state by state, usually dependent on which political party the governor belongs to. These two factors directly impact universities attempting to create their response plan for the 2020 fall semester, as state laws and regulations may impede certain plans, while giving them certain freedoms in others. It's also problematic when some leadership claim that the worst of the pandemic is behind us, while others like Dr. Anthony Fauci claim we are still in the first wave (Armour, 2020). Regardless of where universities are located and what their states regulations are, university leaders would be wise to follow the most up to date data to make their decisions. Many states throughout the United States are in various stages of reopening, loosening their restrictions put in place to combat the spread of SARS-CoV-2. However, directly following reopening, case numbers for COVID-19 have begun to increase instead of dropping (Johns Hopkins University and Medicine, 2020). Additional concerns for universities center on how these numbers largely vary for different regions within the United States. Although the Northeast and the Midwest have seen their case numbers fall, cases of COVID-19 are steadily climbing in the West and rapidly accelerating in the South (Johns Hopkins University and Medicine, 2020). Depending on where a university is located, this information could drastically alter their response plan.

As of now, the best option to combat SARS-CoV-2 are non-pharmaceutical solutions such as social distancing and mask wearing. Recent data shows that these methods have helped tremendously in controlling the spread of the outbreak. Specifically, these measures have helped reduce spread by reducing the R number for the virus or the number of people an individual is expected to infect (Flaxman et al., 2020). Non-pharmaceutical solutions have also prevented approximately 530 million infections globally (Hsiang et al., 2020). University leaders will have to keep this information in mind when developing their reopening strategies. As a result of following these non-pharmaceutical solutions some universities have shuttered their campuses. However, closing campuses and moving to e-learning risks revenue loss due to students not paying for room and board as well as activity fees. For example, Moody's Investors Service (2020) stated that they expect higher education's finances will be negatively affected by the pandemic and predicted low enrollment for the fall 2020 semester.

Along with enrolling students within the United States, university leaders also need to take into account how many students will be enrolling in their programs from abroad. While the American Council on Education (2020) estimated that enrollment will be down 15% for the fall 2020 semester, they have also projected a 25% decrease in international student enrollment. The United States has historically seen a substantial number of international students come to the country to attend their programs. This trend, however, has been declining for decades and

only exasperated by the pandemic (Dennis, 2020). According to Dennis (2020), higher education has been experiencing disruptions in the forms of economic, political, technological, and societal trends that international recruiters have not been able to anticipate. Economic supremacy in the West is beginning to be challenged by countries in Asia and South East Asia, and some predict that they will either become equal or surpass the West in terms of economic growth (Hawksworth, 2015). For decades, universities in the United States have been seeing a fairly steady decline of international students from a variety of countries. In 1971, international students made up 36.7% of enrollments, whereas by 2014, only 22% of enrollments were from international students (Dennis, 2020). With the pandemic now being a factor, families and individuals might rethink or decide to not enroll in United States universities for the fall 2020 semester. As the United States is an epicenter for SARS-CoV-2 with the highest number of confirmed coronavirus cases (Johns Hopkins University and Medicine, 2020), the country's struggle to not reduce their infection rate, and the economic impact brought on by the subsequent recession, students might rightfully believe that their economic prospects would be better elsewhere when planning for their long term future. While larger universities might be able to survive the financial shortfalls that losing international enrollments will bring, smaller and mid-tier universities will suffer, causing them to potentially merge or close for good (Dennis, 2020).

Even outside of universities and higher education itself, there are potentially longer-term issues with enrollment. In the United States, most universities typically require an ACT or SAT score in order to qualify for admittance in undergraduate programs while post-baccalaureate programs require scores from the GRE, GMAT, LSAT, MCAT, or TOEFL. In the wake of the pandemic, large scale in-person testing with both students and test administrators crowded into a room is not feasible or safe. According to Horn (2020), some universities, like Case Western Reserve University, will not require ACT or SAT scores when applying for their university due to the pandemic. It remains to be seen if other universities will follow Case Western Reserve's actions, or what the long-term implications might be for forgoing this requirement. If universities do decide they will still require the ACT or SAT scores when applying, they can expect enrollment numbers to drop significantly as students would not have had the opportunity to take the test.

Beyond dropping enrollment due to financial and physical constraints, a recent survey by *Inside Higher Ed* (Lederman, 2020) showed that while university leaders are worried about their university's overall financial stability, decline in overall future student enrollment, and their ability to afford to employ staff and faculty in the long-term future, they are primarily worried about their students and faculty's mental and physical well-being in the immediate-future. Thus, we can

assume that these presidents perceive the very real challenges of keeping their students and employees safe, while also trying to maintain their financial revenue streams. More and more the balance between these two issues is strained as infection numbers for COVID-19 continue to stay flat or increase, rather than declining in the United States.

### **Why Historic Recession Enrollment Trends Could Hold**

With so much uncertainty within higher education, there is still some evidence that enrollment might increase as it did with previous recessions. While the Great Recession in 2008 was not that long ago, technology has significantly improved in that time, and with it there are new opportunities for universities to begin to explore online e-learning. Furthermore, universities that already have robust online programs could see larger enrollment numbers. As such, universities could see a form of redistribution in their enrollment. Rather than choosing to not attend college, students could shift away from traditional four-year universities to universities with stronger and possibly cheaper online programs (Bevins et al., 2020). Thus, rather than losing students, certain institutions will see increased enrollment while others will see drops. While such reports remain hopeful that universities will be able to bear the brunt of low enrollment, they acknowledge the significant challenges that universities will have to face in order to prepare for the following educational year.

There is also the consideration that technology will not have a significant impact on enrollment, and instead universities will guarantee that there will be in-person classes taking place on campus in the fall. An example of a university going this route is Purdue University. On April 21<sup>st</sup>, 2020, President Mitchell Daniels Jr. wrote a letter which addressed the concerns surrounding the fall 2020 semester and the COVID-19 pandemic. In the letter, Daniels says that the university will charge ahead with reopening in the fall, stating “Purdue will employ every measure we can adopt or devise to manage this challenge with maximum safety for every member of the Boilermaker family”. Leadership at Purdue University have weighed the risks of exposing their faculty, staff, and students to SARS-CoV-2, and have made the decision that they will be able to keep everyone safe. To prospective and returning students, this level of confidence could be seen as a reassurance. If people feel that they will be put into undue risk, the chances of them returning is lowered, however, if they feel they will be protected, it might push them to enroll.

## Conclusion

Ultimately, it is simply too early to tell how the recession and pandemic will impact student enrollment numbers for the fall 2020 semester. While historical data and trends consistently point to enrollment numbers going up as unemployment numbers rise, this recession is far too different to confidently rely on past data and models. As universities are still crafting their response plans and deciding on whether or not to invest in online solutions, hold classes in person, or some combination of the two, it is hard to ignore the glaring reality that the current recession has a real physical danger associated with it. Along with that, the only empirical way we have to mitigate that danger are the non-pharmaceutical methods in the form of social distancing, diligent hand washing, and wearing facial masks. While guaranteeing to remain open in the fall, no university can promise the complete safety of their staff, faculty, and students. If we consider the data from China, which had reopened completely in recent months, we know that consumer activity was low because citizens simply chose to stay away from crowded spaces (National Bureau of Statistics of China, 2020). Thus, it is initially hard to imagine that enrollment numbers will follow historic trends if students are expected to crowd into small classrooms or students are deterred from enrolling due to the financial burden of the recession. Finally, and most importantly, there is still the real risk of lockdowns going back into effect across the country, as many experts, scientists, and doctors warn that a second wave could hit during the United States' influenza season. As influenza often strikes the United States in October and lasts through March, this second wave would coincide with the fall and spring semesters at universities. Given this timeline, new or returning students might not be willing to take the risk of having their education cut short or disrupted if the state their university is located in reimposes the strict lockdown measures, forcing these schools to shutter their doors again and for students to move back home.

Unfortunately, robust data on enrollment that could assist the education world in making decisions will not exist until after the fall 2020 semester starts (i.e. after enrollment and payments are locked in). With the data that is presently available, the best that university leaders can hope for is a stable enrollment that reflects their predictions from before the pandemic and current recession began. Even then, insiders and experts still predict that these enrollment numbers will decline. Ultimately, the only thing universities can rely on, is the great uncertainty this pandemic and recession has brought.

## References

American Council on Education. (2020, April 10). *Higher education community requests \$46.6 billion for students and institutions in fourth supplemental package, proposes tax changes*. [https://www.acenet.edu/News-Room/Pages/Higher-Education-Community-Requests-\\$47-Billion-for-Students-and-Institutions-Proposes-Tax-Changes.aspx](https://www.acenet.edu/News-Room/Pages/Higher-Education-Community-Requests-$47-Billion-for-Students-and-Institutions-Proposes-Tax-Changes.aspx)

Armour, S. (2020, June 16). Fauci warns of coronavirus resurgence if states don't adhere to safety guidelines. *Wall Street Journal*. <https://www.wsj.com/articles/fauci-warns-of-coronavirus-resurgence-if-states-dont-adhere-to-safety-guidelines-11592338771>

Barr, A., & Turner, S. E. (2013). Expanding enrollments and contracting state budgets: The effect of the great recession on higher education. *The Annals of the American Academy of Political and Social Science*, 650, 168-193.

Bednarzik, R. W., Hewson, M. A., & Urquhart, M. A. (1982). The employment situation in 1981: New recession takes its toll. *Monthly Labor Review*, 105(3), 3-14.

Bevins, F., Krishnan, C., & Law, J. (2020, April 3). *Coronavirus: US higher education plan for an uncertain future?* McKinsey and Company. <https://www.mckinsey.com/industries/public-sector/our-insights/coronavirus-how-should-us-higher-education-plan-for-an-uncertain-future>

Bureau of Labor Statistics. (2020). *The Employment Situation—May 2020* (News Release USDL-20-1140). U.S. Department of Labor. <https://www.bls.gov/news.release/pdf/empsit.pdf>

Centers for Disease Control and Prevention. (2020, February 11). *Coronavirus disease 2019 (COVID-19)*. <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

Daniels, M. J. (2020, April 21). *A message from President Daniels regarding fall semester*.

Purdue University: Office of the President. <https://www.purdue.edu/president/messages/campus-community/2020/2004-fall-message.php>

Dennis, M. J. (2020). COVID-19 will accelerate the decline in international student enrollment. *Enrollment Management Report*, 24(4), 1–5. <https://doi.org/10.1002/emt.30672>

Flaxman, S., Mishra, S., Gandy, A., Unwin, H. J. T., Mellan, T. A., Coupland, H., Whittaker, C., Zhu, H., Berah, T., Eaton, J. W., Monod, M., Imperial College COVID-19 Response Team, Ghani, A. C., Donnelly, C. A., Riley, S. M., Vollmer, M. A. C., Ferguson, N. M., Okell, L. C., & Bhatt, S. (2020). Estimating the effects of non-pharmaceutical interventions on COVID-19 in Europe. *Nature*. <https://doi.org/10.1038/s41586-020-2405-7>

Federal Reserve. (2017). *Report on the economic well-being of U.S. households in 2016 - May 2017*. Board of Governors of the Federal Reserve System. <https://www.federalreserve.gov/publications/2017-economic-well-being-of-us-households-in-2016-education-debt-loans.htm>

Hawksworth, J., & Chan, D. (2015). *The world in 2050: Will the shift in global economic power continue?* <https://doi.org/10.13140/RG.2.1.5120.7129>

Horn, M. (2020, March 23). *COVID-19's long-term impacts on education in 2020 and beyond*. EdSurge. <https://www.edsurge.com/news/2020-03-23-covid-19-s-long-term-impacts-on-education-in-2020-and-beyond>

Hsiang, S., Allen, D., Annan-Phan, S., Bell, K., Bolliger, I., Chong, T., Druckenmiller, H., Huang, L. Y., Hultgren, A., Krasovich, E., Lau, P., Lee, J., Rolf, E., Tseng, J., & Wu, T. (2020). The effect of large-scale anti-contagion policies on the COVID-19 pandemic. *Nature*. <https://doi.org/10.1038/s41586-020-2404-8>

Jaschik, S. (2020, March 23). Admissions is in a state of uncertainty. *Inside Higher Ed*. <https://www.insidehighered.com/admissions/article/2020/03/23/admissions-state-uncertainty>

Johns Hopkins University and Medicine. (2020). *America Is Reopening. But have we flattened the curve?* Retrieved June 25, 2020 from <https://coronavirus.jhu.edu/data/new-cases-50-states>

Kim, H., Krishnan, C., Law, J., & Rounsaville, T. (2020). *COVID-19 and US higher education enrollment: Preparing leaders for fall*. McKinsey and Company.

[https://www.mckinsey.com/~media/McKinsey/Industries/Social%20Sector/Our%20Insights/COVID%2019%20and%20US%20higher%20education%20enrollment%20Preparing%20leaders%20for%20fall/COVID-19-and-US-higher-education-enrollment-Preparing-leaders-for-fall\\_F.ashx](https://www.mckinsey.com/~media/McKinsey/Industries/Social%20Sector/Our%20Insights/COVID%2019%20and%20US%20higher%20education%20enrollment%20Preparing%20leaders%20for%20fall/COVID-19-and-US-higher-education-enrollment-Preparing-leaders-for-fall_F.ashx)

Langdon, D. S., McMenamin, T. M., & Krolik, T. J. (2002). U.S. labor market in 2001: Economy enters a recession. *Monthly Labor Review*, 125(2), 3–33.

Lederman, D. (2020, March 27). Presidents fear financial, and human, toll of coronavirus. *Inside Higher Ed*. <https://www.insidehighered.com/news/survey/college-presidents-fear-financial-and-human-toll-coronavirus-their-campuses>

Moody's Investors Service. (2020, April 19). *Research announcement: Moody's - COVID-19 puts pressure on higher education finances*.

[https://www.moodys.com/research/Moodys-Covid-19-puts-pressure-on-higher-education-finances--PBC\\_1222963](https://www.moodys.com/research/Moodys-Covid-19-puts-pressure-on-higher-education-finances--PBC_1222963)

National Bureau of Statistics of China. (2020, May 18). *Total retail sales of consumer goods went down by 7.5 percent in April 2020*.

[http://www.stats.gov.cn/english/PressRelease/202005/t20200518\\_1745969.html](http://www.stats.gov.cn/english/PressRelease/202005/t20200518_1745969.html)

Popescu, O. M. (2019). The impact of terrorist attacks on the world economy. Stock market case study. *Romanian Economic Journal*, 74, 100-113.

Rozelle, S., Rahimi, H., Wang, H., & Dill, E. (2020, March 30). *Lockdowns are protecting China's rural families from COVID-19, but the economic burden is heavy*. International Food Policy Research Institute. <https://www.ifpri.org/blog/lockdowns-are-protecting-chinas-rural-families-covid-19-economic-burden-heavy>

United States Financial Crisis Inquiry Commission. (2011). *The financial crisis inquiry report: Final report of the National Commission on the causes of the financial and economic crisis in the United States*. Financial Crisis Inquiry Commission.

<http://purl.fdlp.gov/GPO/gpo3449>

Urquhart, M. A., & Hewson, M. A. (1983). Unemployment continued to rise in 1982 as recession deepened. *Monthly Labor Review*, 106(2), 3-12.



## **College After COVID-19: Financial Future of a Small College**

By Jennifer Kuklenski

[The author is an Associate Professor of Economics]

## **Introduction**

The purpose of this paper is to examine the impacts of the COVID-19 crisis, and the differences between before COVID-19 (BC) and after COVID-19 (AC), as it relates to corporate finance topics in higher education and more specifically, the future of small liberal arts college. According to some recent estimates, as much as 20% of small liberal arts schools may close within the next 5 years simply due to demographic shifts. This was anticipated BC. Now, due to impacts of social distancing guidelines and the spread of COVID-19, experts estimate that many colleges will not be able to keep their doors open beyond next year. Summer enrollment was already down at many schools and several suspect fall enrollment may be similarly low.

Like businesses, colleges and universities are feeling the pressure on their finances due to the impact of the pandemic, and there are already noticeable financial ramifications that are likely to get worse (DePietro, 2020). As discussed by DePietro (2020), most colleges are reassigning their financials to keep only essential expenditures and many are enacting severe cost-cutting measures, such as reduced pay or layoffs. In Northwest Valley's case, this comes at the heels of a major financial crisis in 2015 that forced the college to lay off staff, reduce hours, and issue a 5 to 7.5% pay cut for all employees (see Myers, 2017). Although the financial health of college is arguably stronger now than in 2015, the college will likely still experience some financial hardship due to the COVID-19 crisis.

### **Higher Education Outlook Before COVID-19 (BC)**

Even before the COVID-19 crisis, the future of higher education was uncertain. Some optimistic studies, such as a few conducted by the NCES, suggest that total enrollment in degree-granting post-secondary institutions may grow by as much as 15% by 2025, others conducted by the same organization are less optimistic (Husser & Bailey, 2017; Husser & Bailey, 2018). The latest study finds that enrollment may only grow by 3% between 2016 and 2027 (Husser & Bailey, 2019). The authors report that enrollment is projected to remain flat between 2019 and 2027, which is to say that the 3% increase projected during the 10 years under study has already been realized. Projections after 2025 are more problematic. According to an economist from Carleton College in Minnesota, college enrollment is expected to drop by 15% between 2025 and 2029, with continual declines projected thereafter (Grawe, 2018).

The projected declines after 2025 largely have to do with demographic changes, specifically lower fertility rates that were observed after the 2008 financial crisis (Barshay, 2018). Indeed, the number of children born between 2008 and 2011 fell dramatically, which means that as higher education institutions fast forward eighteen years to 2026, there are far fewer college-age children. Data from the Centers for Disease Control and Prevention (CDC) indicates that birthrates have failed to rebound even after economic recovery (Barshay, 2018). Young people today are having fewer children, later in life, even when they are doing well financially.

Colleges will feel the pain of this demographic transition differently. Enrollment rates among the top ranked colleges and universities are expected to drop much less, while regional four-year institutions, which attract less out-of-state and international students, are expected to lose more than 11% of their students between 2012 and 2029 (Barshay, 2019). Lower enrollment will translate into fewer tuition dollars, especially for small, private colleges, which depend heavily on tuition for survival. Some colleges will likely be forced to close their doors. Between 2010 and 2017, fifty-eight small colleges permanently closed their doors (ICEF, 2018). This includes White Mountain College, one of Northwest Valley's Eco-League partner colleges in Utah, which closed in 2019. Moody's Investor Service predicted an uptick in closures among private colleges, with expectations of at least 15 college closures in 2020 (ICEF, 2018).

In addition to the demographic trends discussed above, smaller colleges are grappling with declining public funding, declining donations, and rising costs. This compounds the cost disadvantage already associated with small colleges. Although small liberal arts colleges tend to offer more engaging student experiences, they do so at a much higher per student cost due to scale inefficiencies and resource disadvantages (Hoskins & Brown, 2017). Additionally, a survey of Business Officers at small private colleges found that colleges are operating in a marketplace that is much different from that of ten years ago (Lederman, 2018). Research indicates a continual decline in student interest in liberal arts education over the last few decades, with a growing percentage of students seeking the direct financial, as opposed to broad experiential, benefits from their educational experience (Hoskins & Brown, 2017).

This changing attitude toward "careerism" is occurring simultaneous to added competition in the higher education sector (Hu, 2017, p. 3). The traditional pitch about the lifelong value of a liberal-arts education may no longer work for attracting students (Lederman, 2018). Yet, many small liberal arts colleges struggle to accept the need to emphasize marketplace outcomes in their curriculum. This is especially problematic given the fact that the cost of attending a liberal arts college is notably higher than a state research university. Even

after financial aid packages are considered, the average net price for attending a private non-profit four-year institution is around \$26,400, compared to \$14,120 at an in-state public four-year institution (Hu, 2017). According to Grawe (2018), small colleges will be under pressure to operate with leaner budgets and may be forced to cut liberal arts courses in lesser demand while expanding professional programs that will result in good-paying jobs.

Lederman (2018) notes a steady decline in confidence among financial executives at four-year undergraduate colleges like Northwest Valley. Among chief financial executives in 2018, less than half (44%) felt confident about their institution's financial stability over the next ten years. This was down from 52% in 2017 and 54% in 2016. Reflecting on the growing gap between tuition revenues and costs, 68% of financial executives acknowledged that their institutions' tuition discount rates were no longer sustainable and in response, colleges have been reducing tuition discounts in addition to experimenting with new programs to generate revenue. For many colleges, enrollment initiatives will likely focus on full fee-paying students, such as international students. (Lederman, 2018)

Moreover, two-thirds of college business officers reported that their financial reports are based on accrual rather than cash accounting (Lederman, 2018). The primary difference between accrual and cash accounting rests in the timing of when expenses and revenues are recognized (Morah, 2020). Accrual accounting attempts to "match revenues to the periods in which they are earned and expenses to the periods in which the effort to generate incomes occurred" (Ehrhardt & Brigham, 2017, p. 61). For example, rather than treat the purchase price of a long-term asset (such as maintenance equipment) as an expense in the purchase year, accountants "spread" the purchase cost over the asset's useful life (Ehrhardt & Brigham, 2017). According to finance experts in higher education, this approach may mask underlying financial weaknesses for struggling colleges (Lederman, 2018). Since accrual accounting does not anticipate how major upcoming expenses can immediately impact cash flow, financial reporting may not reveal when cash flow is reaching dangerously low levels. As revenue gets tighter, cash becomes increasingly important; therefore, financial reporting on an accrual basis may not be appropriate for many colleges, especially those with financial risk (Lederman, 2018).

### **The Pandemic**

In 2020, Northwest Valley College President announced to the campus community that Northwest Valley College would close its doors in response to the COVID-19 pandemic. Faculty would be given the following week to "transition" their face-to-face classes to online courses and

students would take the same time to move off campus or travel to wherever they would be social distancing for the next few months. This announcement followed those from several other colleges and universities that decided to close their campus for the semester after spring break. During the following weeks and months, colleges and universities lost hundreds of millions of dollars in residence hall rents, meal plans, parking fees and permits, sports tickets, and local and regional partnerships that faculty, staff, and students were part of (Long, 2020).

One of the primary financial concerns among students during the campus closures was payments for room and board. Students living on campuses around the country lobbied for partial refunds, with some taking their arguments to court. Arizona students filed a class action lawsuit against the Arizona Board of Regents in an attempt to receive prorated room and board from three Arizona universities, arguing that the 10 to 25% credit being offered by various universities was not enough (Whitford, 2020). Similar lawsuits have begun in other places around the U.S. as well.

Many schools voluntarily provided partial room and board refunds. These refunds, even when no lawsuit is involved, will be costly. In Minnesota, the University of Minnesota Board of Regents approved a plan to issue prorated refunds for students at all six University of Minnesota campuses for room and board, student activity, and parking fees when applicable. The plan is expected to cost the university system over \$27 million (Whitford, 2020). The entire University of Wisconsin system is expected to spend about \$78 million on room and board refunds. Clemson University, a private college, is expected to lose about \$15 million on refunds (Whitford, 2020). Northwest Valley, which is a much smaller private college, lost approximately \$60,000 in room and board refunds.

At the same time, it may be the case that the primary method of funding small private colleges – one which leaves schools to raise essential revenue through tuition and fees, has put these schools in a precarious situation (Hall, 2020). The effects seem to be magnified at schools that depend on high-paying international students for revenue. Northwest Valley College has managed to mostly escape the latter issue, as less than ten percent of Northwest Valley's student body consists of international students. It seems that Northwest Valley's inability to diversify its student body has been a potential blessing in disguise amid the pandemic.

However, Northwest Valley had previously never offered an online course – all courses were in-person, so the transition to online learning was particularly difficult for faculty and students. Many students complained that they did not receive the same quality of instruction after the transition to online learning. This is not unique to Northwest Valley College, as groups of students have also begun calling for prorated tuition refunds for the spring 2020 semester. In

another lawsuit filed in federal court in South Carolina, a group of students pursued litigation against the University of Miami for alleged breach of contract. The suit cites marketing materials that tout the benefit of living on campus to meet other students, faculty, and staff members, which the college allegedly failed to deliver with the suspension of in-person classes (Anderson, 2020). Most colleges and universities have held firm on tuition though, arguing that students still received educational services and still earned the same amount of credits (Anderson, 2020).

Moreover, faculty and staff had to work especially hard during the transition and post-transition weeks and for many, teaching online was much more challenging than teaching face-to-face. Additionally, the transition to online learning at Northwest Valley College required the acquisition of new technology and eLearning platforms, which the College previously did not have to pay for. The College did offer “free” tuition for its 4-week May term classes; however, those funds were covered by a small business grant associated with the pandemic that the College was awarded. That said, several professors would not teach a full May term class and ultimately, the college was only able to offer 14 of its originally scheduled 25 May term classes. Some classes were canceled because they were field or lab courses that could not be taught effectively in a socially distanced manner. Others were canceled because there simply wasn't enough time to prepare an online course with that same learning outcomes as the face to face course. Although enrollment during May term was only slightly below average for the College, many students were unable to participate in the online courses because they did not have access to reliable internet or a computer. Some colleges, such as the University of Texas-Downtown, have dealt with this challenge by issuing computers to students without access; however, most small colleges do not have the resources to do so (Blackburn, 2020).

Another financial challenge faced by many colleges, especially private colleges, has to do with their endowments. Many schools draw from their endowments to pay for scholarships, faculty jobs, and campus operations, but those reserves have experienced severe losses as markets tumbled (Fortune, 2020). For example, Bucknell University in Pennsylvania reportedly lost \$150 million from its endowment after AC financial losses, while the College of the Holy Cross in Massachusetts experienced a 15% drop in its endowment (Fortune, 2020).

According to a model developed by Boston startup Edmit, small 4-year colleges can expect their revenue from investments to decline by approximately 20% during the next academic year (Thys, 2020). At the same time, Northwest Valley's endowment is relatively small compared to other private liberal arts colleges, and Thys (2020) notes that the colleges most at risk financially as a result of the pandemic are those that don't have large endowments because they will be primarily reliant on tuition, room, and board to stay viable. Moreover, for colleges

with small endowments, “even a few hundred thousand dollars could unbalance a budget” (Chabotar, 2010, p. 7). Ultimately, the Edmit model estimates that more than one third of private four-year colleges in the U.S. are at high risk financially and may be forced to close within the next six years if present financial trends continue (Thys, 2020).

The pandemic has indeed only exacerbated the trends discussed above that are threatening four-year liberal arts colleges. The Edmit model estimates that the effects of the pandemic will reduce the average college life span by 22 years (Thys, 2020). Some schools have also reportedly lost donation funding, although this has not yet been a problem for Northwest Valley College. In fact, the College was able to secure donations that primarily resulted from post-pandemic goodwill, and it was able to raise more money – over \$160,000 – than it has in its history during its annual giving day in May. If any lessons can be learned from the Great Recession though, donations may decline in the months ahead.

Northwest Valley College also needs to consider its debt markets and covenants. Colleges often incur long-term debt in the form of bonds for new buildings and major renovations (Chabotar, 2010). As the pandemic has unfolded thus far, it seems that new debt will continue to be available, as banks are not being as conservative in making loans as they were during the Great Recession. However, the financial ratios that institutions must meet in order to “evidence their creditworthiness and capacity to make timely payments” is of concern for Northwest Valley (Chabotar, 2010, p. 8). These ratios might include indicators like total debt as a proportion of unrestricted net assets or the percentage of the budget expended on debt service (Chabotar, 2010).

As explained by Ehrhardt and Brigham (2017), for organizations with high financial leverage, which is simply the extent to which an organization uses debt financing, even a small decline in financial performance can cause the organization’s value to fall below the amount it owes to creditors. As leverage increases, creditors’ risk becomes higher and they may be less likely to lend. Northwest Valley was recently able to close a line of credit that consumed a large portion of its budget and its debt is nowhere near as high as most colleges of its size. Its debt-to-assets ratio – the ratio of total debt to total assets – is therefore quite low (Ehrhardt & Brigham, 2017). Recently, however, the College was concerned that it may be unable to access credit due to its relatively high potential for defaulting. Most colleges have put a freeze on capital spending for the time being; however, some capital spending will still be required for regular maintenance purposes in the AC environment.

## **The New Normal After COVID-19 (AC)**

The post-pandemic normal will be different when thinking about the short-term and long-term impact of COVID-19. According to a contingency planning panel at Northwest Valley College, there are a few viable post-pandemic models, including fully online, hybrid or blended learning, and a Block Plan model. Although the intent would be to implement one or more of these models to temporarily manage the COVID-19 crisis, they may remain in use in the long-term. In the short-term, colleges will have to first choose between online or in-person classes. For Northwest Valley, this is a particularly difficult decision given the residential nature of the College and that fact that until the Winter 2020 term, Northwest Valley had never offered an online class.

The online learning model was already chosen by a few Northwest Valley faculty members for the fall 2020 semester and was implemented during Northwest Valley's May term. Although development costs for online courses tend to be greater given the technology and faculty training investment, many colleges with online programs make those investments because of their plan to scale their online programs (Pederson, 2015). The President of Northwest Valley College has stated that Northwest Valley needs to grow by about 50 to 100 students to be financially sustainable. Given Northwest Valley's rural location, online programs may help attract some of those much-needed students. Indeed, the ability to grow enrollment, without needing to build more residence halls, lecture classrooms, or lab facilities, is certainly attractive (Pederson, 2015). Although, Ehrhardt and Brigham (2017) note that the cost of capital includes both information technology and compensation plan considerations. Therefore, overall capital costs will increase with a larger student body, even if students are learning remotely.

For example, in order to run the fully online May term courses, Northwest Valley needed to purchase an upgraded version of their eLearning platform from Jenzabar. Although these costs for May term were covered by a CARES Act grant, the licenses for eLearning platforms must be renewed periodically and this will be an added cost for the College in the future. Cybersecurity is also a major issue. Universities can mitigate the risks of cyberthreats by making sure cybersecurity teams have up to date training and by making investments required to ensure security and data privacy. Areas for increased monitoring include collaboration tools and remote-learning platforms, monitoring networks for malware, and monitoring faculty and student endpoints to catch data-related incidents before they become a serious issue (Laboissiere & Sarakatsannis, 2020). These security enhancement efforts also increase the price tag of increased online learning and may require hiring additional IT staff.



Many small colleges have been hesitant to adopt more technology in learning, viewing it as part of the problem of rising costs rather than part of the solution (Twigg, 2003). However, in a study of thirty colleges that systematically redesigned courses to enhance online learning, Twigg (2003) found that course redesign projects resulted in a savings of \$3.6 million collectively each year. On average, all thirty institutions reduced costs by about 40%, ranging from 20% to 84% individually (Twigg, 2003). Moreover, Twigg (2003) found that when implemented via a “whole course redesign” approach, with additional computer based resources, support services that enhanced active learning, and increased on-demand help, the online courses resulted in better learning outcomes for students than their face-to-face counterparts (p. 30). The ability to strategically extend Northwest Valley’s influence and reach, potentially even globally, is also an appealing opportunity, especially given the College’s environmental mission and the growing global awareness of climate change and its effects.

One of the greatest benefits of increasing online learning options after the pandemic for Northwest Valley is the ability to employ adjunct instructors. Because of the College’s rural location, finding qualified faculty who are willing to stay in the long-term has been a challenge. In the last 3 years, Northwest Valley lost nearly half of their full-time faculty members in the social sciences programs, for example. Many new social science faculty in the last 5 years have stayed at the College for only 1 or 2 years. This issue is compounded by the fact that Northwest Valley’s starting salary is quite low, especially for disciplines with strong market opportunities outside of academia. Northwest Valley has a universal salary system for faculty, through which all Ph.D. holding assistant professors start at \$50,000 per year. Although this is a decent salary given the cost of living in its rural location, it is still quite low compared to what scientists, economists, accountants, engineers, and the like can earn on the “outside” or even at other local institutions, including the local community and technical colleges.

Additionally, it is challenging to find qualified adjunct instructors who reside in the area and can teach face-to-face during the day (Northwest Valley offers limited evening course options because about half of the student body consists of student athletes who begin practice at 4:00 P.M.). As demonstrated by Bettinger and Long (2010), adjunct instructors can be a particularly large area for cost savings – up to 80% cheaper than full-time faculty. Aside from not paying benefits, adjunct instructors allow colleges to be more flexible in hiring. If course enrollment is low for instance, the College can more easily cancel a course than it can if a full-time permanent faculty member is assigned to the course. This flexibility may also be important given the rising costs associated with tenured faculty (Bettinger and Long, 2010). That said, research also suggests that the increased reliance on adjunct faculty is correlated with a

decrease in educational quality (Jaschik, 2017). If so, more adjunct instruction could worsen recruiting and retention issues at Northwest Valley. As it is primarily a teaching college, quality instruction and individual attention is one of the reasons students are attracted to Northwest Valley College. Over-reliance on adjunct faculty may weaken long-term financial outcomes.

That said, the cost savings in instructional costs associated with employing adjuncts can be used in other areas of need that would help with student retention. For example, Hurlburt and McGarrah (2016) of the American Institute of Research found that among public four-year colleges, savings were applied primarily to maintenance, administrative, and student-services staff. This “cost shifting” could therefore help Northwest Valley offset some of the technology and support services costs associated with online learning (Hurlburt & McGarrah, 2016, p. 2). Zellner and Moore (2011) find that personal and supportive student services that address the isolation online students sometimes feel positively affect retention rates as well. Increased support services will be particularly important for students with learning disabilities. Indeed, Laboissiere and Sarakatsannis (2020) find moving to remote learning during the spring 2020 term has overwhelmed resources to ensure learning is aurally, tactilely, and visually accessible.

Moreover, the anxiety and distress caused by COVID-19 requires increases in mental health services, for students as well as faculty and staff (Laboissiere & Sarakatsannis, 2020). These services can be quite costly. Increased advising support services also improve online student outcomes, but again, this raises the cost of labor for the College (Zellner & Moore, 2011). Northwest Valley currently has trouble advising all of its students; increased advising may therefore require the College to hire professional advising staff rather than rely primarily on faculty for quality advising.

The second model, which will likely be appealing to the type of student Northwest Valley College attracts, is a blended learning model. In the short term, Northwest Valley might consider a HyFlex model to deal with the pandemic. The HyFlex model would be primarily in-person instruction but would be flexible for students who, for health reasons or otherwise, are not able to attend in-person classes (Maloney & Kim, 2020). Those students would essentially learn alongside the in-person students via web-based technology. In the long-term, more traditional blended learning formats may be adopted, through which faculty may teach in person once per week and hold online meetings or discussion forums to meet the remaining contact hours. The blended model would allow Northwest Valley to capture some of the cost-savings associated with online learning, while also appealing to students who still want some sort of in-person interaction with classmates and professors. Moreover, the blended model is inherently more

flexible in the event of future crises that forces the students and faculty to continue with remote learning.

Definitions of blended learning range from a combination of learning experiences that integrate some form of educational technology, to approaches that focus on a specific percentage of combination between online instruction and in-person experiences (Poon, 2013; Bates, 2017). The latter is likely the most feasible for Northwest Valley. As defined by Thurab-Nkhosi (2018), blended learning is an “integrated and planned approach to teaching and learning that appropriately combines face to face and online strategies and technologies to advance student-centered learning (p. 136). Researchers such as Twigg (2003) and Benson and Anderson (2010) argue that colleges have yet to realize the power of Information Communication Technologies (ICTs) in higher education and that the right blended learning model can improve teaching and learning, while also reducing costs. This is especially applicable to face-to-face campuses (Thurab-Nkhosi, 2018). Research also shows that future generations of learners – from Generation Z and below – are increasingly attracted to flexible learning formats and a multi-faceted approach to education (Hanover Research, 2018). Since Northwest Valley’s student body consists primarily of these younger, traditional learners, catering to their tastes with a blended learning format may be the best option.

The third option that Northwest Valley is considering, which may stick beyond the fall semester, is the modified block plan. A traditional block plan structures the academic semester so that students take a single course over three or four weeks (Maloney & Kim, 2020). Rather than having class meetings two or three times per week, block courses meet daily for two or three hours. Over the course of the semester, students can take a full load of three to five courses consecutively, rather than simultaneously. Northwest Valley’s contingency planning group has chosen a modified block plan model. The 15-week semester will be divided into two sessions and students will take two courses per session. One of the short-term benefits of this model is that it reduces the amount of people students and faculty have contact with throughout the 7.5-week sessions. Instead of faculty teaching three classes of students at the same time, they will only teach one or two. Moving from the traditional semester to a modified block plan would also allow the College to make rapid decisions if the situation requires shifting from in-person or blended to fully remote learning (Maloney & Kim, 2020). Finally, the block plan model reduces the amount of classroom turnover, making it easier to clean and sanitize rooms between classes. This should save the College in terms of COVID-19 related cleaning and maintenance costs.

The modified block plan will also allow Northwest Valley students to narrow their focus to only one or two classes at time, which has proven to be successful. For instance, Hanover Research (2018) demonstrates that condensing courses into accelerated terms can help students minimize the possibility of “outside roadblocks” that may interfere with course completion (p. 4). Additionally, courses that meet frequently and exclusively develop a level of intimacy that is difficult to achieve when students’ attention is spread across four or five courses (Maloney & Kim, 2020). Students find that they can devote more attention to the subject or assignment at hand, which will be particularly important if online or hybrid classes are offered. According to Morrison (2007), students in accelerated classes experience higher levels of academic achievement than students in non-accelerated classes.

Geltner and Logan (2000) from Santa Monica College conducted a study on the influence of session length on student success over several years. They tracked student success rates (measured by letter grade) and withdrawal rates by comparing class lengths of 6, 8, and 16 weeks. They disaggregated the data by certain student and faculty categories (such as student ethnicity and full- or part-time faculty). Their findings show that for all categories of students, in all categories of faculty-taught courses, student success rates were higher for 6- and 8-week classes than for 16-week classes. Their findings also show that withdrawal rates among all examined student categories for all types of faculty-taught courses were considerably lower for 6- and 8- week classes than for 16-week classes. For all day classes, for instance, withdrawal rates were about 12% for 6-week classes, 13% for 8-week classes, and 20% for 16-week classes. Their findings have been echoed by later researchers at colleges and universities across the U.S. (see Sloan, 2017, for a review of this literature). The greatest financial benefit associated with the modified block plan in the long-term therefore has to do with retention.

## **Conclusion**

This paper explores the impacts of the COVID-19 pandemic as it relates to corporate finance topics in higher education, and more specifically, the future of Northwest Valley College – a small, environmental liberal arts college in the rural mid-west. Colleges and Universities have been put in a precarious and unpredictable financial situation given the health concerns and social distancing requirements associated with COVID-19. These concerns have surfaced while colleges are planning for major demographic shifts that may result in as many as 20% of small liberal arts colleges closing. In Northwest Valley’s case, the pandemic also comes at the heels of a serious financial crisis that forced the college to make major budget cuts in 2015.

As colleges continue to grapple with the pandemic's financial ramifications, which are likely to only get worse before they get better, contingency workgroups have been working hard to determine what the new normal will be after COVID-19 (AC). At Northwest Valley, three new models are being implemented for the Fall 2020 semester: 1) the online learning model; 2) the blended learning/hybrid model; and 3) the block plan model. While these models are first and foremost a response to the pandemic, this paper discussed several reasons they should be considered for long-term adoption. This paper focused on the financial value of these models for a small liberal arts college; however, student outcomes are equally as important when making strategic decisions in higher education. Thus, this paper also examined other potential benefits that may lead to higher levels of recruitment, retention, and ultimately student success.

According to Graw (2018), colleges may be able to avoid budget shortfalls and closures if they can increase their retention rates by focusing on keeping students – and their tuition dollars – on campus from year to year. Indeed, many schools are launching student retention and student success initiatives for this cause (Barshay, 2018). Northwest Valley is no exception. Between 2010 and 2018 for example, Northwest Valley's first year retention averaged 70%, which is about 10% lower than the national average (Northwest Valley, 2020; NCES, 2019). Retention has been identified as one of the primary factors that contributed to Northwest Valley's financial troubles BC. The issue of retention is only exacerbated by the COVID-19 pandemic and will continue to be of utmost importance in the post-pandemic higher education environment.

## References

- Anderson, N. (2020). College students are rebelling against full tuition after classes move online. Retrieved from <https://www.washingtonpost.com/education/2020/04/16/college-students-are-rebelling-against-full-tuition-after-classes-move-online/>.
- Barshay, J. (2018). College students predicted to fall by more than 15% after the year 2025. Retrieved from <https://hechingerreport.org/college-students-predicted-to-fall-by-more-than-15-after-the-year-2025/>.
- Bates, T. (2017, June 10). Online learning and distance education resources. Retrieved from <https://www.tonybates.ca/tag/blendedlearning/>.
- Benson, V., & Anderson, D. (2010). Colloquium: Towards a strategic approach to the introduction of blended learning: Challenges faced and lessons learned. *British Journal of Educational Technology*, 41(6), pp. E129-E131.
- Bettinger, E.P. and Long, B.T. (2010). Does Cheaper Mean Better? The Impact of Using Adjunct Instructors on Student Outcomes. *The Review of Economics and Statistics*, 92(3), pp. 1-16.
- Blackburn, S. (2020). How this university is closing the digital divide during COVID-19. Retrieved from <https://universitybusiness.com/university-it-strategy-closing-college-digital-divide-during-coronavirus-covid-19/>.
- Chabator, K. (2010). What about the rest of us? Small colleges in financial Crisis. *Change: The Magazine of Higher Learning* 42(4), p. 6-12.
- DePietro, A. (2020). Here's A Look At The Impact Of Coronavirus (COVID-19) On Colleges And Universities In The U.S. Retrieved from <https://www.forbes.com/sites/andrewdepietro/2020/04/30/impact-coronavirus-covid-19-colleges-universities/#2726263161a6>.
- Ehrhardt, M.C. & Brigham, E.F. (2017). *Corporate Finance: A Focused Approach*, 6e. Boston, MA: Cengage Learning.
- Fortune. (2020). Colleges are getting slammed amid the coronavirus crisis—and the worst may still lie ahead. Retrieved from <https://fortune.com/2020/04/07/coronavirus-us-colleges-universities-finances-tuition-ticket-sales-enrollment/>.

Geltner, P., & Logan, R. (2010). The Influence of Session Length on Student Success. Santa Monica College. Retrieved from [https://www.researchgate.net/publication/267544985\\_The\\_Influence\\_of\\_Session\\_Length\\_On\\_Student\\_Success](https://www.researchgate.net/publication/267544985_The_Influence_of_Session_Length_On_Student_Success).

Grawe, N.D. (2018). *Demographics and the Demand for Higher Education*. Baltimore, MD: Johns Hopkins University Press.

Hall, S. (2020). A Global View of the Pandemic's Effect on Higher Education. Retrieved from <https://tcf.org/content/commentary/global-view-pandemics-effect-higher-education/?session=1>.

Hanover Research. (2018). Best Practices in Course Scheduling. Retrieved from <https://www.cmich.edu/colleges/se/Documents/Hanover%20Research%20-%20Best%20Practices%20in%20Course%20Scheduling.pdf>.

Hoskins, J.D. & Brown, B.A. (2017). Hold firm or adapt? An empirical examination of the institutional appeal implications of maintaining the Liberal Arts College identity. *Journal of Marketing for Higher Education*, 27(2), pp. 188-212.

Hu, X. (2017). Enrollment Challenges at Liberal Arts Colleges: A Literature Review. *Higher Education in Review*, Special Issue, pp. 1-12.

Hurlburt, S. and McGarrah, M. (2016). Cost Savings or Cost Shifting? The Relationship Between Part-Time Contingent Faculty and Institutional Spending. American Institute for Research. Retrieved from <https://www.air.org/sites/default/files/downloads/report/Cost-Savings-or-Cost-Shifting-Contingent-Faculty-November-2016.pdf>.

Husser, W.J. & Bailey, T.M. (2017). Projections of Education Statistics to 2025, 44 ed. Retrieved from <https://nces.ed.gov/pubs2017/2017019.pdf>.

Husser, W.J. & Bailey, T.M. (2018). Projections of Education Statistics to 2026, 46 ed. Retrieved from <https://nces.ed.gov/pubs2018/2018019.pdf>.

Husser, W.J. & Bailey, T.M. (2019). Projections of Education Statistics to 2027, 46 ed. Retrieved from <https://nces.ed.gov/pubs2019/2019001.pdf>.

ICEF. (2018). Further private college closures predicted in US. Retrieved from <https://monitor.icef.com/2018/07/further-private-college-closures-predicted-in-us/>.

Jaschik, S. (2017). When Colleges Rely on Adjuncts, Where Does the Money Go? Retrieved from <https://www.insidehighered.com/news/2017/01/05/study-looks-impact-adjunct-hiring-college-spending-patterns>.

Laboissiere, M. & Sarakatsannis, J. (2020). Getting the next phase of remote learning right in higher education. Retrieved from <https://www.mckinsey.com/industries/public-sector/our-insights/getting-the-next-phase-of-remote-learning-right-in-higher-education>.

Lederman, D. (2018). Peril for Small Private Colleges: A Survey of Business Officers. Retrieved from <https://www.insidehighered.com/news/survey/peril-private-colleges-survey-business-officers>.

Long, K. (2020). State colleges and universities are girding for a tough financial future after the coronavirus pandemic. Retrieved from <https://www.seattletimes.com/education-lab/state-colleges-and-universities-are-girding-for-a-tough-financial-future-after-the-coronavirus-pandemic/>.

Maloney, E. J. & Kim, J. (2020). Fall Scenario #9: A Block Plan. Retrieved from <https://www.insidehighered.com/digital-learning/blogs/learning-innovation/15-fall-scenarios>.

Morah, C. (2020). Accrual Accounting vs. Cash Basis Accounting: An Overview. Retrieved from <https://www.investopedia.com/ask/answers/09/accrual-accounting.asp>.

Morrison, M. C. (2007). The Benefits of Acceleration. Retrieved from <https://files.eric.ed.gov/fulltext/ED505276.pdf>.

NCES. (2019). "Undergraduate Retention and Graduation Rates." Retrieved from [https://nces.ed.gov/programs/coe/indicator\\_ctr.asp](https://nces.ed.gov/programs/coe/indicator_ctr.asp).

Northwest Valley. (2020). "Northwest Valley College Consumer Information." Retrieved from <https://www.NorthwestValley.edu/about/consumer-information/#retention-graduation-rates>.

Pederson, K. (2015). Learning Online Offers Many Education, Financial Benefits. Retrieved from [https://onlinelearningconsortium.org/news\\_item/learning-online-offers-many-educational-financial-benefits/](https://onlinelearningconsortium.org/news_item/learning-online-offers-many-educational-financial-benefits/).

Poon, J. (2013). Blended Learning: An Institutional Approach for Enhancing Students' Learning Experiences. *Journal of Online Learning and Teaching*, 9(2), pp. 271-288.

Sloan, R. (2017). Improving Student Outcomes Utilizing 8-Week Courses. Retrieved from <https://www.sanjac.edu/sites/default/files/lv-Tech-8-Week-Courses-Study-Paper.pdf>.

Thurab-Nkhosi, D. (2018). Implementing a Blended/Online Learning Policy on a Face-to-Face Campus: Perspectives of Administrators and Implications for Change. *Journal of Learning for Development* 5(2), pp. 133-147.

Thys, F. (2020). One Third Of Private 4-Year Colleges Are At High Risk Financially, Model Predicts. Retrieved from <https://www.wbur.org/edify/2020/05/08/higher-education-financial-crisis>.



Twigg, C. A. (2003). Improving Learning and Reducing Costs: New Models for Online Learning. *Educause Review*, pp. 28-38.

Whitford, E. (2020). Colleges Continue to Churn through Refund Plans. Retrieved from <https://www.insidehighered.com/news/2020/04/06/colleges-announce-room-and-board-refund-plans-students-are-asking-more>.

Zellner, K. S. & Moore, S. (2011). *Measuring and Improving Online Student Retention*. Washington, D.C.: The Education Advisory Board.

## **Effects of COVID19 on Post-Secondary Education**

By Nicole Genord

[The author is an HR manager at a higher-education institution]

## **Introduction**

The current pandemic has changed the ways that many companies do business. These businesses have to find new ways to adapt to what the new normal is, as this pandemic continues to make money and survive. Post-secondary education is no exception to struggling to find balance and continue to be able to earn a profit and stay in business. Not only do the institutions need to stay in business for themselves, but they also are the foundation to many other jobs that are hurting for staff, such as nursing. Using Northeastern College as an example this paper will explore all of the changes caused by this pandemic as well as offer ways to help with issues such as low enrollment.

### **Introduction to Problem**

Northeastern College is a school with a large focus on career and technical two-year degrees. Before the pandemic all of the classes offered by the school were all located on campus. Many of these classes included lab or hands on learning that need to be conducted in person on campus. Many of the students in our demographic prefer to be on campus. Some of the students have living situations that make it hard to focus enough to complete online classes. Others do not have access to reliable internet and technology. This made the switch to online classes when the pandemic started a huge dilemma. All classes had to be transitioned online and we had to figure out ways that we could do that and get our students the technology they need in order to be able to do so. Many people were cut back at their jobs or completely lost their jobs, this financial situation also caused some students to not be able to afford to start or continue their Post-Secondary education. Even with best efforts there was a significant drop in enrollment for summer and fall classes because the classes will be hybrid but majority online. Despite best efforts by the college many students are still avoiding enrollment. This is a situation that is not unique to Northeastern College and it is important to look at the problems and try to identify ways to increase their enrollment numbers and adapt to the new normal that will occur as the pandemic continues and ends.

During recessions people often tend to “wait it out” before applying for schools (DePietro, A. 2020). It is tough to know what the job market will look like at the time of graduation which is not appealing for spending money on post-secondary education. During the pandemic, the job market is not the only unknown that prospective students need to deal with. With the pandemic going on potential students are waiting to see what classes will look like.

They are uncertain if dorms will be open, will classes be difficult to get in due to size restrictions, will classes be on campus, online or both? All of these items can play a major factor on the enrollment of potential students. Many schools like Northeastern College have been waiting on guidance before trying to make these important decisions. With so many courses at Northeastern College needing some type of in person component to graduate it is difficult to appeal to those students when they are unable to determine what the school will look like in the fall and beyond.

When 487 high school seniors were interviewed, one in six students that planned to go to college full time pre-outbreak think they will change their plans (Hinrichs, E., Nehil, T. & Kaul, G. 2020). They were also asked what they would do next and 35% stated they would do a gap year, 35% also said they would just go to school part-time (Hinrichs, E., Nehil, T. & Kaul, G. 2020). This situation can help explain why so many schools, including Northeastern College, are seeing lower enrollment at this time than they normally do. Many schools have not yet released their fall enrollment totals in hopes that things will change positively, and more students will decide on what their plan for fall will be.

## **Funding**

Some students rely on the Pell Grant, which is provided by the government, for funding for community college. With so many people losing their jobs or being cut back due to the pandemic means more money is needed because more people need that additional help than before. Federal spending on financial aid tripled from \$50 billion in 1995 to more than \$150 billion in 2015 (Smith, A. 2019). Even though that is a significant amount of money it does not cover enough. College can cost more money because students do not just have to pay for tuition but they need to pay for books, food, housing and sometimes even tutors in order to be successful.

The federal government is also trying to help out by increasing the spending in the CARES Act. Public post-secondary education institutions in Minnesota will receive nearly \$130 million in funding (Faircloth, R. 2020). The U.S. Department of Education decided that every school that received federal aid from the CARES Act must use at least half of the funding to provide direct cash grants to students who had their education disrupted due to the pandemic (Faircloth, R. 2020). This is a way that the government is trying to support both the students and the colleges to help them be able to survive the pandemic and not have to shut down due to bankruptcy or have to drop out due to college becoming too expensive from circumstances caused by the pandemic. Many of these

programs are needs based. With many losing their jobs there are more students that are eligible based on their new need for financial support.

Grants are another method that can help students afford to attend college. In a study, they found that giving a grant on top of the Pell Fund in the lowest income students, the grant increased overall graduation rate by 1.5% but did not have an impact on enrollment numbers (Anderson, D. 2020). Unfortunately, this shows that grants do somewhat help with overall graduation numbers which will help the work force, however offering more grants may not be enough to fix enrollment numbers for post-secondary education. It would be interesting to do the study again during the pandemic to see if it creates any difference between schools that offer it and schools that do not. Often times during recessions many people try to go to community colleges or trade schools in order to increase their odds of getting a job in a more difficult market. However, during a pandemic the method of schooling outweighs the prospective of gaining a new job. If someone is unable to feel like they can successfully complete school online it is not going to be with the investment of time, money, and energy to get a degree at this time.

Another way that students often helped pay for their post-secondary education was through working jobs on campus. This would allow them to work and go to school in the same place making it easier to commute, especially if the student lived on or near campus. With less activities being on campus many of these jobs are at risk for being cut. Cafeterias, libraries, recreation, and other common spaces are at risk for not opening up at all or opening in limited capacity, both scenarios will cause a cut back in student jobs on campus. Colleges are still able to pay student workers who are impacted by this, but they are not required to continue to pay and many cannot afford to continue to pay (Brown, S. 2020). If a student relies on their campus job in order to be able to afford to attend school, losing this jobs could mean that the school also loses the student.

## **Costs**

The Minnesota State System, which Northeastern College is a part of, is expected to lose at least 35 million dollars in the spring semester (Faircloth, R. 2020). With no changes occurring throughout the summer and fall semesters this could mean that the schools continue to lose 35 million dollars or so each semester. Losing that much money each semester would be a major hit to any institution. Many of the changes that need to occur to help make campus's safer or switch to more online and hybrid courses cost money as well. This combination could put many institutions at risk for layoffs or closing. In 2017, public colleges were spending \$372

billion dollars per year. Two-year colleges spent about 42% of that money towards instruction, including staff and faculties salary and benefits cost (The NCES Fast Facts Tool provides quick answers to many education questions National Center for Education Statistics. n.d). Lower enrollment means less classes and less money which could negatively impact many faculty members' jobs. Having less professors could also make it difficult if enrollment were to pick back up. It takes the college several months to be able to replace a faculty member.

One of the many costs associated with this change would be with the infrastructure of colleges. Many dorms will have to open with limited capacity or completely empty and IT will have to add new software and tools in order to keep up with the increase of online learning (Bevins, F., Bryant, J., Kirshan, C., & Law, J. 2020). The increase in IT support and technology is not something that would be cheap. In addition to the technology itself many teachers will need to undergo training on how to utilize the technology because professors that are not tech-savvy could negatively impact the education of their students (Sahu, P. 2020). One thing Northeastern College is currently doing is providing Chromebooks and hot spots for students to rent through the library. However, there is not enough to provide to each student, and it increased a lot of administrative work to keep track of these laptops. The college is currently paying for parts of these items when they need replacing. If a lot of these laptops need repairs or go unreturned this is not financially the best decision for the college. On the other hand, the cost of a laptop and reliable internet may not be very affordable to the students making it difficult for them to continue to attend the school with online classes, even if the classes are hybrid. The campus also has moved the location of their three computer labs to areas that are closer to the entrance in order to help with clean protocols in the building and not have to clean the entire campus each day. The labs have staff in them to help with issues and are available any time the campus is open. The labs are able to have the computers spaced out in order to keep within the six feet of space guidelines that have been set. The technology already existed and was used for this same purpose, so it does not cost the college extra money to continue to provide a service that they were already providing in a different location in the building.

Since the change during spring semester occurred quickly and unexpectedly many of the classes could use room for improvement. There are many factors that were not addressed such as keeping a student from cheating, switching projects that needed to be in person, and embracing new technology to better support students (Sahu, P. 2020). These are areas that need to be looked at and adjusted if hybrid and online classes are going to continue. Northeastern College was at a sever disadvantage when this change occurred because they were not offering online classes at this time. No staff or faculty were familiar with working

remotely and many did not have the technology required to be able to do so. Rushing to get things done and not doing them to their full potential puts the college at risk for having students fail or not return because things were not done to the best ability. With the sudden change and so many aspects of students' lives being affected the college needs to be able to support them academical and be able to be flexible to help with students mental health so they can handle the extra stress of being a college student during these times (Sahu, P. 2020).

The average bachelor's degree costs \$38,496 to \$60,593 not including online fees, housing, food, or textbooks (Kerr, E. 2020). That total cost means that people are really trying to figure out their best plan on how they can make sure they can complete their courses. When a student fails a class it will cost hundreds in order to repeat it. It will add time to when they can receive a degree which could mean loss revenue due to not having a job or having a low paying job. There is also a difference in the cost of online programs compared to in person programs. On average in 2019 the tuition for online classes was \$316 per credit and in person was \$311 (Kerr, E. 2020). While this difference in amounts is small it can add up when completing a degree, especially when personal internet and technology have to factor into the cost as well. If you are unsure that an online program is doable then you would want to wait until you can be successful in the campus setting. It would be a major financial risk to try and start attending school in a program that will cost more per credit and be difficult to successfully complete. Students may not want to take such a big risk one something that costs a lot of money.

### **Potential Fixes**

There are several different changes that campuses can embrace to try and increase their enrollment and create a better environment for students. Some campuses are offering virtual tours of campus, easing deadlines, dropping SAT and ACT scores, offering different methods of high school GPA interpretation for recent high school grades (Hinrichs, E., Nehil, T. & Kaul, G. 2020). Many students are struggling to be able to take the SAT or ACT that are required because many of those locations that host the testing have shut down due to the pandemic. It can also be a struggle for students to finish out their high school career when it switched to being online unexpectedly. Some students may struggle with that format due to the way that they learn or distractions in their environment. They may also not have the technology that they needed in their homes in order to be successful and keep their grades up. Colleges do not want to punish students for the struggles that they are facing due to this unexpected pandemic. Colleges also do not want to turn away students for technicalities when they are

already struggling to reach their enrollment goals that they need to stay in business and keep everyone employees. Each method that a school decides to put into place can cost the school money and a lot of time in designing and implementing each one.

Even though the campus life will be missing there are ways that colleges can help enhance student connections to each other. You can put students with common interests and classes into small cohorts or mentorship programs in order to help students make connections with one another and have a support system (Mintz, S. 2020). This can be done virtually to help continue to keep the amount of face to face interactions limited. Offering online tours is another way that a campus can try to show what their environment feels like in hopes to convince prospective students that this is still a great place to go especially if things improve and classes are able to resume with in person instruction. This can help give some impression of the social aspect that students often look for. Being able to work together academically could help lower dropout rates and help students to succeed academically. Networking is often something students look for with their Post-Secondary education so it can be beneficial for the students and the school if they can embrace online networking across the campus.

Classes can be done as a hybrid. It will be important to have teachers interact as much as possible in the courses as well as offer hands on activities and discussions, not just lectures and papers submitted online (Mintz, S. 2020). This can help keep students engaged and excited which can help them be successful and learn. This is important because research has shown that students enrolled in online or hybrid courses are more likely to drop out than those that attend in person classes (Do, Xi, & Jaggars, S. 2012). Some studies have shown that technology allows learners more time to think critically and reflectively, which allows strong outcomes such as analysis, synthesis, judgment, and application of knowledge (Chen, P.-S. D., Lambert, A. D., & Guidry, K. R. 2010). These students scored higher and showed a higher level of understanding more complex situations and were able to provide deeper reflections in their work.

### **Northeastern College Specific Solution**

Right now, Northeastern College is focusing its efforts on the screening process. Everyone has to fill out a screening questionnaire before coming on campus and it states where and how long they will be on campus. The college has reported not having enough cleaning supplies or enough classroom space for all of the classes to return on campus and maintain social distancing at all times. The screening allows the cleaning to be focused into areas that



were visited and allows for contact tracing in case there was someone on campus who self-reports that they have been recently diagnosed with COVID19 and could be a risk to the people that they were around. There is also not enough facility staff in order to be able to clean the whole building throughout the day so it is important to limit where people are going and only clean the areas that they know people have been. The college is trying to hold off on hiring new staff to help keep their costs low and help avoid potential layoffs of staff and faculty. The lack of necessary supplies, staff, and space show that the college will not be able to have in person classes in the fall and be able to do so safely. With this information they should be able to start planning for the future knowing that offering in person classes the same as they had been previously been offering, is not an option.

With the amount of trade and career classes offered by the college it would be impossible for all courses to only be offered online. Nursing programs, mechanics, and estheticians are just some of the programs that need to have some type of in person interaction to be successful. The amount of people allowed in these labs and classrooms will have to be smaller. Classes can rotate to be online and in person and have half the class come in one day and another half come in on a different day. The college can continue to offer computer labs and equipment rentals while it is unsafe to be on campus. Hopefully in the future the college will be able to offer more in person courses safely in order to help with their enrollment and the success of their students in their desired programs. The campus has decided to be online only for the summer, but they continue to struggle to make a formal decision for fall classes. Making a decision on what fall will look like could help faculty to better prepare for classes and would help prospective students be able to make their decision so that the college can get accurate enrollment numbers for fall sooner than later.

## **Conclusion**

COVID19 is causing markets to have to take a look at how they are operating and ways that they can adjust to keep up with the new normal that we will be facing. Post-secondary education is one of the markets that has been greatly impacted by the pandemic and needs to make changes in order to remain successful in the new normal. Northeastern College needs to start making decisions on their fall semester classes in order to help their enrollment numbers. The college should make the decision for all online or online and hybrid for fall semester so that faculty has time to plan and make the classes the best they can be for their student's education instead of waiting and rushing to put things together like they had to at the end of spring

semester. They can also look at adapting their admission process to allow it to be easier for prospective students to apply and help ease some of the struggles that they have been having due to the pandemic. Being able to plan and adapt to the changes will help them be more successful and be able to continue to provide education opportunities for students in the years to come with adjustments on how classes are presented.

## Bibliography

Anderson, D. (2020). Financial Aid Can Help Low-Income Students Finish Two-Year College Programs. *Rand Corporation*. doi: 10.7249/rb10069

Bevins, F., Bryant, J., Kirshan, C., & Law, J. (2020, April 3). Coronavirus: How should US higher education plan for an uncertain future? Retrieved from <https://www.mckinsey.com/industries/public-sector/our-insights/coronavirus-how-should-us-higher-education-plan-for-an-uncertain-future>

Brown, S. (2020, March 26). When Covid-19 Closed Colleges, Many Students Lost Jobs They Needed. Now Campuses Scramble to Support Them. Retrieved from <https://www.chronicle.com/article/When-Covid-19-Closed-Colleges/248345>

Chen, P.-S. D., Lambert, A. D., & Guidry, K. R. (2010). Engaging online learners: The impact of Web-based learning technology on college student engagement. *Computers & Education*, 54(4), 1222–1232. doi: 10.1016/j.compedu.2009.11.008

DePietro, A. (2020, May 1). Here's A Look At The Impact Of Coronavirus (COVID-19) On Colleges And Universities In The U.S. Retrieved May 17, 2020, from <https://www.forbes.com/sites/andrewdepietro/2020/04/30/impact-coronavirus-covid-19-colleges-universities/#5db4541861a6>

Do, Xi, & Jaggars, S. (2012). Online and Hybrid Course Enrollment and Performance in Washington State Community and Technical Colleges. *Columbia Academic Commons*. doi: 10.7916/D8862QJ6

Faircloth, R. (2020, April 17). Minnesota colleges receive \$180 million in federal COVID stimulus aid. Retrieved from <https://www.startribune.com/minnesota-colleges-receive-180-million-in-federal-covid-stimulus-aid/569711972/>

Hinrichs, E., Nehil, T. & Kaul, G. (2020, April 3). Amid COVID-19 uncertainties, Minnesota colleges are trying to hang on to prospective students. Retrieved from <https://www.minnpost.com/education/2020/04/amid-covid-19-uncertainties-minnesota-colleges-are-trying-to-hang-on-to-prospective-students/>

Kerr, E. (2020, January 14). What You'll Pay for an Online Bachelor's Degree. Retrieved from <https://www.usnews.com/higher-education/online-education/articles/what-youll-pay-for-an-online-bachelors-degree>

Mintz, S. (2020, April 27). Maintaining the Campus Experience in the Time of Social Distancing: Inside Higher Ed. Retrieved from <https://www.insidehighered.com/blogs/higher-ed-gamma/maintaining-campus-experience-time-social-distancing>

The NCES Fast Facts Tool provides quick answers to many education questions (National Center for Education Statistics). (n.d.). Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=75>

Sahu, P. (2020). Closure of Universities Due to Coronavirus Disease 2019 (COVID-19): Impact on Education and Mental Health of Students and Academic Staff. *Cureus*. doi: 10.7759/cureus.7541

Smith, A. (2019, April 26). Call for major government funding boost for community colleges. Retrieved May 24, 2020, from <https://www.insidehighered.com/news/2019/04/26/call-major-government-funding-boost-community-colleges>

**Minnesota's Education Opportunity Gap:  
Distance Learning During the COVID 19 Pandemic**

[The author is an elected official in state government]

## **Introduction**

Our Minnesota State Constitution requires state government to fund a form of public schools in a “general and uniform matter” in order to have an educated populace to participate in “our republican form of government” (Strom, 2019). Not only is a form of public education a constitutional obligation that the federal government has left to the states, I have always viewed it as a moral obligation as well. But our education system here in Minnesota is not the great equalizer it was intended to be; “Minnesota has some of the largest achievement gaps by race, ethnicity, and socioeconomic status in the nation” (Grunewald, 2019). We were already dealing with a pandemic of inequities in Minnesota before another pandemic hit, COVID-19.

On March 13, 2020 Governor Tim Walz issued an executive order declaring a state of peacetime emergency due to the outbreak of COVID-19 in Minnesota and two days later he ordered the public schools closed beginning March 18 (Emergency Executive Order 20-1 & 20-2, 2020). Included in order 20-2 was planning time, from March 18 through March 27, 2020, for schools and teachers to prepare for distance learning (Emergency Executive Order 20-2). And, on April 21, Governor Walz continued distance learning until the end of the school year with two more planning days allotted (Emergency Executive Order 20-41). Along with these executive orders came extensive implementation guidance from the Minnesota Department of Education.

According to Education Commissioner Mary Cathryn Ricker, the first month of distance learning placed undue burdens on students and families with disproportionate impacts on students who already fell in the opportunity gap, as well as students with disabilities, communities of color, indigenous, immigrant, and low-income families (Minnesota Department Education, 2020, June 2). In this paper I will reflect on the foundations of our state’s public education system, Minnesota’s move to distance learning during the COVID-19 pandemic, the opportunity gap, the technology gap, and other mitigating factors that have impacted our students during this historic time. I will also provide an analysis of the challenges and opportunities we face as we move into the next school year.

## **Public School Financing in Minnesota**

Financing our public schools in Minnesota is ever evolving and consistently complicated. Public education is a public good that has positive externalities and spillover features that benefit the general public: higher productivity, informed citizenry, redistribution, leveling of the playing field, and affordability (Gruber, 2016). Minnesota’s constitution references an educated

populace and a uniform system of public education, as well as requiring that “the legislature shall make such provisions by taxation or otherwise as will secure a thorough and efficient system of public schools throughout the state” (Strom, 2019). As for efficiency, there is a “natural monopoly” that efficiencies of scale create in having one provider of education as a public good (Gruber, 2016, p. 316). However, our system for funding school has not always been straight forward.

Originally, our public-school system was funded by local property taxes set by individual school boards, but shortly after 1900 those funds began to be supplemented by state general revenue (Strom, 2019). In 1971, the “Minnesota Miracle” was implemented after a decade of work to address disparities in education funding by increasing and equalizing state aid and capping the amount of local property taxes funding permitted (Strom, 2019). Over the years, the funding formula was tweaked until it stabilized in 1989 and is the formula that you see today (Strom, 2019).

Currently, Minnesota has roughly 876,000 public school students spread out over 336 school districts and a state funding formula that gives \$6,567 per student; that per student amount can increase with the addition of different categoricals, 13 tweaks to the formula, depending on a school district’s demographics and need (Strom, 2019). It is a complicated system that spent roughly \$13.494 billion during the 2018-2019 budget cycle of which \$9.525 billion came from the state general fund and with the remaining coming from local property taxes and levies as well as \$754 million from federal sources (Strom, 2019). So, if we are adhering to a formula and equalizing funding, how did Minnesota end up with some of the worst achievement gaps in the country?

### **Minnesota’s opportunity gap**

The first step to understanding why some of our students are not achieving would be to acknowledge that there is an issue. Over the last few decades there has been a plethora of research around the existence of an achievement gap. In fact, Books (2007) notes that, regarding an achievement gap, there is at least agreement amongst experts of the existence of “a major problem in public schooling”. In Minnesota, when you study standardized test scores alone, you see a gap between students of color/indigenous scoring as much as 34% lower in reading comprehension and 40% lower in math than their white counterparts as you see in figures 1-4 (Grunwald, 2019). Our graduation rates for our students of color and indigenous students rank, noted in figure 8, among the lowest in the country as well (Grimm, 2020). But,

pointing to test scores and graduation rates simplifies the problem by ignoring the link to “broader social findings” (Books, 2007). By studying the social issues, like housing, income inequality, and excess stressors, you begin to see that the achievement gap we see in our schools is an opportunity gap in society.

“More than one in five of all US children live in poverty”, face housing stability, food insecurity, and other lack of resources (Parker, 2014). Disparities in our schools “are evident across race, ethnicity, and socioeconomic status” no matter what part of Minnesota you live in or what type of school you go to (Grunewald, 2019). There is no denying that some of our students face an opportunity gap that makes it much harder for them to achieve success in school and in life. That lack of educational attainment exacerbates the income gap that can take multiple generations to change (Books, 2007). In turn, one’s economic success can also directly affect the stability of one’s housing.

In Hennepin County alone, 52% of renter households earn less than 60% of the area median income with 78% of those households pay more than 30% of their income toward rent and 44% paying more than 50% of their income towards housing as shown in figure 12 (Norton, 2019). With housing costs increasing 20% between 2010 and 2018, an affordable place to live is rapidly becoming out of reach for those in jobs that are in top demand as well as swiftly growing jobs as seen in figure 13 (Norton, 2019). Affordability in the housing market is not the only concern facing families, the location of affordable housing is as well.

As our region has become more racially diverse and our disparities in income, unemployment, health, and education have grown as shown in figure 11 (Orfield, 2015). Exclusionary housing practices, along with the concentration of low-income areas has increased segregation of our schools in the Twin Cities seven times over since the start of the 2000’s (Orfield, 2015). And, despite increased funding going to lower class sizes going to schools with high levels of poverty and high percentages of students of color, the opportunity gap persists (Grunewald, 2019). But, one interesting finding in the Minneapolis Federal Reserve’s study is that those same schools have a bigger pool of less experienced teachers (Grunewald, 2019). Those less experienced teachers may not have the skill set in managing classrooms and developing relationships with students. Building these relationships leads to another piece of the opportunity gap, students that have higher instances of trauma.

Trauma experienced by children from birth to 17 can change a child’s brain development and affect their attention span, decision-making process, learning, and how they respond to stress itself (CDC, n.d.). The toxic stress from adverse childhood experiences (ACEs) can directly affect a child’s health, well-being, economic outcome as well as their education as



shown in figure 10 (CDC, n.d.). Clinical research on the effects of trauma on the growing brain, has added another layer of understanding on how to reach children where they are emotionally and developmentally at. In his book *“The Boy Who Was Raised as a Dog”*, Dr. Bruce Perry (MD, PhD) discusses how trauma impacts the growing brain and how a caring community is needed to help a traumatized child heal (Perry, 2008). Our schools are part of that community and order for a child to learn, our education system needs to focus on a child’s emotional and physical needs as much as their cognitive development (Perry, 2008).

The bottom line is that children do not come in pieces, there are many factors that go into the opportunity gap. When a child walks into our schools weighed down by housing instability, economic insecurity, and increased trauma, they are already starting behind. This paints a picture of the state of our students and of our schools before the pandemic hit and that state has not changed since we had to pivot to distance learning.

### **Move to distance learning**

Once the announcement was made that schools were closing, the Minnesota Department of Education (MDE) began to develop teaching and learning guidance for our public schools to pivot to distance learning. The guidance has been continually updated by MDE after discussions with all the stakeholders. Schools were given from March 18 to March 27 to create plans that would ensure equity and equal access to educational material for all students (Minnesota Department of Education, 2020). MDE stressed that distance learning did not necessarily need to include e-learning or online learning. Some of our school districts chose to extensively use online platforms to distribute educational material, while some used bus routes or pick-up sites to hand-off material to students and parents.

MDE’s thirty-one-page guidance document covered everything from educational material to attendance to the delivery of school nutrition. It outlined requirements for student’s mental well-being, social emotional learning as well as addressing students who receive special services including those with special needs, English language learners, and students experiencing homelessness. The guidance also included early childhood, before and after care, and post-Post-Secondary options. One only need read this document to see the expansiveness of the services our public schools provide our students. COVID-19 has not only highlighted the special place our schools hold in our communities but has shone a harsh light on the opportunity gap in our society. The technology gap is just one piece that was amplified by moving to distance learning.

## Technology Gap

In 2016, MDE reported to the legislature the status of the 1:1 technology program in our public K-12 schools. The report noted that over the past 20 years, Minnesota public schools have gradually implemented some level of programming where students in 55% of our districts have an electronic device for learning (Casselius, 2016). The first large initiative was in two of Minneapolis public schools in 1998 followed by Hopkins and Stillwater public schools in the early 2000's (Casselius, 2016). The report cautioned that “high-speed broadband access, efficient internal networks, and robust wi-fi systems” along with the people necessary to support the programs are key to a successful initiative (Casselius, 2016). Another concern was the lack of professional development for teachers in how to integrate technology in their classrooms; in the same survey, as seen in figure 16, 18% of teachers noted they had less than four hours of training (Casselius, 2016). Finally, the report concluded that, at the time, there was very little data available on infrastructure in our schools (Casselius, 2016). But a school's digital infrastructure was not the only concern, districts also needed to worry about family's accessibility to the digital network as well as electronic devices in the hands of students.

While many of our schools may have been ready to deliver curriculum on-line, some of our most underserved families lacked the devices and internet connection to receive the educational materials. While 84% of Minnesota households have broadband services in their homes, only 63% of those with household incomes of \$35,000 or less do not have a connection in their home (Orlando, 2018). A National survey showed that 1 in 5 students from underserved populations, which can also be broken down by race/ethnicity, only have one electronic device at home and that 56% of the students who reported only one device said that the device was a smartphone as shown in figures 14 & 15 (Moore, 2018). Why is this important to know, Hall (2006) says it best when explaining that “technology is actually accelerating the rate at which the divide is growing” and that it “merely accelerates the positive or negative trends in student achievement that are already occurring”. The digital divide has made distance learning difficult for a segment of our student population but that is not the only factor that has affected our students' success and exacerbated the opportunity gap during the end of the 2019-2020 school year.

## Other mitigating factors

As noted above, our students have a wide variety of barriers to learning when conditions are optimal let alone during a pandemic and a shift to distance learning. In June of 2020, the Minnesota House of Representatives Education Policy & Finance Committees held a series of joint hearings to take testimony from students, parents, teachers, social workers, counselor, and other school professionals regarding distance learning and plans around returning to school in the Fall. At the time of writing this paper, the third hearing with school administrators and school boards had yet to occur. In the first meeting students and parents shared their concerns over the lack of access to technology and the internet, engagement between teachers and students, student's mental health, and students who receive special services falling behind (Hubbard, 2020).

In the second meeting, teachers, counselor, school psychologists, and social workers as well as support staff, shared their pressing concerns regarding student's mental and physical health as well as the continuity of education (Cooney, 2020). In the forefront was their concern for students who faced economic insecurity from both the COVID-19 pandemic and the civil unrest sparked by the murder of George Floyd (Cooney, 2020). Mr. Floyd was a black man killed by a Minneapolis police officer on May 25, 2020. Teachers were concerned that students would not have the support and space needed to process this tragic event (Cooney, 2020). But at the very top of the list was that teachers missed the ability to connect with their students face-to-face.

All these factors play into what decades of research into human development shows us, that "social, emotional, cognitive, linguistic, academic – are deeply intertwined in the gain and in behavior" and that these domains are central to learning (Jones, 2017). Not only do teachers play a large role in the social and emotional learning of their students but student's learning also benefits from the ability to interact with others in order to meaningfully connect with content to achieve academic success (Jones, 2017). Schools play a much larger role than the mere academic development of our students and our current system relies heavily on a bricks and mortar, face-to-face model for delivery. With the pandemic yet to run its course, and a possible second and third wave later this year, we do not know what this fall will look like for our schools, students, and teachers. Our students have faced a pandemic, had their learning disrupted, were cut off from their friends and teachers, and witnessed civil unrest. Now students, as well as teachers and parents are waiting to see what their school life will look like in the fall.

## Analysis

On June 18, 2020, MDE unveiled guidance for school districts to follow as they plan for the fall. In conjunction with the Minnesota Department of Health (MDH), MDE asked schools to prepare for three different scenarios: in-person instruction for all, a hybrid model with strict social distancing and capacity limits, and a distance learning model (Minnesota Department of Education, 2020). MDE's focused on a lofty goal "ensuring that every student in the state of Minnesota receives an equitable education and has equal access to learning instruction during the COVID-19 pandemic" (Minnesota Department of Education, 2020, June 18). MDE provides comprehensive guidance around: communicating with students, families and staff, availability of federal funding, nutrition services, transportation, worker protection, technology access, and much more. Final guidance for a fall school opening will be forth coming by the end of July. But while schools wait, they should waste no time in planning how to address the shortcomings of the spring's distance learning in order to better prepared kids for the Fall.

One of the first things to tackle is what some experts are calling the COVID slide, the learning loss students have experienced as the pandemic interrupted the end of their school year. Researchers have been busy using statistics around summer learning loss to predict how far behind our students will be in the Fall. Estimates suggest that students returning in the fall will have roughly only 70% of the learning gains in reading and as low as 50% in math as shown in figures 17 & 18 (Kuhfeld, 2020). It will be extremely important to take a baseline measurement of where students are at in order to adjust and individualize learning plans. Summer school is also an option for those whose spring grades have already shown they are behind academically.

Districts should also increase their efforts to make sure students have access to electronic devices. Although MDE has made it clear that distance learning does not necessarily mean on-line learning, a large majority of our schools have decided on an e-learning delivery model. There are hopes that the federal funds coming to the state will help mitigate the costs our schools incurred from COVID in order to cover the technology purchases. Connecting families to the internet may be a little more difficult but working with non-profits and local businesses has proven to be somewhat successful already. The hardest piece of the digital divide will be making sure students have support at home to help them navigate the various steps of the process. Partnering with parents and caregivers will be key as well as looping in school counselors and social workers where available. During testimony, school counselors noted that distance learning has given them a unique opportunity to deepen relationships with

students and families as they visited them virtually in their homes (Cooney, 2020). Unfortunately, Minnesota has the 4<sup>th</sup> worst student to counselor ratio in the country at 1 counselor for every 723 students (KARE11, 2018).

Students' mental health and well-being were on the top of many lists as concerns for students returning. Teachers, especially, wanted to make sure that students would have the support to work through some of their trauma and anxiety. While some of our schools have embedded social emotional learning strategies in their classrooms, it may take the expertise of our school counselors, social workers, and psychologists to tackle the need. School-linked mental health grants have been available to some Minnesota schools over the last few years but there still is a serious lack of resources for schools to provide this service.

Another possible tool is the adoption of a Multi-tiered System of Supports (MTSS) framework that some of our neighboring states have implemented. This is a "whole-school, data-driven, prevention-based framework designed to improve learning outcomes for every student" and is being promoted in Minnesota by a grassroots group of educators whose model is shown in figure 9 (Grimm, 2020). These educators have formed the Minnesota Collective for Education Equity (MnCEE) and believe this layered continuum of evidence-based supports is the answer to tackling the opportunity gap and that COVID-19 is the perfect opportunity to help re-imagine how we deliver education in Minnesota (Grimm, 2020). This is just the beginning of the list of items our schools will have to consider as we rapidly move toward the 2020-2021 school year. I have not even touched on the logistics of following the Minnesota Department of Health's guidelines on social distancing, cleaning buildings, or transporting the students.

## **Summary**

As Minnesotans, we have always been proud of our public-school system. But, our current approach to education has left too many of our low-income, black, brown, and indigenous students behind. The recent pandemic has focused a glaring spotlight on our opportunity gap and distance learning has only exacerbated it.

Minnesota's digital divide, and other mitigating factors, have impacted our students' learning as schools used a new model to deliver curriculum this spring. There are challenges and opportunities ahead as we move into the next school year. It is imperative that we use an equity lens and a student-centered approach in order to mitigate some of the learning losses. If we do not, we may be leaving the next generation of wage-earners and leaders behind.

## References

- Books, S. (2007). What are we talking about when we talk about “closing the achievement gap”? *International Journal of Learning*, 14(2), 11–17.  
<https://doiorg.xxproxy.smumn.edu/10.18848/1447-9494/CGP/v14i02/58587>
- Cassellius, B. (2016). *1:1 Device programs best practices in K-12 education*. Minnesota Department of Education. Retrieved from  
<https://www.leg.state.mn.us/docs/2016/mandated/160189.pdf>
- Center for Disease Control (CDC), (n.d.). *Preventing adverse childhood experiences*. U.S. Department of Health & Human Services. Retrieved from  
<https://www.cdc.gov/violenceprevention/childabuseandneglect/aces/fastfact.html>
- Cooney, V. (2020, June 25). School professionals call for changes to accommodate student learning and health. *Session Daily*. Retrieved from  
<https://www.house.leg.state.mn.us/SessionDaily/Story/15377>
- Donovan, L., & Green, T. (2009). Two-way mirror: technology-rich K-8 and teacher education programs. *Action in Teacher Education*, 30(4), 45–55.
- Emergency Executive Order 20 – 01 (2020). *Executive orders from Governor Walz*. Office of Governor Tim Walz and Lt. Governor Peggy Flanagan. Retrieved from  
<https://mn.gov/governor/news/executiveorders.jsp#/list/appId/1/filterType//filterValue//page/8/sort//order/>

Emergency Executive Order 20 – 02 (2020). *Executive orders from Governor Walz*. Office of Governor Tim Walz and Lt. Governor Peggy Flanagan. Retrieved from <https://mn.gov/governor/news/executiveorders.jsp#/list/appId/1/filterType//filterValue//page/8/sort//order/>

Emergency Executive Order 20-41 (2020). *Executive orders from Governor Walz*. Office of Governor Tim Walz and Lt. Governor Peggy Flanagan. Retrieved from <https://mn.gov/governor/news/executiveorders.jsp#/list/appId/1/filterType//filterValue//page/8/sort//order/>

Grimm, E., Hansen-Burke, A., Henderson, J., Hensgen, A., Hodges, S., Kember, J., Knewitz, D., McKeveitt, N., Olson, E., Phillipe, D., Rodriguez, M., & Weeks, M. (2020). *Pursuing educational equity in Minnesota through a statewide multi-tier system of support*. Minnesota Collective for Educational Equity. (Research Report). Retrieved from <https://www.minnesotacollectiveforeducationalequity.org/s/MnCEE-White-Paper-Pursuing-Educational-Equity-Through-Statewide-MTSS.pdf>.

Gruber, J. (2016). *Public Finance and Public Policy*. (5th ed.). NY: Worth Publishers (Macmillan Education Imprint).

Grunwald, R. & Nath, A. (2019). *A statewide crisis: Minnesota's education achievement gaps*. Federal Reserve Bank of Minneapolis. Retrieved from <https://www.minneapolisfed.org/~media/assets/pages/education-achievement-gaps/achievement-gaps-mn-report.pdf?la=en>

Hall, D. (2006). Bridging the Gap: Strategies for creating equitable learning opportunities. *Learning & Leading with Technology*, 33(7), 15–18.

- Hubbard, R. (2020, June 24). Education committees examine the report card on distance learning. *Session Daily*. Retrieved from <https://www.house.leg.state.mn.us/sessiondaily/Story/15376>
- Jones, S. M., & Kahn, J. (2017). The evidence base for how we learn: supporting students' social, emotional, and academic development. consensus statements of evidence from the council of distinguished scientists. *Aspen Institute*.
- KARE11 (2018, March 14). *School safety: Minnesota has 4th worst student/counselor ratio*. Retrieved from <https://www.kare11.com/article/news/school-safety-mn-has-4th-worst-studentcounselor-ratio/89-528636288>.
- Kuhfeld, M. & Tarasawa, B. (2020). *The COVID-19 slide: What summer learning loss can tell us about the potential impact of school closures on student academic achievement*. Collaborative for Student Growth: NWEA Research. Retrieved from [https://www.nwea.org/content/uploads/2020/05/Collaborative-Brief\\_Covid19-Slide-APR20.pdf](https://www.nwea.org/content/uploads/2020/05/Collaborative-Brief_Covid19-Slide-APR20.pdf)
- Minnesota Department of Education (2020, March 26). *Minnesota distance teaching and learning implementation guidance*. Retrieved from <https://education.mn.gov/MDE/dse/health/covid19/>
- Minnesota Department of Education (2020, June 2). *Minnesota distance teaching and learning implementation guidance*. Retrieved from <https://education.mn.gov/MDE/dse/health/covid19/>
- Minnesota Department of Education (2020, June 18). *Guidance for Minnesota public schools: 2020-2021 school year planning*. Retrieved from <https://education.mn.gov/MDE/index.html>



- Moore, R., Vitale, D., & Stawingoa, N. (2018). *The digital divide and educational equity: A look at students with very limited access to electronic devices at home*. ACT Research for Equity in Learning. Retrieved from <https://www.act.org/content/dam/act/unsecured/documents/R1698-digital-divide-2018-08.pdf>
- Norton, G. & Birkey, A. (2019). *Market watch Hennepin county: trends in the unsubsidized multi-family rental market*. Minnesota Housing Partnership. Retrieved from <http://mhponline.org/images/stories/images/research/MarketWatch/HennepinCo/MarketWatchHennepinCounty.pdf>
- Orfield, M. (2015). *Why are the Twin Cities so segregated?* Institute on Metropolitan Opportunity: University of Minnesota Law School. Retrieved from <https://www.minnpost.com/wpcontent/uploads/sites/default/files/attachments/WhyAretheTwinCitiesSoSegregated22615.pdf>.
- Orlando, R. (2018, Nov.-Dec.). Connection is essential: closing the digital divide. *Minnesota Cities*. Retrieved from <https://www.lmc.org/news-publications/magazine/nov-dec-2018/internet-connection/>
- Parker, E. (2014). Closing opportunity gaps. *Principal Leadership*, 15(3), 40-44.
- Pautz, S., & Sadera, W. A. (2017). Leadership practice in a one-to-one computing initiative: principals' experiences in a technology driven, second-order change. *Computers in the Schools*, 34(1-2), 45-59.
- Perry, B. D., & Szalavitz, M. (2008). *The boy who was raised as a dog: And other stories from a child psychiatrist's notebook: what traumatized children can teach us about loss, love, and healing*. New York: Basic Books.

Strom, T. (2019). *Minnesota school finance: A guide for legislators*. Minnesota House Research.

Retrieved from <https://www.house.leg.state.mn.us/hrd/pubs/mnschfin.pdf>

## Appendix A

**Figure 1**  
*Minnesota disparities in testing*

Proportion of students proficient at grade level on MCA III tests in 2018

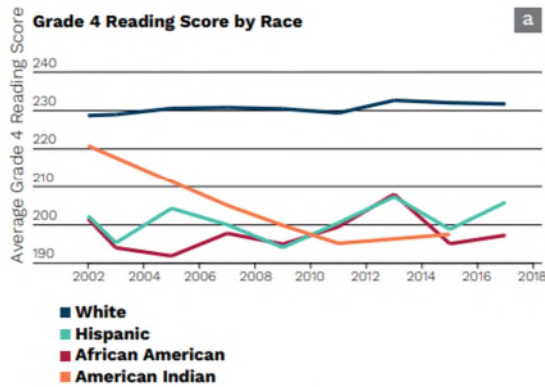
	Grade 4 Reading	Grade 8 Math
White students	65%	65%
American Indian/Alaska Native students	31%	25%
Asian students	48%	63%
Black students	31%	29%
Hispanic students	32%	35%
Students eligible for free/reduced-price meals	36%	36%
<b>All students</b>	<b>56%</b>	<b>57%</b>

(Grunwald & Nath, 2019)

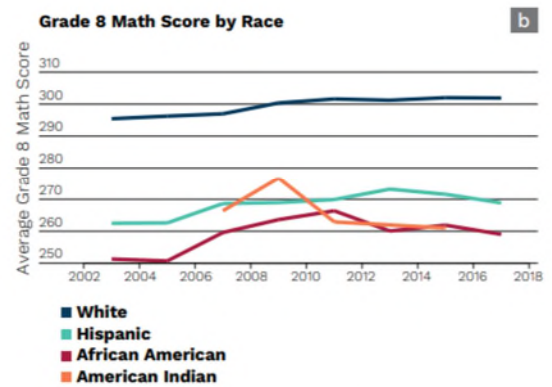
**Figure 2**  
*Minnesota disparities in testing on a line graph*

Large racial disparities in test scores across students and schools

5



Source: Authors' calculations based on data from the National Center for Education Statistics (NCES)



Source: Authors' calculations based on data from the National Center for Education Statistics (NCES)

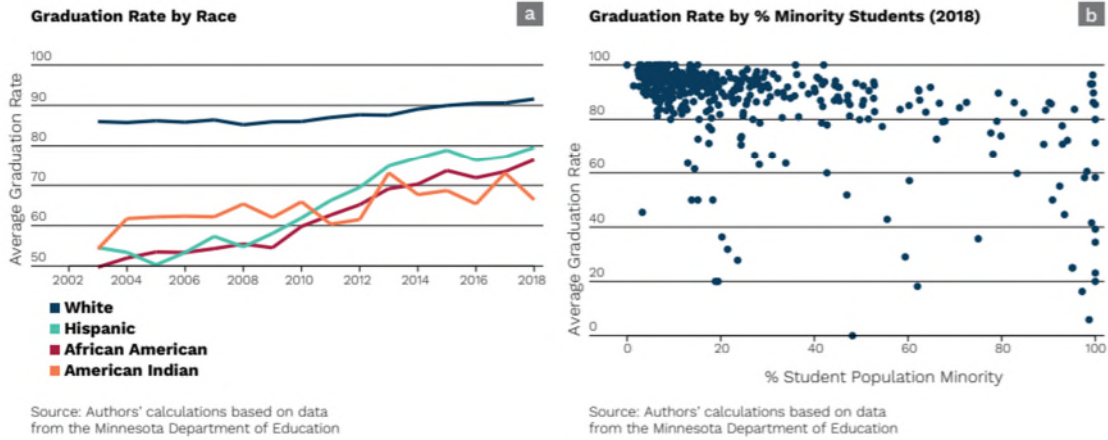
(Grunwald & Nath, 2019)

**Figure 3**

*Graduation rates by race/ethnicity*

Graduation rate gaps by race have gradually decreased but remain wide

12



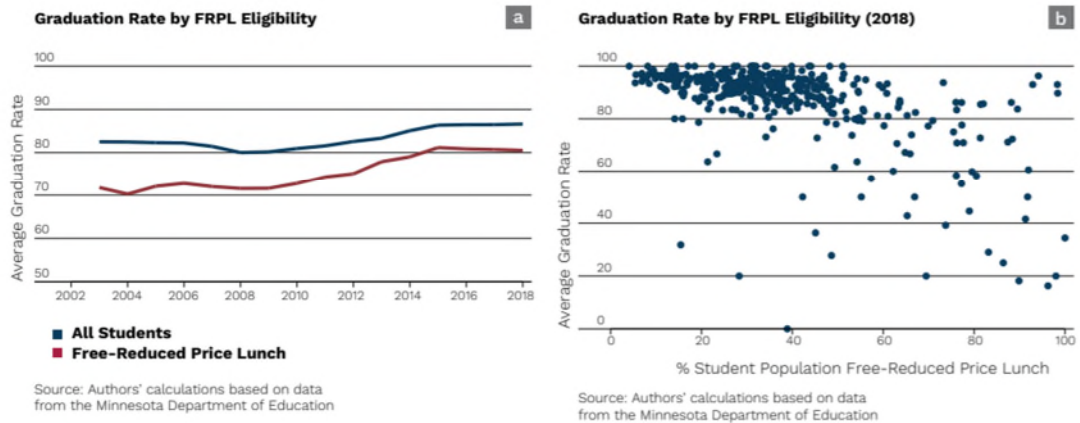
(Grunewald & Nath, 2019)

**Figure 4**

*Graduation rates by socioeconomic background*

Graduation rate gaps by socioeconomic status have remained wide

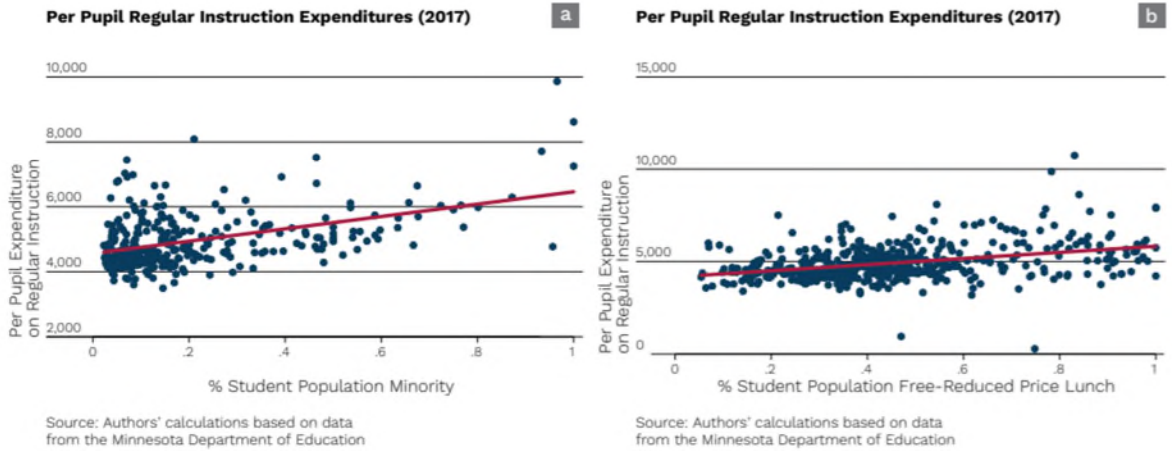
13



(Grunwald & Nath, 2019)

**Figure 5**

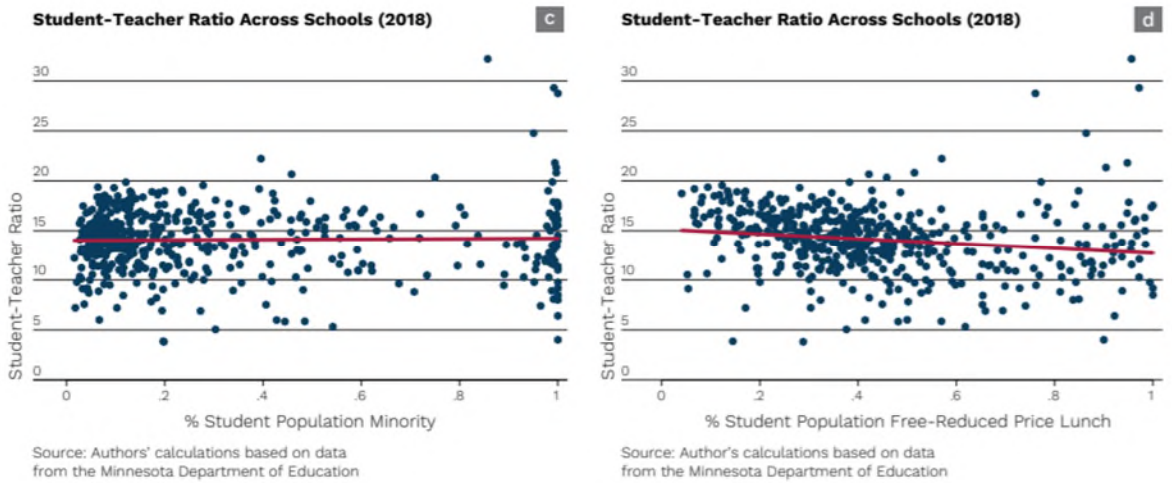
Minnesota has equalized funding and class size by race and income, but not teacher experience



(Grunwald & Nath, 2019)

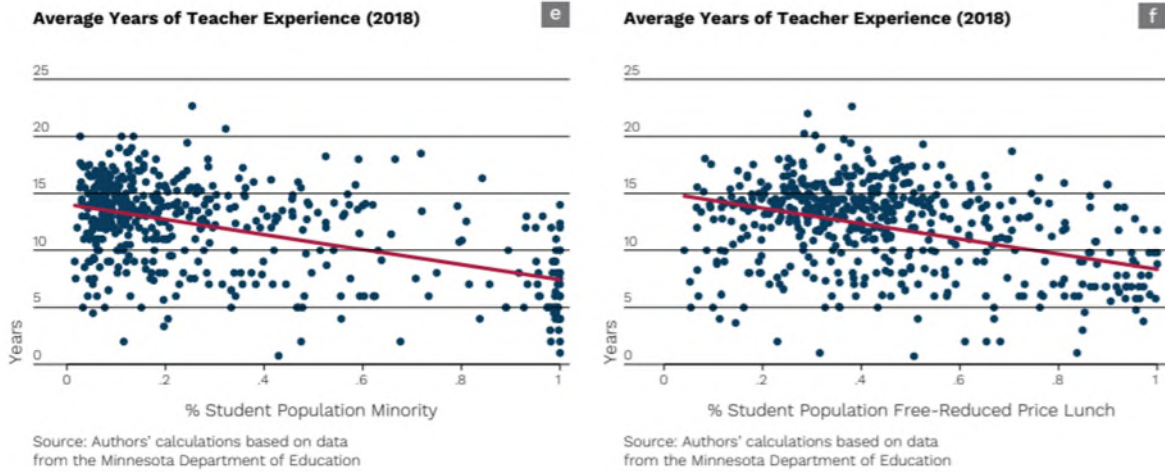
**Figure 6**

*Student Teacher Ratios*



(Grunwald & Nath, 2019)

**Figure 7**  
Average years of teacher experience



(Grunwald & Nath, 2019)

**Figure 8**  
Minnesota graduation rates in comparison to the national rates

**2016-2017 GRADUATE RATES AND NATIONAL RANK**

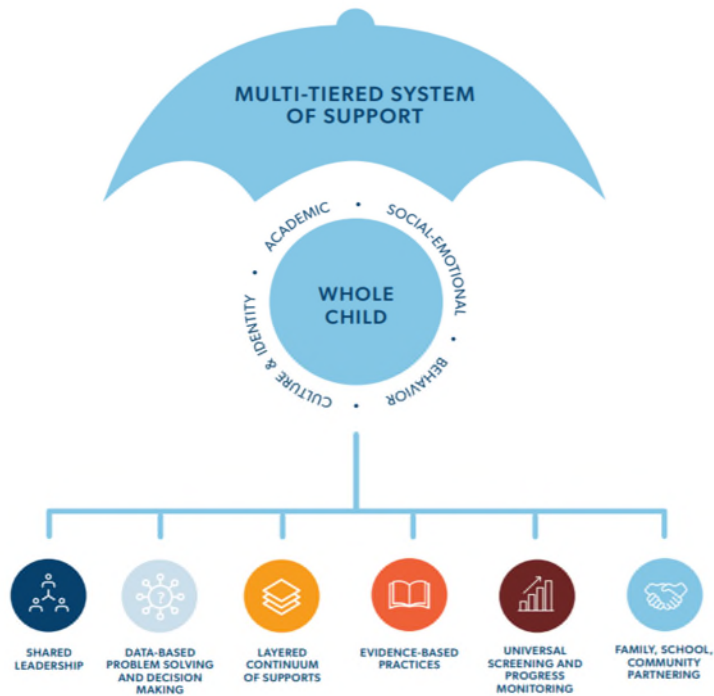
STATE	Overall		Students with Disabilities		Economically Disadvantaged		Limited English Proficiency		Black		Hispanic		American Indian / Alaskan Native	
	%	RANK	%	RANK	%	RANK	%	RANK	%	RANK	%	RANK	%	RANK
<b>MN</b>	<b>82.7</b>	<b>34</b>	<b>61.2</b>	<b>36</b>	<b>69</b>	<b>45</b>	<b>64.7</b>	<b>30</b>	<b>64.8</b>	<b>51</b>	<b>66.3</b>	<b>51</b>	<b>51</b>	<b>46</b>
IA	91	1	74.3	11	83.7	8	80	4	82	13	82.4	12	83	9
WI	79	11	68.2	24	77.4	27	65	29	67	50	80.3	21	79	19
USA	<b>84.6</b>	-	<b>67.1</b>	-	<b>78.3</b>	-	<b>66.4</b>	-	<b>77.8</b>	-	<b>80</b>	-	<b>72.4</b>	-

\*Rank is in relation to 50 states and the District of Columbia (out of 51)

(Grimm, E., 2020)

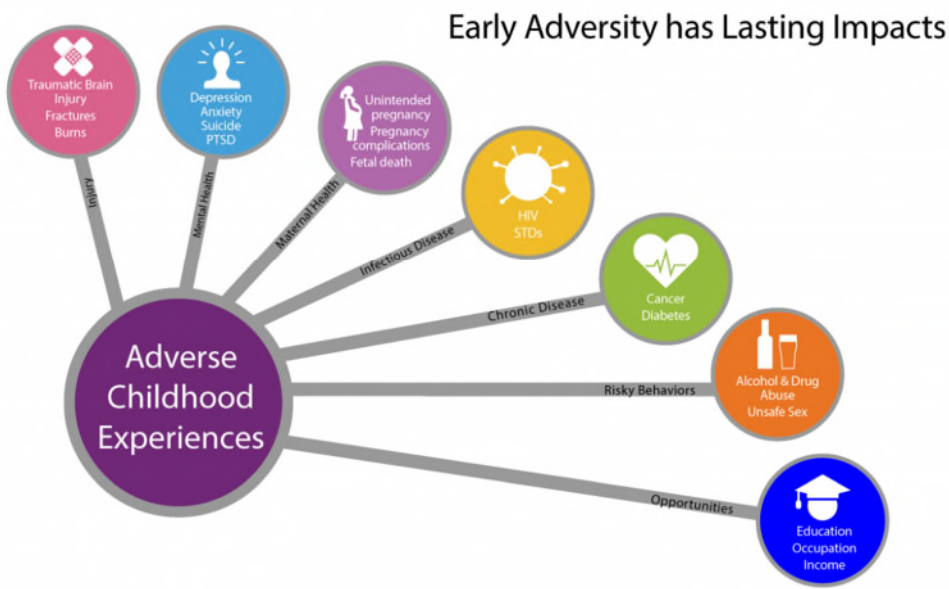


**Figure 9**  
Multi-tiered System of Support (MTSS) for students



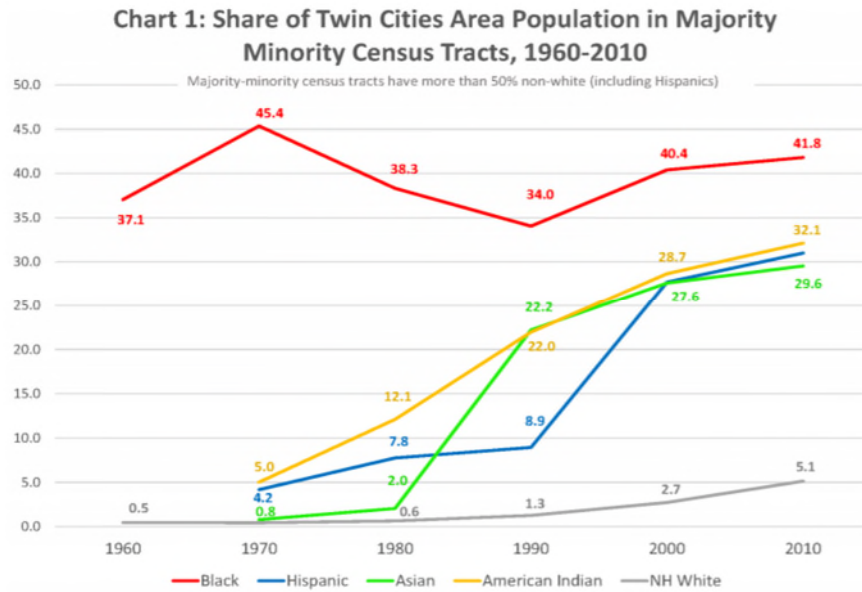
(Grimm, 2020)

**Figure 10**  
Association between ACEs and Negative Outcomes



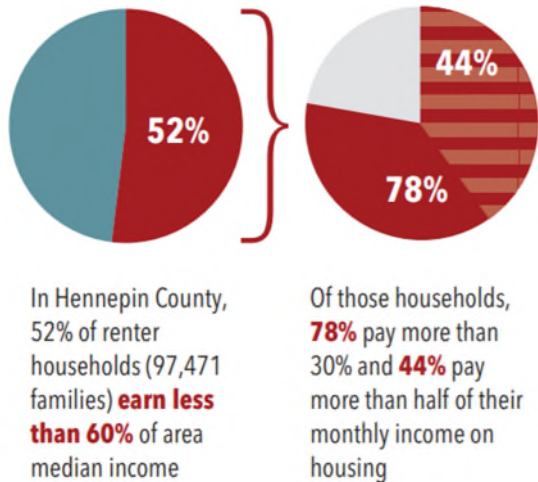
(CDC, n.d.)

**Figure 11**  
Twin Cities region has become more racially diverse



(Orfield, 2015)

**Figure 12**  
Housing market in the Twin Cities



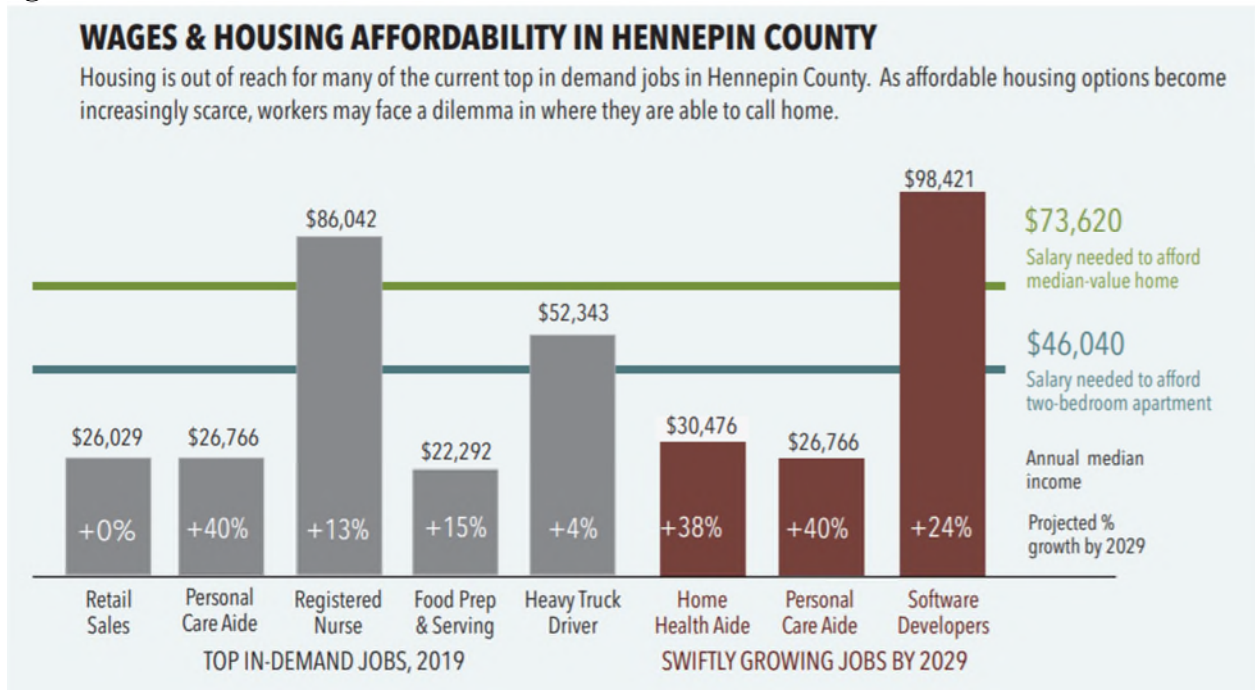
	Percent renter households	Change in renters, 2000-2017	Percent residents of color
<b>Hennepin County</b>	38%	22%	31%
Minneapolis	53%	15%	40%
St. Louis Park	44%	33%	19%
Brooklyn Center	38%	14%	59%
Richfield	37%	14%	38%
Minnetonka	31%	38%	14%
Brooklyn Park	29%	19%	55%
Plymouth	28%	51%	22%
Edina	28%	21%	16%
Eden Prairie	27%	52%	23%
Crystal	27%	18%	27%
Golden Valley	26%	51%	18%

1- Unless otherwise noted, information in this section comes from the U.S. Census Bureau, 2013-2017 American Community Survey | 2- Metropolitan Council staff analysis of U.S. Census Bureau, 2013-2017 American Community Survey Public Use Microdata Sample five-year data | 3- Area median income is calculated for the 13-county HUD Metro MN-WI area of Minneapolis-St. Paul-Bloomington.

(Norton & Birkey, 2019)



**Figure 13**



(Norton & Birkey, 2019)

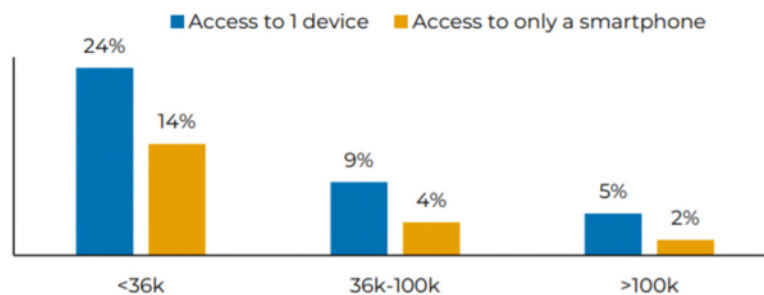
**Figure 14**

*Annual Family income compared to access to electronic devices*

### Annual Family Income Range

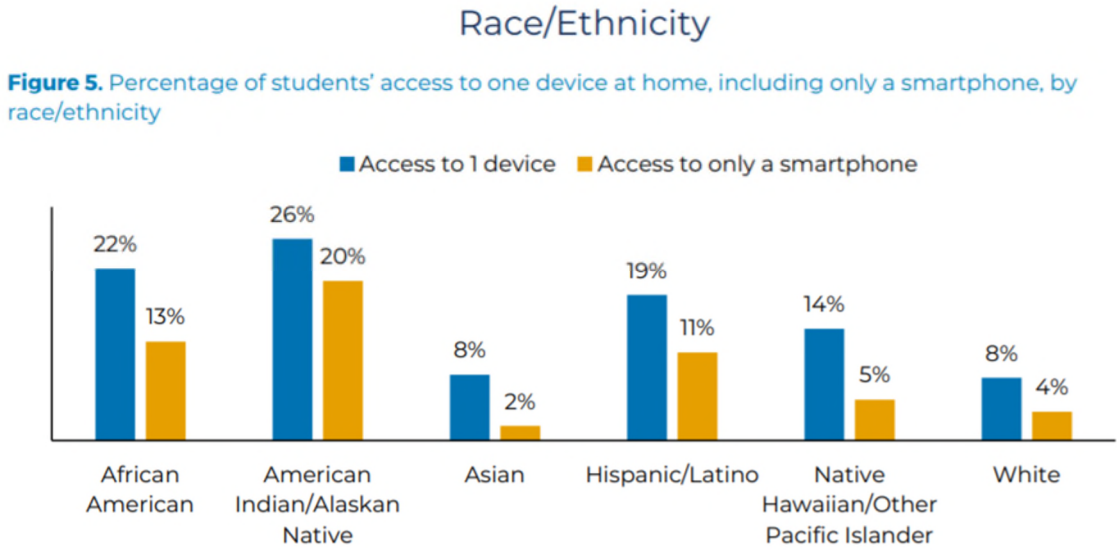
Nearly one quarter (24%) of students whose self-reported annual family income was below \$36,000 also report only having access to one device—a gap of 19 percentage points compared to students from families with annual income above \$100,000 (Figure 3).

**Figure 3.** Percentage of students' access to one device at home, including only a smartphone, by annual family income range



(Moore, R., 2018)

**Figure 15**  
Access to devices by race and ethnic backgrounds



(Moore, R., 2018)

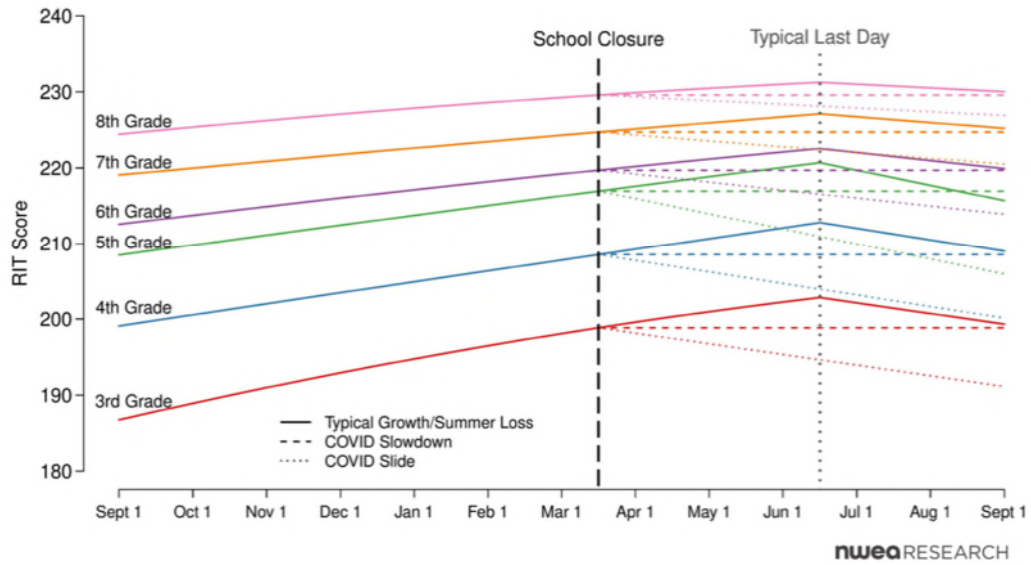
**Figure 16**  
Amount of professional development for technology integration in our school districts



(Casselius, 2016)

**Figure 17**  
*NWEA research on the COVID-19 slide (Mathematics)*

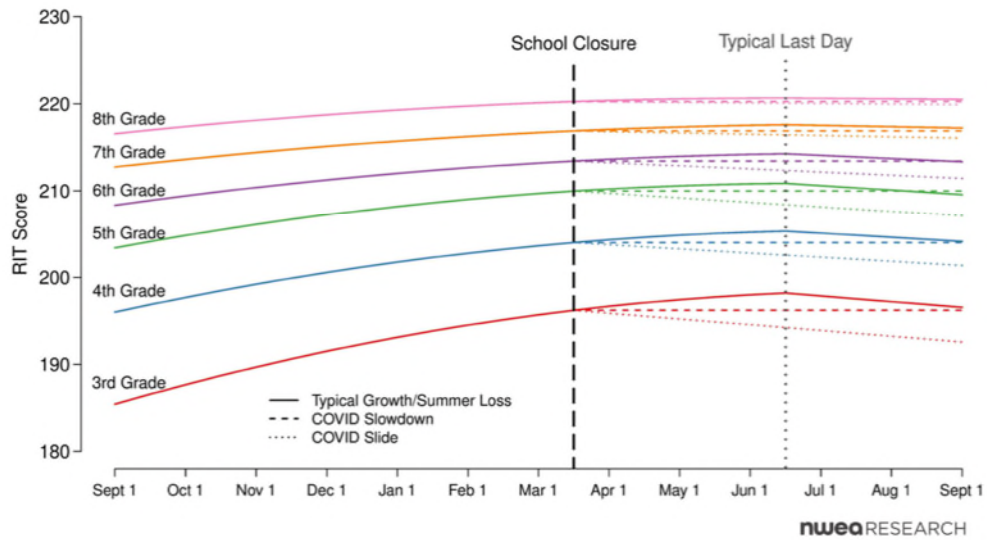
**Figure 1. Mathematics forecast**



(Kuhfeld & Tarasawa, 2020)

**Figure 18**  
*NWEA research on the COVID-19 slide (Reading)*

**Figure 2. Reading forecast**



(Kuhfeld & Tarasawa, 2020)

## **Impact of COVID-19 on Law Enforcement**

[The author is a law enforcement officer in the federal government]

## Introduction

Coronavirus (COVID-19) has quickly become one of the largest hurdles the modern world has faced. Effecting worldwide economies, public health, and the structure of many services we take for granted, COVID-19 has reshaped the way we live our lives. Essential services such as law enforcement have been on the front lines throughout the crisis and have experienced drastic changes in how they function on a daily basis. Between staffing changes, health concerns, acquisition of personal protective equipment (PPE), and the financial impacts of the virus, which are felt at every level of government, COVID-19 has had a profound impact on how law enforcement throughout the country conducts their duties. The pandemic is a continually evolving situation, with new information being announced daily. With that in mind, the information which I am referencing throughout the paper is the most specific information available currently and is subject to change due to the ever-evolving climate of the situation.

Throughout this paper, I will be discussing the impact of COVID-19 on the law enforcement field, with specific insight from my role as a Law Enforcement Officer at the Federal Reserve Bank of Minneapolis. I am in a unique position being employed by the Federal Reserve, which is at the forefront of steering our economy through the pandemic. The Fed has been extremely proactive in forming policies to keep its employees safe and to quickly shift its focus to preserving our nation's economy through the crisis. The way myself and other officers throughout the country conducted their duties has drastically changed throughout the last few months. I will be delving into how police work is changing due to the virus, from its previous state, and what the future of law enforcement may look like after the pandemic. There are possible permanent implications which the virus could have on the field, so the topic of whether law enforcement will ever return to the same state it was in before COVID is in question. In addition to changes in my current job, and officers' roles throughout the country, I will be exploring how the Fed's level of government could be impacted from the virus, and the affect the virus is having on other departments throughout the nation.

Lastly, there are a variety of economic impacts which have already come to light from the financial strain of the virus. Counties such as Peoria, Illinois are already facing the heavy economic impacts of the disease. "The County Board voted on Thursday to cut 10.5% from every department, cuts that will total about \$12 million, as a way to plug the gaping hole left by the economic devastation the COVID-19 virus has wrought in just a few weeks. Tax revenue is down drastically. Fees for services are down as well. Property taxes aren't set to be collected until later in the year." (Kravetz, 2020). This is just one example of the damage the virus is

beginning to inflict on the economy that we can see. Whether it is less tax revenue causing cutbacks in cities, strain on local government budgets, or budgetary changes within departments due to staffing levels and equipment demand, there are a variety of impacts from the virus that effect police departments throughout the country. These different aspects lead to a future climate of law enforcement that could look different than before the virus, especially when taking how departments address public health concerns into consideration. The question remains whether these changes will be permanent, or just a short-term impact on the field as a whole.

### **Analysis/Data**

The COVID-19 pandemic has reshaped the way many police departments execute their day to day operations. Reduced staffing, newly required use of PPE, and a dramatic shift in crime are just some of the factors that have resulted from the virus outbreak. The changes brought on from the pandemic have heavily altered operations in many departments, which could continue after the pandemic has subsided. In addition to the operational changes, COVID-19 has had a heavy financial impact on many departments and municipalities due to the financial strain that the virus is having on all levels of government. Many departments, with mine included, have introduced reduced staffing to help mitigate exposure to COVID-19 by having less officers present, and by altering staffing of squad cars to just one officer instead of two, to maintain social distancing. In a recent survey conducted by the International Association of Chiefs of Police (IACP), respondents from 1,000 agencies were surveyed on their agency's response to the pandemic on topics such as changes to agency operations, preparedness, and creative ideas departments are implementing. The study noted that departments are enacting a variety of techniques to adapt to the pandemic, to reduce risk of their employees becoming infected.

“A number of responses focused on adjusting shift schedules, workdays, squad and deployment formations, and also having some shifts answering calls over the phone from home to minimize officer interactions with each other and the public. Some have stopped in-person roll calls or have staggered shifts to minimize officer interactions with each other.” (Lum, Maupin, & Stoltz, 2020).

In contrast to sworn officer schedule adjustments, “60% of responding agencies indicated that a portion of their civilian workforce was now working remotely. 62% of responding agencies said that the number of hours civilians were working had not changed, although 30%

mentioned that civilian work hours had decreased.” (Lum, Maupin, & Stoltz, 2020).

Understandably, it becomes immediately apparent that the civilian work force has much more flexibility in reducing staffing than sworn officer staffing does. With 30% of civilians having decreased hours, this can dramatically reduce their income, as well as department expenditures (Lum, Maupin, & Stoltz, 2020). This decrease in hours can have a heavy financial impact on families, but it should be noted that there are no statistics available that differentiate whether departments are still paying these employees for 40 hours, even though they may be working a reduced schedule.

At the Fed, our department has enacted a reduced schedule that typically leads to most officers only working 2 days a week while still being paid for 40 hours. There are situations in which officers can work remotely, but this was mainly implemented to maintain full-time status, and to keep officers’ pay at a normal level. Unlike most other departments, the Federal Reserve has a continual stream of revenue during the pandemic, which allows us to reduce staffing while maintaining hourly pay. Interestingly, our operational costs have decreased during the virus, even with the addition of hazard pay to working officers. Less overtime, adjunct duties, training, and a hiring freeze, have reduced department costs. This may not be the case at other agencies, but it has been a unique effect which I have observed at the Fed.

The effect of the virus on staffing in combination with the social impact of stay at home orders has had an impact on crime throughout the country. In a study focused on crime in Los Angeles and Indianapolis, social distancing and shelter in place has had an impact on certain crimes, but not a reduction in all types of infractions. As depicted in Table 1 below, there has been a significant reduction in crimes such as burglary and assault, but a dramatic increase in domestic violence crimes. Stay at home orders have forced families to spend a significant amount of time together, which has led to a dramatic increase in domestic assault cases. Unsurprisingly, both burglary and assault crime have decreased, due to most of the population spending their time mainly at home during stay at home orders. Table 1 highlights both Los Angeles and Indianapolis’ altered crime levels due to COVID-19. It should be noted that statistics vary throughout different municipalities around the country, but this represents an overview of how crime is impacting a variety of cities. In addition, traffic stops have dramatically declined, which is depicted in Table 2, due to the stay at home order and changes in organizational policy.

“Reduced traffic stops could be partially explained by the overall reduction in traffic flow due to people complying with shelter in place orders. In Indianapolis, patrol officers were also instructed to exercise discretion in conducting traffic stops to mitigate less than necessary social

contact. In Los Angeles, no such directive was issued, but individual discretionary choice by officers may be at play.” (Mohler et al, 2020).

A study conducted by the International Association of Chiefs of Police found that, “61% of responding agencies indicated that they had adopted formal policies to reduce or limit proactive traffic or pedestrian stops.” (Lum, Maupin, & Stoltz, 2020). New policies and social effects from the stay at home order are the main influencing factors for the changing statistics regarding traffic stops. I assume that as society begins to reopen, crime level will also return to previous levels before coronavirus. There may be some anomalies, such as a continued reduction of traffic stops for officer safety, but in general the impact on crime will not be extremely long-term.

A decrease in overall crime is excellent news, but unfortunately there is a negative aspect to the drop in crime, specifically regarding the reduced amount of traffic stops.

“One unforeseen impact could be the loss of traffic- and road-related fines and fees. A large portion of that money is transferred to the State Treasurer’s Office and eventually sent to local school districts to pay for technology upgrades. The agency expects revenue for the fiscal year that ends in June to come up \$300 million short, and projections call for a \$370 million shortfall in fiscal 2020-21.” (Browder, Pryor, Kerr, & Burns, 2020).

The example depicted above in North Carolina will have an impact on the State Treasurer’s Office budget and will eventually trickle down to various entities that rely on state finances, such as local schools receiving technology upgrades. Though there are other aspects of the pandemic that could lead to cost savings, such as a reduced prison population, which is depicted in Table 3 below, factors such as an overall drop in crimes could have a negative financial impact on the state. At the end of the pandemic, the finalized budget impacts will shine light on the areas which have either saved the state money such as possible reduced staffing costs, or have cost the state money, such as the loss of revenue from fines.

Impacts from reduced traffic stops on revenue leads me to the next factor affecting law enforcement, which is the financial impact of COVID-19 on local government and agencies. As mentioned above, we are already beginning to see the repercussions of the virus on traffic levels and enforcement. In addition to this factor, changes in revenue for cities and local governments has had a profound effect on the ability for cities to balance their budget. City budgets rely heavily on tax and fee structures, whether it be taxes generated from retail sales, income, or real estate. As depicted in Table 4 below, municipalities rely on a mix of taxes and fees to ensure it is getting a proper revenue stream. With COVID-19 either closing or causing a drop in sales at many businesses, it has had a profound effect on local budgets. Many cities



are resorting to drastic measures to account for the unexpected monetary loss that COVID-19 has had on them. Cities such as Schenectady, New York are being forced to make tough decisions to balance out spending, such as cutting the budget of their police department.

"There's no way that I can cut a quarter of my budget out and properly police this city," Schenectady Police Chief Eric Clifford said. Clifford said in an effort to save money amid the COVID-19 pandemic, he's being asked to look at cutting \$3 million, or about 25 percent from the department's budget. Clifford said one of the few places he has any flexibility is staffing. He said his department already has 8 vacant positions that won't be filled." (Burkhard, 2020).

Budget cuts such as the one in Schenectady will have an immediate effect on the city's ability to provide adequate policing. Now that stay at home orders are beginning to end, the demand for police response will become even more necessary, especially when taking into consideration the typical rise in crime during the summer. Closer to home, Duluth is also seeing the impact of policing during a pandemic.

"Chief Tusken also said he continues to employ his current roster of officers as the city of Duluth faces dozens of layoffs because of a budget shortfall this year of a projected \$25 to \$30 million. Tusken says overtime expenses are down substantially during the pandemic, which can help offset any potential budget concerns with his department – at least right now." (Hanger, 2020).

Though government budget shortfalls are just beginning to emerge, they will most likely have an effect throughout the duration of the pandemic, and after. Hiring and pay freezes are becoming common among many municipalities, such as the one that Minneapolis enacted a month ago. At the state level, "officials announced that a deficit of \$2.426 billion is now projected for the current biennium, representing nearly a \$4 billion change since the surplus projected in February." ("Coronavirus In Minnesota: State Now Faces A \$2.4 Billion Deficit Amid Pandemic", 2020). The state will have to compensate for the loss of funds by introducing layoffs, increasing taxes, and by drawing money from the rainy-day fund it has in place. Further on in the COVID-19 crisis, these measures could influence state law enforcement operations, whether it be budget cuts, layoffs, or pay freezes.

At the Federal Reserve, our Law Enforcement Division has seen a drastic drop in overtime, accompanied by other cost savings such as less travel, fuel, and training expenses. Our department is unique in comparison to many other law enforcement agencies throughout the country, that we do not rely on tax dollars to fund our operations. No pay freezes have been announced but hiring has been stalled for the moment as the state begins to reopen. Our budget will most likely remain consistent, if not less than normal numbers, but many

departments who rely on public tax dollars and fees will feel more pressure to cut costs, even though their operating budgets are still consistent, if not lower than normal.

## Discussion

During the COVID-19 pandemic, the level of government in which citizens are exposed to has dramatically increased. Between public health announcements from the Centers for Disease Control, Minnesota state government, and local government, people have been exposed to a response system that has never been utilized at this level and has normally operated mainly in the background. In terms of law enforcement, police presence prior to the murder of George Floyd either maintained or slightly decreased in most areas, due to department policies protecting officers from the virus, officers contracting COVID-19, and reduced staffing. There are certain locations, such as metropolitan areas where people tend to gather, that have a higher concentration of officers in one location, but overall there has not been an increase in police staffing or presence, merely the shifting of where officers patrol.

“In New York City, the center of the pandemic in the U.S., one out of six officers is calling out of work for either a confirmed case or potential exposure. In Detroit, another city hit hard by the spreading illness, 14% of the force’s 2,500 officers are quarantined. The police chief there moved 80 officers from special units to patrol work, according to a report by The Detroit News.” (Anderson & Richman, 2020).

Interestingly in this sense, the physical level of government revolving around law enforcement has actually decreased, but due to enforcement of stay at home policies, the perceived level of government in terms of police presence may seem higher than usual for many citizens.

Departments throughout the country are taking steps to protect officers by employing social distancing guidelines, scheduling changes to reduce the amount of officers working at a given time, and have halted all community engagement activities which involve any kind of social contact. The Duluth Police Department recently enacted schedule changes to protect officers from COVID-19, “Chief Mike Tusken says his patrol officers are working 12-hour shifts for five days on and 15 days off to allow an officer to potentially develop symptoms of COVID-19 before returning to work.” (Hanger, 2020). Staffing changes such as this have become more common, to mitigate any exposure from officers who have possibly contracted the virus. According to a study conducted by the IACP, “73% of responding agencies had adopted policies to reduce or limit community oriented policing activities.” (Lum, Maupin, & Stoltz, 2020).

Departments normally rely heavily on community engagement activities to build a strong relationship with the community to help mitigate criminal activity. During the pandemic, most routine community engagement practices have been deemed unsafe, but departments are still taking measures to practice distanced community engagement, such taking drive by requests for birthdays, and distributing masks to citizens of certain cities. Boston Police Officers recently conducted community outreach where officers handed out free masks to the public, along with educating citizens on COVID-19. “The free face mask handout was part of an effort to ensure Boston residents are sufficiently equipped with the appropriate protection during the COVID-19 state of emergency.” (“Boston police distribute free face masks to residents across city”, 2020).

The factors mentioned above in addition to financial setbacks impacting departments have led to a drastic change in government presence in terms of law enforcement. Although police coverage of patrol areas still needs to be maintained, certain departments have enacted measures to reduce community presence and staffing to either preserve safety or because of budget cuts. This results in a perceived police presence that is similar to before COVID-19, but in reality, the actual level of government in terms of police manpower has been slightly reduced due to the virus. The main concern of departments during the pandemic is that they can still maintain a police presence that preserves a safe community, while ensuring the safety of their officers.

The Federal Reserve has been a key player in helping the economy through this difficult patch, which has led to a further increased governmental presence of the Federal Reserve System. The Federal Reserve in partnership with the Treasury Department, has been tasked with managing programs such as the Main Street Lending Program, and the Term Asset-Backed Securities Loan Facilities (TALF) program. “The Federal Reserve, in cooperation with the U.S. Department of the Treasury, introduced the Term Asset-Backed Securities Loan Facility (TALF) to encourage the issuance of securities backed by privately originated loans to consumers and businesses and to improve market conditions for ABS more generally.” (“Term Asset-Backed Securities Loan Facility (TALF)”, 2020). The administration of these programs brought on by the CARES Act has given the Federal Reserve immense responsibility and has led to it being one of the main entities tasks with preserving our economy during the crisis.

In terms of Federal Reserve Law Enforcement, our governmental presence has been reduced drastically. Staffing changes and precautionary procedures to reduce infection risk have led to a dramatic decrease in officer presence, and an almost full stop of community outreach. We are an extreme example compared to many police departments throughout the

country, being that our staffing can still function effectively while in a reduced staff setting, which results in a safer environment for all employees at the Fed.

Overall, the perceived level of government regarding police has maintained throughout the country, but in terms of actual staffing, the physical level of government has decreased slightly. It is important for departments to maintain a perceived strong presence, especially when considering the enforcement of stay at home orders. Departments must still be able to enforce laws and ensure the safety of the community, but due to the impacts of COVID-19 on staffing, community engagement, and the financial impact on local government, many departments have had to alter their presence in the community. As the pandemic progresses and a treatment is eventually found, the level of government in law enforcement will return to a state similar to before the virus, but for the time being, police departments must consider the safety of their officer, in tandem with maintaining stay at home orders for states who still have them enacted.

COVID-19 is likely to enact changes in law enforcement that could last long after the pandemic is done. The most likely change being the continued use of PPE until the pandemic fully subsides, policy changes, continually changing crime dynamics, and the financial impact of COVID-19 on governments. The use of PPE will continue through the pandemic, even as numbers begin to subside. Until widely available treatment becomes available for the virus and hospital capacity returns to normal, safety measures taken by police will likely remain the same. I would assume that after a treatment is widely distributed, most practices will return to pre-COVID-19 operations, with the possibility of some lingering extra PPE practices being enacted.

Crime dynamics have fluctuated throughout the pandemic. As discussed earlier in the paper, and as depicted in Table 1, there has been a dramatic rise in domestic violence, but other crime areas have dropped. As the pandemic progresses these numbers will most likely alter back to their previous state, and the incidence of cybercrime related to the pandemic should also shift. Cybercrime related to COVID-19 has impacted people throughout the world and has led to significant monetary loss.

“Cybercriminals are using the pandemic for commercial gain, deploying a variety of ransomware and other malware.

Both APT groups and cybercriminals are likely to continue to exploit the COVID-19 pandemic over the coming weeks and months. Threats observed include:

- Phishing, using the subject of coronavirus or COVID-19 as a lure,
- Malware distribution, using coronavirus- or COVID-19- themed lures,

- Registration of new domain names containing wording related to coronavirus or COVID-19, and
- Attacks against newly—and often rapidly—deployed remote access and teleworking infrastructure.” (“Alert (AA20-099A)”, 2020).

As the pandemic subsides, cybercrime will shift away from COVID-19, and find another exploit elicit information and funds from innocent civilians. One can assume that as the world begins to return to normal, so will the crime trends we commonly observe.

A change that I have observed in law enforcement that is beginning to occur as a result of the pandemic subsiding, is what the “new normal” will look like as people return to work and to public areas. With employers and local government having policies in place to help maintain the safety of its employees, altered office designs, one-way walking routes, restricted access to certain areas of buildings that would normally be open, are beginning to be enacted. Patrol practices for law enforcement are likely to be scaled back until widespread treatment becomes more readily available, and contact will be minimized. Again, one can assume that once a widespread treatment for COVID-19 becomes available, many of these policies and procedures for the virus may subside. I would assume that for a prolonged period, plexiglass barriers and a higher level of PPE are examples of what will become commonplace long after the pandemic is over.

As a society, we are just beginning to see the financial effects that the virus is having on our economy and government entities. In a recent interview with the City of Santa Fe Financial Director, “McCoy said the overall \$100 million shortfall constitutes a 30 percent decline in revenue into all funds. “This will impact all departments and all divisions,” she said. “There is really not a single revenue point that is unaffected.” (Chacón, 2020). Statements such as this will most likely become much more common, as cities are now starting to feel the crippling effects that the shutdown had on tax revenue and other sources of income for government municipalities. This is just another added example of government funds running low, like the examples I outlined earlier in the paper. Upon seeing further reports of the COVID-19 financial impact, it is apparent that all levels of government will face long lasting financial impacts from the pandemic. Law enforcement throughout the country will be affected by this and there will most likely be widespread budget cuts which will have to be enacted. This is one aspect of law enforcement that may be affected for years to come, until all levels of government recover, and the pandemic has subsided.

## Summary

As you have seen from the information depicted throughout the paper, the law enforcement field has been heavily impacted by the COVID-19 pandemic. Whether it be changing crime levels, the impact on department procedure, or the financial implications of the virus, there are a variety of factors at play regarding how police departments conduct their missions. Officer safety and well-being is a primary concern for departments throughout the country. The New York Police Department has been hit hard by the virus and has been an example for how heavily departments can be impacted. As of May 17<sup>th</sup>, “In total, 5,648 NYPD members have tested positive for coronavirus. About 149 members (111 uniformed and 38 civilian) are still out sick with the virus, the NYPD said.” (John, 2020). This is another example of how the pandemic has affected law enforcement response, and how statistics like this have led to the creation of policies that have altered police presence throughout the country.

It is important that police agencies maintain a strong presence to deter any criminal activity, while also ensuring safe levels of staffing for the pandemic. These factors have influenced a change in the level of government which police departments typically have. The perceived presence of police has maintained, but at a variety of departments, as shown in the survey conducted by the IACP, police staffing, and presence has declined for the virus. This has led to a level of government in terms of law enforcement that has a perceived presence that is like before the pandemic but is in fact less than typical staffing for a variety of agencies. The true level of government for many departments has either been slightly reduced or maintained to maintain a safe environment for employees.

Lastly, we are beginning to see the heavy financial impacts in which the virus and stay at home orders is having on the nation’s economy, including its impact on law enforcement agencies throughout the country at a variety of governmental levels. In a recent interview with CBS 60 Minutes, Federal Reserve Chairman Jerome Powell discussed what economic recovery could look like for the United States.

“The sooner we get the virus under control, the sooner businesses can reopen. And more important than that, the sooner people will become confident that they can resume certain kinds of activity. Going out, going to restaurants, traveling, flying on planes, those sorts of things. So that’s really going to tell us when the economy can recover.” (Powell, 2020).

There is no specific timeline for when the economy will begin to recover, but one can assume that any kind of widespread treatment for the virus, in tandem with the end of stay at home orders after the pandemic is under control, will pave the way for economic recovery. Until

this begins, police departments will feel the effect of the economic impact in which reduced public spending and government expenditures on COVID-19 is inflicting on all levels of government. As mentioned earlier in the paper, many departments are already feeling the effects of the economic downturn caused by COVID-19. These impacts will continue and may increase in severity depending on how well municipalities are able to adjust their budget. There will be a long road to recovery, which may last many years. It is difficult to determine an actual period, but until that point arrives, law enforcement departments will continue to feel the impact of COVID-19 on their operations.

### **Conclusion**

Through all the points covered in this paper, it is evident that the COVID-19 pandemic will have an impact on law enforcement country-wide, which will most likely last until a widespread treatment is available, and until the economy begins to recover. Law enforcement before the pandemic and after the pandemic is likely to experience some changes. Heightened use of PPE will become more recognized, economic impacts on departments will impact operations, and crime trends will fluctuate due to economic impacts from the virus, and the ending of stay at home orders. Looking forward, many departments may face budget cuts from the economic impact on government and will have to institute cutbacks in various areas.

It is vitally important that law enforcement agencies throughout the country maintain the health and well-being of their employees, to serve the public to the best of their ability. Until the pandemic is over, we are likely to see mitigation practices in place throughout the country at most police departments. This mitigation is key, to ensure the safety of employees, and the public. Though law enforcement operations are heavily impacted at the moment, as the virus subsides and the economy starts to recover, things will begin to return to normal. The future of law enforcement will most likely include more PPE, and policies in place to help prevent transmission of disease. The financial impacts of the virus may have somewhat long-term impacts, but as the economy begins to recover, so will police departments. Through my experience, I have observed that the pandemic has led to the creation of new plans and policies to better address a pandemic. This experience will lead to law enforcement agencies being more prepared to handle future pandemic events and will build a quicker reaction time to another event like the one we are experiencing. Law enforcement has persisted through a variety of events, such as 9/11, and has come away from the events better educated and prepared. I am confident that this pandemic will help departments build better policies and

procedures, which will help keep our communities safe and healthy. This may be one of the largest hurdles the modern world has faced, but I am confident that police departments around the country will recover and will be better prepared to handle another event of this magnitude.



## References

- Alert (AA20-099A). (2020). Retrieved from <https://www.us-cert.gov/ncas/alerts/aa20-099a>
- Anderson, J., & Richman, T. (2020, April 9). Baltimore Police finalizing 'contingency' staffing plan as 19 employees test positive for coronavirus. Retrieved from <https://www.baltimoresun.com/coronavirus/bs-md-ci-officers-with-coronavirus-20200409-mxnoestil5egtpqnimj2kuzt7u-story.html>
- Boston police distribute free face masks to residents across city. (2020, May 17). Retrieved from <https://www.wcvb.com/article/boston-police-distribute-free-face-masks-to-residents-across-city-amid-covid-19-coronavirus-pandemic/32553696>
- Browder, C., Pryor, D., Kerr, R., & Burns, M. (2020, May 4). Stay-at-home rules mean traffic stops in NC hit lowest mark in years. Retrieved from <https://www.wral.com/coronavirus/stay-at-home-rules-mean-traffic-stops-in-nc-hit-lowest-mark-in-years/19083995/>
- Burkhard, E. (2020, May 6). Schenectady police may see cuts due to COVID-19 budget impacts. Retrieved from <https://wnyt.com/schenectady-new-york-news/schenectady-police-may-see-cuts-due-to-covid-19-budget-impacts/5721030/>
- Chacón, D. J. (2020, May 19). City of Santa Fe projects \$100 million budget shortfall for fiscal year. Retrieved from [https://www.santafenewmexican.com/news/coronavirus/city-of-santa-fe-projects-100-million-budget-shortfall-for-fiscal-year/article\\_f315792e-991f-11ea-833d-c787a6f8c6b5.html](https://www.santafenewmexican.com/news/coronavirus/city-of-santa-fe-projects-100-million-budget-shortfall-for-fiscal-year/article_f315792e-991f-11ea-833d-c787a6f8c6b5.html)
- Coronavirus In Minnesota: State Now Faces A \$2.4 Billion Deficit Amid Pandemic. (2020, May 5). Retrieved from <https://minnesota.cbslocal.com/2020/05/05/elective-surgeries-could-resume-budget-update-expected/>
- Hanger, D. (2020, April 24). Duluth Police Chief Talks COVID-19, Community Engagement, Budget. Retrieved from <https://www.fox21online.com/2020/04/23/duluth-police-chief-talks-covid-19-community-engagement-budget/>
- How COVID-19 is shrinking Connecticut's prison population. (2020, May 1). Retrieved from <https://ctmirror.org/2020/05/01/how-covid-19-is-shrinking-connecticuts-prison-population/>
- John, T. (2020, May 18). May 17 coronavirus news. Retrieved from <https://www.cnn.com/world/live-news/coronavirus-pandemic-05-17-20-intl/index.html>
- Kravetz, A. (2020, May 18). Peoria sheriff: Budget cuts will hurt but not cripple department. Retrieved from <https://www.pjstar.com/news/20200518/peoria-sheriff-budget-cuts-will-hurt-but-not-cripple-department>
- Lum, C., Maupin, C., & Stoltz, M. (2020, April 13). THE IMPACT OF COVID-19 ON LAW ENFORCEMENT AGENCIES (Wave 1). Retrieved from [https://www.theiacp.org/sites/default/files/IACP-GMU\\_Survey.pdf](https://www.theiacp.org/sites/default/files/IACP-GMU_Survey.pdf)
- Mohler, G., Bertozzi, A. L., Carter, J., Short, M. B., Sledge, D., Tita, G. E., ... Brantingham, P. J. (2020, May 1). Impact of social distancing during COVID-19 pandemic on crime in Los Angeles and Indianapolis. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0047235220301860#bb002>
- Pagano, M. A., & McFarland, C. K. (2020, March 31). When will your city feel the fiscal impact of COVID-19? Retrieved from <https://www.brookings.edu/blog/the-avenue/2020/03/31/when-will-your-city-feel-the-fiscal-impact-of-covid-19/>
- Powell, J. (2020, May). Full Transcript: Fed Chair Jerome Powell's 60 Minutes interview on economic recovery from the coronavirus pandemic. Retrieved from <https://www.cbsnews.com/news/full-transcript-fed-chair-jerome-powell-60-minutes-interview-economic-recovery-from-coronavirus-pandemic/>
- Term Asset-Backed Securities Loan Facility (TALF). (2020). Retrieved from <https://www.federalreserve.gov/regreform/reform-talf.htm>

Tables

Table 1.

*Coefficients and p-values of daily calls for service rate regressed against Google daily residential mobility index controlling for day of the week.*

Type	City	Intercept	res. Mob. coef.	p-val	$\Delta y^\dagger$
<b>Burglary</b>	Los Angeles	100.5896	<b>-0.8875</b> ↓	<b>&lt;0.0001</b> *	<b>-19.2740</b>
<b>Burglary</b>	Indianapolis	18.8282	-0.131	0.1927	-2.3061
<b>Robbery</b>	Los Angeles	38.1009	-0.068	0.433	-1.4759
<b>Robbery</b>	Indianapolis	5.3363	0.0112	0.7278	0.1970
<b>Assault-battery</b>	Los Angeles	193.5346	<b>-0.3977</b> ↓	<b>0.0471</b>	<b>-8.6362</b>
<b>Assault-battery</b>	Indianapolis	10.3443	0.0089	0.8383	0.1563
<b>Vehicle theft</b>	Los Angeles	25.3955	<b>0.3005</b> ↑	<b>0.0009</b> *	<b>6.5268</b>
<b>Vehicle theft</b>	Indianapolis	19.3494	0.0797	0.3906	1.4022
<b>Domestic violence</b>	Los Angeles	116.5062	<b>0.6239</b> ↑	<b>0.0002</b> *	<b>13.5495</b>
<b>Domestic violence</b>	Indianapolis	88.5106	<b>0.8643</b> ↑	<b>&lt;0.0001</b> *	<b>15.2112</b>
<b>Vandalism</b>	Los Angeles	53.4743	<b>-0.4069</b> ↓	<b>0.0001</b> *	<b>-8.8368</b>
<b>Vandalism</b>	Indianapolis	19.927	0.1657	0.3166	2.9156
<b>Traffic stops</b>	Los Angeles	335.0749	<b>-9.7213</b> ↓	<b>&lt;0.0001</b>	<b>-211.1285</b>
<b>Traffic stops</b>	Indianapolis	203.3891	<b>-12.8343</b> ↓	<b>&lt;0.0001</b>	<b>-225.8672</b>

†

Expected call rate change computed by multiplying the estimated coefficient of residential mobility by the average residential mobility index post- shelter in place minus the average pre- school closing.

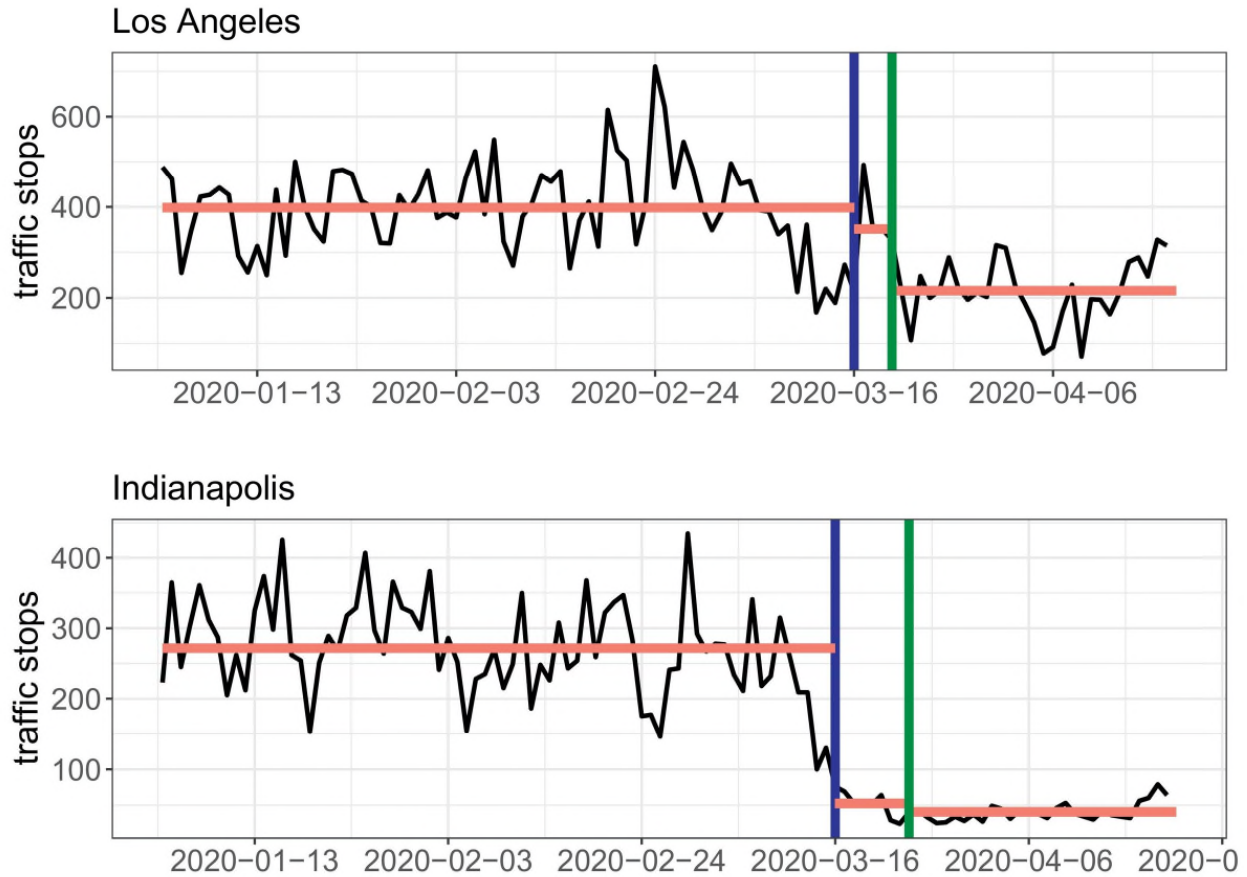
\*

Significant after conservative Bonferroni correction with critical value  $\alpha^- = 0.0042$ .

Note. Mohler, G., Bertozzi, A. L., Carter, J., Short, M. B., Sledge, D., Tita, G. E., ... Brantingham, P. J. (2020, May 1). Impact of social distancing during COVID-19 pandemic on crime in Los Angeles and Indianapolis. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0047235220301860#bb002>

Table 2.

Traffic stop data from Los Angeles and Indianapolis

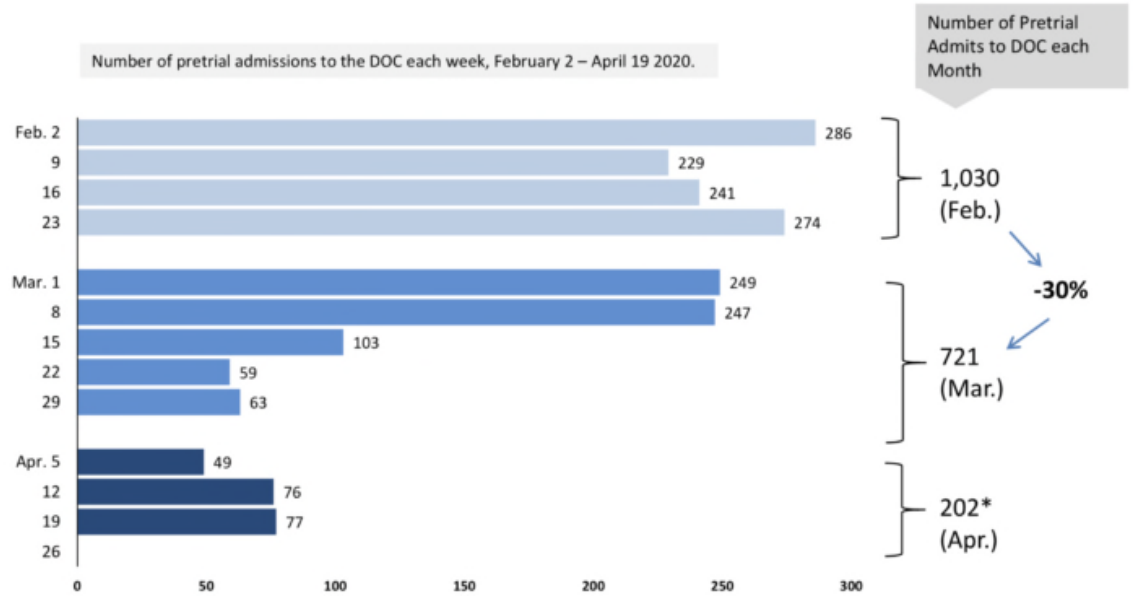


Note. Mohler, G., Bertozzi, A. L., Carter, J., Short, M. B., Sledge, D., Tita, G. E., ... Brantingham, P. J. (2020, May 1). Impact of social distancing during COVID-19 pandemic on crime in Los Angeles and Indianapolis. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0047235220301860#bb002>

Table 3.

Number of pretrial admissions to the DOC each week, February 2-April 19, 2020

**Pretrial admissions to the DOC shrank further each week in March, and April's totals are on track to be even lower.**



Note. How COVID-19 is shrinking Connecticut's prison population. (2020, May 1). Retrieved from <https://ctmirror.org/2020/05/01/how-covid-19-is-shrinking-connecticuts-prison->

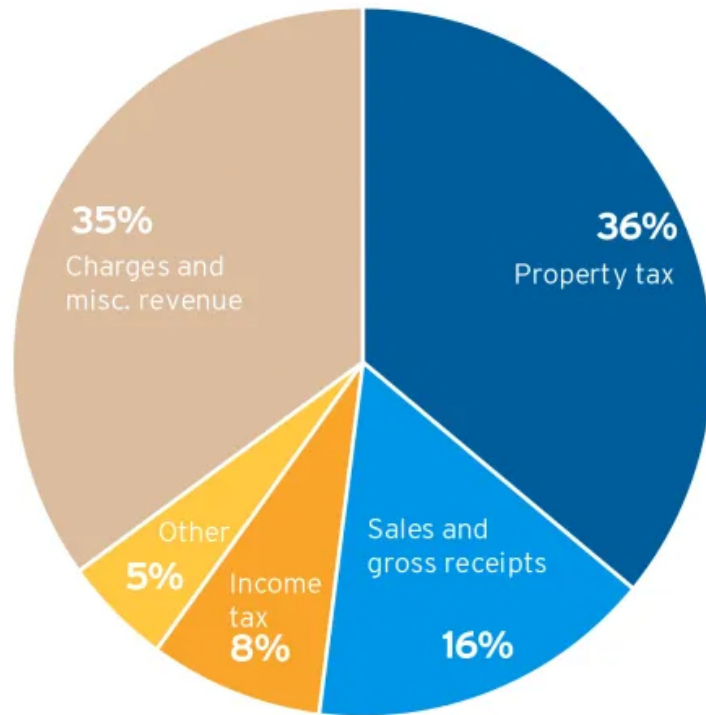
Table 4.

*Composition of municipal own-source revenue*

FIGURE 1

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**Composition of municipal own-source revenue**



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Source: Authors' calculations of Census of Governments 2017 data.

**B** | Metropolitan Policy Program  
at BROOKINGS

Note. <https://www.brookings.edu/blog/the-avenue/2020/03/31/when-will-your-city-feel-the-fiscal-impact-of-covid-19/>

**Analysis of the Effects of the Covid-19 Pandemic and Subsequent Civil  
Disturbances on the Law Enforcement Field**

[The author is a law enforcement officer in county government]

## Introduction

### Overview of pre-Coronavirus challenges for law enforcement

Much has been debated in recent years by media and through political discussions of diversity and calls for police reform. The protests in Ferguson, Missouri in 2014 along with numerous other protests since then across the country in opposition to various police activity have been widely broadcast and reported on by the media. Minnesota has been no exception with the shooting deaths of Jamar Clark and Philando Castile in 2016, and most recently and tragically the death of George Floyd, all resulting in multiple protests and demonstrations throughout the State which were highly publicized by the media.

Accompanying the abundant national news coverage of these events have been opinions voiced by politicians, celebrities, and many others on the need for police reform in America and in general criticizing the actions of the police leading up to or during these events.

These events were significant enough in recent years to initiate research into what is now called “The Ferguson Effect”, a controversial term initially coined by St. Louis Chief of Police Sam Dotson, which theorizes that law enforcement officers across the county have become less proactive in their policing efforts as a result of increased public criticism and mistrust following the shooting death of Michael Brown and the subsequent protests. (Simonds, 2017) One extreme example of this is the case of a Birmingham, Alabama police detective who stopped a male and told him to stay in his car, but was instead beaten bloody and unconscious with the Detective’s own handgun. When asked why he had not used appropriate force to prevent the assault, the detective stated he was afraid of becoming the next viral video. (Valencia, 2015)

It is no question that those working in the law enforcement profession have been under more scrutiny in recent years. Part of the reason for this may have contributed to improvements in technology. The use of smart phone technology has made it possible to instantly distribute videos to an unlimited audience. Hundreds or thousands of people can now comment on and develop opinions which may not always be based upon objectively reasonable facts or evidence required for a conviction from a legal perspective. Users on social media often play both judge and jury and pass negative judgment on a law enforcement officer based upon whatever opinion they formed from limited exposure to a video viewed on social media. Circumstances surrounding the encounter, as well as actual facts pertaining to the incident are often omitted, thus giving an inaccurate depiction of the true events. Critical pieces of information which lead

the officer to behave in a way which they have been trained are often lost when viewed through the lens of social media and news media outlets.

Recruitment and retention for Law Enforcement agencies across the United States had been decreasing at an alarming rate even before the onset of Covid-19 and the most recent civil unrest and calls for police reform. “The perception of increased violence in society, the belief that the sole role of law enforcement is crime fighting, and concerns that police officers have violated the civil rights of minorities have discouraged some potential recruits from applying for police officer positions.” (Ra’oof, 2014) With widespread civil unrest throughout the Country in the wake of George Floyd’s death in police custody in Minneapolis, the challenges of recruiting and retaining a quality workforce for many agencies will likely continue to increase.

### **Initial Law Enforcement Response to Pandemic**

When the Covid-19 initially first became an issue within the borders of the United States the Center for Disease Control recommended “social distancing” precautions be adopted nation wide. The First Cases of Covid-19 which were diagnosed in the United States were in January-February of 2020. By mid-March, transmission had become widespread, and by April 21, a total of 793,669 confirmed COVID-19 cases had been reported in the United States, the majority resulting from widespread community transmission. Factors that contributed to the acceleration of dissemination in March included:

- 1) Continued importation of the virus by travelers infected elsewhere (e.g., on cruise ships or in countries experiencing outbreaks);
- 2) Attendance at professional and social events, resulting in amplification in the host locations and multistate spread;
- 3) Introduction of the virus into facilities or settings prone to amplification (e.g., long-term care facilities and high-density urban areas) with the potential for seeding the broader community; and
- 4) Challenges in virus detection, including limited testing, emergence during the peak months of influenza circulation and influenza and pneumonia hospitalizations, and other cryptic transmission including from persons who were asymptomatic or pre-symptomatic. (Schuchat, A., 2020)

Due to the rapid spread of the Covid-19 disease, many States adopted stay at home orders and ordered the closure of non-essential businesses such as bars, restaurants, and other places of public accommodation. Schools were closed and parents, children, and teachers



were all forced to learn how to adjust to an online learning platform to continue with the remainder of the school year.

### **Research Question**

The purpose of this research paper will be to answer the question, *“what will the future of the law enforcement field look like in the wake of the Covid-19 epidemic?”*

### **Effects of Alternative Emergency Scheduling**

In an effort to maximize social distancing during the first wave of the Covid-19 Pandemic, many law enforcement agencies adopted an alternative staffing schedule. Law enforcement agencies operate on a round the clock schedule, usually broken into different shifts which cover days, afternoons, and evenings. During the pandemic, while each agency adopted it's own unique schedule to accommodate for social distancing, the overall strategy was to keep law enforcement officers separated from each other through physical distancing to avoid disease transmission between staff. Police Departments and Sheriff's Offices are often staffed in shifts of 8-10 hours in duration and overlapping to ensure effective coverage during peak times of calls for service. During the early days of the Pandemic many departments underwent a restructuring of their patrol schedules to adjust to 12 hour days with no overlap. Departments which were previously operating at a 8-10 hour day often had 3 shifts and now would have 2 but the staffing would be divided into 6 teams the same as before. By working 12 hour shifts departments could have coverage with 2 teams for a 5 day stretch, then rotate through the other two teams while maximizing the amount of time off for each shift. In the event an employee contracted or was exposed to the Coronavirus during their rotation they would have a longer stretch of time off and potentially fewer work hours would missed due to a quarantine period after an exposure or waiting for a negative Covid-19 test result.

### **Financial and Payroll Implications, Short/Long Term Operations**

One of the potential challenges faced by maintaining staffing in an operational capacity, which is really a necessity for a law enforcement agency, is how to handle a situation where they are exposed to an infectious disease in the performance of their duties. If an employee is injured in the line of duty their recovery falls under workman's comp but how can it be proven an

employee received exposure to Covid-19 while on duty if symptoms were not to present themselves for some time after exposure? In the private sector there have been actions taken to protect employees who are kept on the payroll of their companies but work from home such as the Family First Coronavirus Response Act which, “enables employers to keep their workers on their payrolls, while at the same time ensuring that workers are not forced to choose between their paychecks and the public health measures needed to combat the virus.” (Department of Labor, 2020)

Many public agencies have instituted a temporary policy change as well to allow for additional limited time off for employees who need to quarantine after exposure or contraction of the virus and not need to use their accrued leave for time off. In the future after Covid-19, the continued staffing of law enforcement agencies may require more permanent solutions for an extended leave of absence to quarantine.

### **Body-Worn Cameras**

Another effort toward transparency on the part of law enforcement agencies is releasing body-worn or squad camera footage that clearly shows the circumstances leading to the officer’s actions before use of force incidents. The use of body cameras has steadily increased over recent years. A study conducted by the Bureau of Justice in 2016 indicated, “47 percent of general purpose law enforcement agencies had acquired body-worn cameras.”(Hyland, 2018) This same report listed the main reasons for agencies placing body-worn cameras into service were to, “improve officer safety, improve evidence quality, reduce civilian complaints, and reduce agency liability.” Body worn cameras are a benefit to law enforcement and juries as they provide a factual representation of the events as they occurred from the officer’s point of view. One of their pitfalls however, is that they can only show a limited perspective of that of the field of view of the camera lens. They may not be able to accurately show everything the officer was able to see or perceive at the time of the event.

The death of George Floyd in Minneapolis Police custody kicked off both a mixture of peaceful protests and looting and riotous behavior on a national scale with calls to end police brutality and systemic racism in America. Stock prices in Axon, a leading manufacturer of body worn cameras and less-lethal weapons, rose significantly with speculation that many more law enforcement agencies would be adopting body worn cameras for regular patrol use. In the future beyond the Covid-19 epidemic, the use of body worn cameras and drones will be used as a standard means to record and document criminal behavior and law enforcement action.

## **Incarceration Limitations and Challenges**

The onset of the Covid-19 epidemic created a nightmare situation for correctional institutions throughout the United States. The disease is capable of being transmitted through airborne means and through close contact with other humans. In a County jail or State prison where dozens of people are confined in close proximity and mingle in larger groups throughout the day, and due to the extremely contagious nature of the Covid-19 disease, a single infected individual entering the facility could result in a catastrophic number of incarcerated persons becoming infected with the disease.

In order to prevent correctional institutions from becoming epicenters of disease spread, many implemented controls to reduce the overall population within the correctional setting and medically isolate inmates which exhibit symptoms assimilated to Covid-19 infection. According to guidance from the Center for Disease Control regarding prevention and response to the Covid-19 Pandemic, "Facilities should make every possible effort to place suspected and confirmed COVID-19 cases under medical isolation individually. Each isolated individual should be assigned their own housing space and bathroom where possible." These guidelines would be unattainable for many correctional facilities where inmates are often crowded and housed with multiple individuals to a locked cell in a dormitory style housing unit with a central common space. If an inmate were to be brought into a correctional institution with Covid-19 infection the result would likely be the entirety of the facility including both inmates and staff contracting the disease. If too many staff members became incapacitated or needed medical isolation due to the disease then there would not be enough staff to adequately care for and provide safety and attend to the needs of the inmates.

To reduce the amount of people confined within a correctional setting courts began releasing persons who had either a low probability of reoffending and/or individuals who were charged with a crime other than a crime of violence or who did not have a very great risk of absconding from the criminal justice system. Additionally, certain low level crimes and misdemeanors have been enforced by either a citation or summons to a future court date or a payable fine rather than resulting in an arrest and subsequent incarceration of the offender.

In the long term forecast of the law enforcement profession in the years and decades following the initial Covid-19 Pandemic it could be theorized the same system would be in place to prevent widespread infection of this current or any other pandemic disease. Global travel has become so prevalent and convenient in recent years and contributed greatly to the success of

global business and industry. It has become apparent that one of the negative side effects of such extensive global travel is that certain highly contagious diseases and contagions such as the Coronavirus can be easily spread throughout the globe and create widespread pandemic unless there are inoculations or other rigid controls put into place to prevent it. In the foreseeable future without a reliable cure or vaccination to provide the majority of people with immunity, the risk to correctional facilities is high due to overpopulation and shortage of facility space to adequately medically quarantine infected individuals.

A recent statistic from the Federal Bureau of Prisons indicates 45.9% of inmates currently being held in incarceration Federally are held on drug charges. (Federal Bureau of Prisons, 2020) By comparison, crimes such as homicide, aggravated assault, kidnapping, robbery, sex offenses, and weapons, explosives and arson charges only amount to 36.8% of the total number incarcerated at a Federal level. While State prison and local jail populations will differ slightly in numbers, this is still a fairly representative figure of the population incarcerated on a national scale.

Prior to the onset of the Covid-19 disease, many courts have offered non-violent drug offenders alternatives to incarceration. Court ordered treatments and/or mental health counseling have been offered with a degree of success in various states such as California, which has statistics of those who have completed a substance abuse treatment program as an alternative to court have an 85% reduced percentage of recidivism. (Bailey, 2003) The topic of correctional facilities being overpopulated has been discussed for years prior to the onset of Covid-19 with the discussion surrounding these alternative sentencing models focusing on treatment and mental health counseling for non-violent drug offenders. There has been criteria similar to this model put into place already to significantly reduce the populations of correctional facilities in the wake of the Covid-19 outbreak. As a result, in the post Covid-19 world the standard for arresting an individual and holding them in custody may be significantly higher with non-violent crimes with no victim being enforced through other methods and possibly using more creative approaches such as court mandated counseling or treatment for certain crimes.

### **Law Enforcement and Mental Health**

Law enforcement officers are frequently the first ones, and at times the only ones, to respond to persons experiencing mental health crisis situations. Paramedics responding to a situation where an individual is threatening suicide typically have a policy in place where they must wait in the area for law enforcement to advise them the situation is safe enough for them

to approach to either care or assess the individual. Many agencies have invested in training for law enforcement officers when responding to mental health crisis calls. CIT (Crisis Intervention Team) International trains officers how to respond effectively to mental health crisis situations which often do not need enforcement action to be taken but instead direct them to treatment or counseling and hospitalization in serious cases. Their goal is to provide, “A police-based crisis intervention training to help persons with mental disorders and/or addictions access medical treatment rather than place them in the criminal justice system due to illness-related behaviors.” (CIT International, 2020) While this program has been effectively used, there is evidence of much greater success when officers voluntarily seek opportunities to be trained in this area. “CIT officers who had volunteered had consistently better scores on a range of measures of attitude toward mental illnesses and their treatments, self-efficacy for interacting with persons with serious mental illnesses, stigma, de-escalation skills, and referral decisions.” (Compton, 2017) While in the wake of the George Floyd protests there are calls to “defund the police” to provide more mental health care for communities, situations involving mental health crisis can often be high-stress, rapidly changing situations which CIT trained police officers are ideally suited to respond to. In the future, providing officers with in depth and recurring mental health crisis response training nationwide as a requirement for maintaining a license as a peace officer would allow for more consistent and effective responses to these situations.

## **Conclusion and Analysis**

As detailed in this paper there are multiple areas of change which will potentially inspire changes in the law enforcement profession. Additionally, changes may come from nationwide protests for racial issues involving the police. Law enforcement agencies have a long and challenging road ahead and many agencies are doing their best to adapt to the constant challenges presented by Covid-19 and the civil unrest across the United States. The civil unrest across the country is perhaps also stemming from socio-economic disparity in our communities. Unemployment data from the Bureau of Labor Statistics in the first quarter of 2020 shows the Caucasian unemployment rate at 3.6% and Black or African American unemployment at 6.6%. (Bureau of Labor Statistics, 2020) We have seen the Covid-19 epidemic significantly affecting communities differently based upon income level and access to healthcare and ability to physically distance from others. Police agencies can take some action in the future to actively recruit from communities with a high minority demographic and consider hosting academies for non-traditional candidates to be trained for a career in law enforcement. This option may

improve both the recruiting challenges faced by law enforcement agencies and also increase minority representation within law enforcement agencies and potentially reduce feelings of disparity between minority populations and public safety agencies.

## References:

- Schuchat, A. (2020) *Public Health Response to the Initiation and Spread of Pandemic COVID-19 in the United States, February 24–April 21, 2020*. Center For Disease Control and Prevention. Retrieved from:  
<https://www.cdc.gov/mmwr/volumes/69/wr/mm6918e2.htm>
- Federal Bureau of Prisons. (2020) *Inmate Statistics*. Retrieved from:  
[https://www.bop.gov/about/statistics/statistics\\_inmate\\_offenses.jsp](https://www.bop.gov/about/statistics/statistics_inmate_offenses.jsp)
- Bailey, D. (2003). *Alternatives to Incarceration*. American Psychological Association. Retrieved from: <https://www.apa.org/monitor/julaug03/alternatives>
- Department of Labor. (2020). Temporary Rule: Paid Leave Under the Family’s First Coronavirus Response Act. Wage and Hour Division. Washington, D.C. Retrieved from:  
<https://www.dol.gov/agencies/whd/ffcra>
- Compton MT, Bakeman R, Broussard B, D’Orio B, Watson AC. (2017) *Police Officers’ Volunteering for (Rather Than Being Assigned To) Crisis Intervention Team (CIT) Training: Evidence For a Beneficial Self Selection Effect*. Behavior Science Law. 1-10.  
CIT International. Retrieved from: <https://www.citinternational.org/page-18452>
- Simonds, S. (2017). *The Ferguson Effect – Are Police Anxieties to Blame?* Naval PostGraduate School. Monterey, CA. Retrieved from: <https://calhoun.nps.edu/handle/10945/53049>
- Valencia, N. (2015) *Pistol Whipped Detective Says He Didn’t Shoot Attacker Because of Headlines*. CNN. Retrieved from: <https://www.cnn.com/2015/08/13/us/alabama-birmingham-police-detective-pistol-whipped/index.html>

Hyland, S. PH.D (2018). *Body-worn Cameras in Law Enforcement Agencies, 2016*. Bureau of Justice Statistics. Retrieved from: <https://www.bjs.gov/content/pub/pdf/bwclea16.pdf>



## **Impact of Covid-19 on Employment in the Accounting Industry**

[The author is an associate auditor at a large accounting firm]

## **Introduction**

With rising challenges of Covid-19 across the world, it should be first noted that all the concerned organizations will get impacted from multiple perspectives. Second, even the management teams of the organization will not be in a proper position to handle the given problem. They will need to deploy problem-solving approach and thereby identify possible solutions at a given workplace (Cumberland & Ivy, 2020).

As per the UN News reports, it is found that the International Labor Organization has predicted that around 25 million jobs across all the sectors will be threatened by the new corona-virus threat (Cumberland & Ivy, 2020). In addition, all the employment sectors will be greatly impacted, and the organizations will need to identify solutions for this issue.

It will be difficult for the manufacturing companies and other similar industries; wherein physical presence of the workers will be needed to complete the given job tasks. On the other hand, for some of the industries such as IT and even Accounting, the employees will be able to perform their tasks provided they are provided with such technological mediums and connectivity (Cumberland & Ivy, 2020).

Only then they will be able to continue with their tasks, which later will allow them to perform better amid the given environment. In addition, it will be crucial for the Human Resources (HR) department to identify the trends related to it.

They will then need to formulate the recruitment policies and other associate procedures in this direction. It will thereby allow the given organization to perform better and also make sure that the employees will be lesser affected amid the given environment. Also, the HR team might need to provide with new service source from which the employees will be able to perform their daily task routines (Gennaro et al., 2020).

This report will be discussing the case related to impact of Covid-19 on the employment in the accounting sector before and after the pandemic. It will then provide accordingly recommendations that the top-level management need to implement for achieving desirable future outcomes.

## **Impact of Covid-19**

It is observed that with rising cases of Covid-19, not only employees and organizations will be affected but people of the community at large are heavily impacted. It is even found that

majority of the nations have announced lock-down situations and hence people are not allowed to travel outside from their homes. They will need to stay at their home and thus protect them from this pandemic.

Further, as per the reports, it is found that the four major sectors that will be heavily impacted with Covid-19 include - travel and accommodation, retail and wholesale, business services and administration, and even manufacturing (Gennaro et al., 2020). They together comprise off 37.5% of the total global employment across the world (Gennaro et al., 2020).

It can be thus found that all the companies will be impacted a lot and they will need to find innovative ways through which they will not only need to provide assistance to the working staff but also identify means through which these employees will be able to perform their daily tasks in a given environment (Gennaro et al., 2020).

It should also be noted that the front-line workers specifically in the healthcare organization will be impacted that most. These include - healthcare workers, medical professionals, and even the social professionals that are directly involved to fight against the coronavirus (Gennaro et al., 2020).

It will be the responsibility of all the organizations across the world to overcome this challenge as all the sectors will be affected across the world. It will be a great concern for the middle- and low-income countries since their industries will be hit and a huge proportion of people are in an unemployed situation (Gennaro et al., 2020).

There is a need to take measures in this direction that will allow the organization to improve on this situation and possibly even look out for the ways through which better employment can be provided to the people in a given environment.

Also, it should be noted that agriculture will be the worst-hit sector and the government will need to look out for ways such as economic packages to assist all the people associated with this sector (FERENCE et al., 2020). One of the ILO chief clearly stated that fiscal stimulus and targeted help will only solve the current situation and thereby revive the organization from the current pandemic.

### **Accounting Career before Covid-19**

It should be first noted that the key functional roles of an accounting professional will include - examining and analyzing accounting records, checking for completeness, inspecting financial reports of the organization, and even determining that the organization is following both accounting and compliance regulations (FERENCE et al., 2020).

Second, they will then need to compute for the taxes and accordingly prepare for the return statements. It will thus allow them to file the final financial reports of a given company or individual during a given financial year. In addition, there is also a need to analyze the business operations in large-scale companies, through which the organizations will be checking for business trends, costs, financial commitments, projected future revenues, and even other obligations. It will be more important to check and assign entries made to proper accounts (FERENCE et al., 2020).

The accounting professionals are even required to prepare the budgets for the company and after completion of the financial year, they will need to check the estimated costs versus accrued costs. They can accordingly provide recommendations to the companies based on the gaps identified and thus achieve desirable outcomes.

Before covid-19 pandemic, each of these functional roles was thus performed by working in an office of the organization. There used to be physical environment where the clients used to visit the accounting professionals along with their transaction documents. The accounting clerical staff will then first prepare the books of accounts and later the senior accounting professional will be inspecting each of the entries made in a given environment (FERENCE et al., 2020).

Also, they will be checking whether there are any financial issues within the given firm or not. The accounting firm based on the given performance even used to provide recommendations on - tax strategies, resource utilization, budget forecasts, and even other assumptions (Lowery, 2020).

It thus used to be simpler for the employees working in the accounting organization to perform their daily work tasks, job routines, and other responsibilities in a given working environment (Lowery, 2020). However, at present, it seems that the entire scenario has changed that is creating more issues for not only the working staff but also for the entire accounting organization. In addition, there is a need to identify possible solutions through which these staff members can be provided with additional leverage to work from home.

The accounting firm will need to even check for Enterprise Resource Planning (ERP) solutions or cloud-based computing systems that will assist them to complete their day-to-day work routines in a given environment (Lowery, 2020).

It will thus make sure that the organization is able to perform their daily job routines and even the employees are able to perform their allocated tasks within the given timeframe. They will thus be able to serve their clients in a better way and also will complete all the accounting related tasks for them as per the requirements of the client (McQueen, 2020).

## Accounting Career after Covid-19

As per the reports of Live Mint, it is found that the urban employment rate has increased to 30.9%. On the other hand, around 50 million people have lost their jobs during this lock-down period, and it thus seems that the situation will turn worse in the near future (McQueen, 2020). One can even find that even the Accounting sector is also impacted amid the given situation.

However, as per the survey conducted by Smart Vault, it is found that majority of the accounting firms have started using cloud-computing based technologies. In the survey conducted across accounting professionals, book-keepers, and even tax professionals, it can be found that all the firms have started to use collaborative technological tools through which they have been able to perform their task routines. In addition, with the help of cloud-based document management, they are able to connect with clients, collect their accounting data, and accordingly perform their roles (Möller, Utz, & Verbeeten, 2020).

In addition, the organization is also investing into new platforms that are allowing them to enable remote work and communication for all the accounting professionals in a given environment. It will be more important for the organizations to adapt to the new cloud-based system as that will be savant time and efforts (Möller, Utz, & Verbeeten, 2020). Also, it will increase the working efficiency of the staff even by working from home.

On the other hand, the accounting professionals can connect and communicate with their clients. They will be able to use all the project management tools such as - video conferencing, status tracking, sending of documents, receiving of accounting data from the clients, and other similar services through such technological platforms.

Even, client will be able to review the current progress and will be able to provide any suggestions to improve the final outcomes. It thus seems that success will be achieved more in the case of such virtual collaboration tools rather than the earlier traditional approach of connecting with the clients (Möller, Utz, & Verbeeten, 2020).

However, there are certain challenges related to Cybersecurity while dealing with the confidential data of the clients. It will be crucial for the IT department of the given accounting firm to take all precautions in securing the data of the clients (Möller, Utz, & Verbeeten, 2020). Even, the central database needs to be protected and secured so that the hackers will not be able to hack the data.

Additionally, all the accounting professionals will need to follow the standard code of conduct and thereby restrain them from engaging into any type of unethical practices. Only then

they will be able to perform the given job roles in a better way and thus serve to the given purpose of the organization.

On the contrary, the senior management officials will need to review such working practices and identify functional loopholes, if any (Mehta & Kumar, 2020). They can then provide new suggestions that will allow the organization to achieve desirable outcomes amid the given work environment. Also, it will enhance overall productivity levels of the accounting professionals amid the given operational environment.

### **Consequences Observed**

By working from home, it will first make sure that the given problem of unemployment will be solved, and the organization will be able to solve on their clients. Additionally, the morale and work satisfaction levels of the employees will be high, and they will also make sure of completing the given work tasks as per the expectations.

However, they might face certain issues while getting required physical copies from the clients due to lock-down situation. In other conditions, it might also happen some of the accounting queries will not get solved through video conferencing (Mehta & Kumar, 2020). There will be a need to have a meeting with the client on physical basis that will allow the accounting staff to perform their duties accordingly.

Also, it will be more important for the working staff to update their managers and leaders from time to time. It will thus allow them to serve their clients in a better way, file in the returns from time to time, and prepare all the financial statements of the entities as per the expectations (Tandon, 2020).

### **Future Opportunities and Challenges**

It should be noted that in the present time that due to rising challenges of Covid-19, it will be more difficult for all the organizations to handle different types of problems arising in the environment.

The role of the senior-level officials will be thus crucial as they will need to make sure that they not only solve the employment problems for the staff but also make sure that they will be able to provide new technological platforms to the employees (Tandon, 2020).

It will thus allow the employees of the organization with new opportunities of working through a platform, ensure following up with their clients, and on the other hand even make sure

of completing the accounting tasks of the clients. The employees will thus be able to perform better and subsequently will also be able to handle complex problems by working from home (Nagarjun, 2020). However, the management team will need to monitor upon such practices and accordingly make changes wherever required to achieve desirable outcomes.

### **Recommendations**

With rising challenges of Covid-19, it should be noted that not only accounting industry but all the organizations across all the sectors will be impacted in multiple ways. There is a need to look out for technological-based options that will allow the organization to connect with all the staff and thus provide them with an opportunity to work from home. Since, accounting is not a manufacturing-based sector; one can perform their accounting roles and responsibilities from any location (Nagarjun, 2020).

They, however, need to be provided with collaboration tools and other software modules through which they will be able to perform the accounting tasks. In addition, it should also be noted that there will be multiple tasks that need to be performed by an accounting professional such as - checking for the financial documents of a given company, preparing the asset and liability statement, also checking out for capital entries, and even making sure that the concerned entity has followed to the legal, accounting, and compliance norms in the given documents (Nagarjun, 2020).

Once the documents are prepared, they can connect with the clients and thus share the details of the financial reports prepared. They will even complete the required taxation entries for the clients, which will make sure that the companies have registered their taxation documents with the concerned regulatory authorities.

On the other hand, the staff will be able to perform their roles and responsibilities in a convenient manner with the help of recommended cloud-based platforms. However, the IT team of the given firm will need to secure all the data-sets and make sure that there will be no consequences arising of any cyber-attack on the organization (Nagarjun, 2020).

Instead, they will be able to protect the data of all their clients in a given operational environment and subsequently will be able to secure financial information of the clients along with proper back-ups. Only then it will make sure that the given pandemic problem of Covid-19 will be resolved amid the given environment (Scampuddu et al., 2020).

## **Conclusion**

This report focuses on the issue pertaining to impact of Covid-19 on the accounting firms, on their employment activities, and even on the type of work approach that the workers need to follow while performing their duties at home. In addition, the organization will need to revamp their market strategies and thus make sure that they will be able to overcome workplace issues (Scampuddu et al., 2020).

In addition, the organization will also need to improve on their communication approach and collaboration skills; only then they will be able to overcome the major issues pertaining to Covid-19 in a given working environment (Scampuddu et al., 2020). Even, the accounting professionals will need to maintain the Professional Code of Conduct so that they will be able to perform their daily work routines accordingly and on the other hand, they will be able to even serve their clients in a better way.



## References

- Cumberland, B. L., & Ivy, J. D. (2020). Coronavirus's impact on executive and board of director compensation. *American Bankruptcy Institute Journal*, 39(6), 26-56.
- Ference, S. B., Rood, D. K., Sterna, S., & Wolfe, J. (2020, April 21). The indirect impacts of COVID-19 on CPA firms. Retrieved June 12, 2020, from <https://www.journalofaccountancy.com/news/2020/apr/indirect-impacts-of-coronavirus-on-cpa-firms.html>.
- Gennaro, F. D., Pizzol, D., Marotta, C., Antunes, M., Racalbutto, V., Veronese, N., & Smith, L. (2020). Coronavirus diseases (COVID-19) current status and future perspectives: A narrative review. *International Journal of Environmental Research and Public Health*, 17(8), 2690-2692.
- Lowery, A. (2020). Worker safety in the wake of COVID-19. *Aluminium International Today*, 33(3), 10-11.
- McQueen, M. P. (2020). Multiemployer pension plans' troubles worsening due to covid-19. *Treasury & Risk*, 21-25.
- Mehta, B., & Kumar, A. (2020, April 21). Covid-19 Lockdown Impact: Estimating the Job Losses in India's Informal Economy. Retrieved June 12, 2020, from <https://swarajyamag.com/economy/covid-19-lockdown-impact-estimating-the-job-losses-in-indias-informal-economy>.
- Möller, K., Schäffer Utz, & Verbeeten, F. (2020). Digitalization in management accounting and control: An editorial. *Journal of Management Control*, 31(1-2), 1-8.

Nagarjun, K. (2020, April 29). As job losses escalate, nearly half of global workforce at risk of losing livelihoods. Retrieved June 12, 2020, from [https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS\\_743036/lang-en/index.htm](https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_743036/lang-en/index.htm).

Scampuddu, B., Nieddu, G. L., Hager, & Partners. (2020). Italy imposes a series of liquidity measures in reaction to the COVID-19 emergency. *International Tax Review*, 80-90.

Tandon, P. (2020). COVID-19: Impact on health of people & wealth of nations. *The Indian Journal of Medical Research*, 151(2), 121-123.

## **COVID-19: The Impact on Commercial Real Estate**

[The author is a data analyst at a real estate company]

## Abstract

COVID-19 has struck businesses from all sizes, demographics, and industries. Businesses that have worked on enlarging their offices are now questioning if they continue to do so or scale back and implement a “work from anywhere” model. On the other side of the coin commercial real estate companies are now strategizing how to incorporate COVID-19 as a hurdle when selling commercial real estate properties. The question is will commercial real estate agencies make it through the pandemic or will this just be a new *normal* that they will have to get used to?

**COVID-19: The Impact on Commercial Real Estate**

COVID-19 has impacted almost every aspect of our lives and has also left a lot of questions unanswered like; Is it safe to go visit my family? When will everything go back to normal? If COVID-19 does not go away anytime soon will I still have a job? These are just a few of the million thoughts and fears people around the world are struggling with. Business owners not only think of these but also; will we have to develop a remote working policy? What precautions will we have to apply to create a safe work environment? Is it worth growing our office or downsizing and transitioning to a “work from anywhere” model? The impact of the coronavirus has left commercial real estate companies and business owners questioning “how will we survive and how will we adapt?”

### [Working from anywhere – Companies adapting to COVID-19](#)

Companies, of all sizes, are starting to implement new ways for their employees to work in a safe environment. A lot of those changes include a “working from anywhere” model in which an employee can work from home, a coffee shop, their cabin, or even a friend’s house. Keeping employees safe and containing the spread of COVID-19 is and should be the primary concern at this point for businesses. Companies like Facebook are starting to strategize and pivot to allow employees to work from home on a permanent basis while staying productive. In a recent interview with “Squawk Box” Facebook CEO Mark Zuckerberg that in the future, as early as 5 to 10 years from now, as much as 50% of the company’s workforce could be working remotely (2020, CNBC).

Companies are also having to pivot and change the way they operate in from an HR perspective and from a corporate strategy perspective. Companies, like Google, are starting to change the structure of their benefit packages to help benefit employees who work remotely.

One of the benefits that companies are starting to offer are reimbursement packages so employees can appropriately buy the equipment needed to work as efficiently, or more efficient, at home compared to working in the office.

Companies also have the difficult task of keeping employees motivated in a virtual atmosphere rather than being face to face. One of those challenges and tasks is to manage virtually, not micromanage. Although management has a tough task it is also in the best interest of the employee to stay as or more efficient while working virtually than in the office. The reason why it is so important to stay on top of work is because there are many benefits employees have while working from home that they do not have working at the office for eight to ten hours a day. Being able to spend more time with family, not spending precious time in the car commuting between work and home, being able to do household chores like laundry freely, and simply being comfortable being able to be at home.

Owners and shareholders of companies not only get the same benefits as the employees such as spending more time with family but also some perks that might not be as thought of. As time goes on so do leases of office spaces that are not being occupied, at least to full capacity. As employees adjust to working remotely, company decision makers can walk away from having a higher liability each month as they get more comfortable working in a virtual environment. Also, having employees work where they live also ensures that, unless under certain circumstances such as being sick, are going to be punctual to work and hopefully see increased efficiencies in their daily work. Employees and leadership are eager to get back into the office. Having that face to face interaction is something that has been taken for granted in the past and is something many are looking forward to getting back to.

### [Commercial Real Estate: Where are we now?](#)

The commercial real estate industry is experiencing one of, if not the biggest, changes in how clients operate. Companies tend to turn to commercial real estate agencies when they are trying to expand their manufacturing plant, growing out of their office space and into a smaller one; so how exactly is COVID-19 impacting these agencies? The commercial real estate (CRE) industry has been hit with other epidemic and financial crisis in the past but determining how the immediate future because spread of COVID-19 is still uncertain. As the market is still being analyzed to determine a more soluble solution it is noted that "...buyers and sellers take a wait-and-see approach and CRE deals are delayed, most brokers feel the effects. Even property touring activity has declined considerably in the current environment. For instance, US CRE

transaction volume declined 27 percent year on year in March. In early April, most realtors reported a decline of over 30 percent in buyer traffic” (2020, Berry J., Deloitte).

It is not just businesses looking to grow into new spaces that are being cautious with the pandemic. Since COVID-19 has been marked as a pandemic, the market has remained accessible but given the additional risk of repayment most lenders are moving forward with caution. “Since the second week of March, when COVID-19 was declared a pandemic, spreading globally and, particularly, across the United States, financial markets have declined sharply. The S&P 500 and Russel 2000 declined by 13 percent and 29 percent year to date as of April 15. The US 10-year treasury yields declined by 127 bps to 0.6 percent over the same time period. Rather than the typical lag, the CRE industry was affected immediately. This was because trade activities and occupiers’ businesses were shut down” (2020, Berry J., Deloitte). Commercial mortgage-backed security delinquencies since the start of COVID-19 has seen a slight uptick compared to prior years. Property owners are also facing the challenge of short-term liquidity management issues due to delays in rent collection from tenants. Larger submarkets, such as Manhattan, have so far seen one of the largest year-over-year declines in leasing volumes since 2013. But through all the numbers and analytics let us not forget about social distancing, which has had it is on impact on the CRE market. As a result of social distancing as well as other government direction spaces such as malls, shops, restaurants, offices and other living spaces have been closed because these business owners have not been to pay their bills, yet alone operate. Because of brick and mortar stores either operating at a limited capacity, or not at all, companies within the e-commerce and online retails space has thrived due to such a large surge in demand.

### Sectors Impacted within CRE

Real estate investment trusts (REIT) are just one of the sub-categorizes within the CRE industry that has been impacted year-over-year (as of April 15, 2020) because of the coronavirus. Data centers, cell phone towers, and other various industrial companies have all seen a growth of US REIT property indices. However, on the flip-side, multifamily (-15%), office (-17%), Health care (-25%), Retail (-48%), and Hotel (-53%) (2020, Berry J., Deloitte) have all been negatively impacted and seen large decline in each of their respective industries. “As buyers and sellers take a wait-and-see approach and CRE deals are delayed, most brokers feel the effects. Even property touring activity has declined considerably in the current environment. For instance, US CRE transaction volume declined 27 percent year on year in

March. In early April, most realtors reported a decline of over 30 percent in buyer traffic” (2020, Berry J., Deloitte).

Developers and homebuilders have seen large hits to their cashflows directly associated with the amount of jobs being put on hold. A recent contractor survey that was published revealed that more than 50% of US construction firms have either suspended or completely stopped projects and more than two-thirds are expecting delays due to shortage of materials and personal protective equipment. In addition to having a shortage of work, limited resources of supplies, but the Fannie Mae Home Purchase Sentiment Index has also declined from 11.7% in March 2020 to an astonishing 80.8% (2020, Berry J., Deloitte), the lowest it has been since December of 2016 indicating that there could be a decline in new home sales.

Private Equity Real Estate (PERE) companies have not seen an immediate impact from COVID-19 thus far. The services that PERE are primarily focusing on right now are aimed at helping portfolio companies manage costs, risks, and liquidity. In order to manage risk and allow “opportunistic plays” the way companies operate will need to change. Investors going forward may be more hesitant to invest into new assets or even shifting their portfolios completely into a new industry such as e-commerce or some other digital e-commerce sector. Other PERE are taking this opportunity to stay aggressive within their current industry and get value investments in gateway markets and/or invest in distressed assets. The risk right now is high in the private equity real estate market, but the upside potential has never been so great especially for the low premiums within today’s market.

### [Government Actions: The Impact on the CRE Industry](#)

The US government and the Federal Reserve have so far taken multiple steps in responding to the impacts COVID-19 has already had on the commercial real estate industry. While pressures to sell are at an all-time high and liquidity being a concern for commercial mortgage-backed securities (CMBS) there have been short-term relief in terms of financing for investors. When the Federal Government passed the CARES Act the thought was to increase cash flows and liquidity, not just within the CRE market but in general. Within this act though there were several tax and business spending provisions that CRE companies can take advantage of such as; increases in bonus depreciation, utilizing the net operating losses from prior years, and allows companies to obtain cash for the future at a very minimum penalty or tax credits.

## Moving Forward Today

The changes in investing in commercial real estate is nothing but a certainty. Investors will be more careful and look at additional data points prior to making an investment primarily because of the shift in physical buildings being the epicenter of any kind of transaction. Companies like Amazon, Target online, and Walmart have been aggressive during COVID-19 to continually capture marketspace with the intention of shopping online (more than we do today) as the “normal way” to shop. Even seniors and others who did not grow up during the “tech era” are starting to become more accustomed to making everyday purchases like groceries online to avoid large groups of people.

In addition to the change in the real estate space, it is expected that the apartment owner will have to adjust as well. Average apartment rents are dropping across the country according to the *National Real Estate Investor*. Average rent in the United States as of March 26, 2020 was down by 0.23%. This number may seem incredibly low but is the opposite as to how trends have been going within the space; traditionally, during that time of the year, rents would be going up. In the longer term it is quite possible that single-family homeowners feel like they need to have less of a liability and down-size into a smaller space; being either an apartment or condo. However, with the concern of the virus spreading through bigger and more populated cities, larger buildings could have repercussions on new living conditions.

Technology is a tool that some owners and managers are starting to adopt with the change in how most businesses operate today because of the virus. For real estate companies it is common now to meet via video call and to do even to a virtual tour of the home when looking at the house for the first time. There are even instances of mall owners in Asia-Pacific who are resorting to using virtual reality (VR) to connect with shoppers at home rather than their brick and mortar location. Malls, such as the Mixc mall in Shanghai, is allowing shoppers to use a VR platform to take a 360-degree tour inside of the mall where they can then browse as if they were there. Just over Valentine’s Day weekend the mall had generated nearly \$71,000 USD through its VR channel. CRE companies are also taking advantage of new technology when remotely working; “Proptechs are providing employees technology equipment, such as monitors and headphones, and offering them child care vouchers while schools are closed. A few brokers are increasing the use of digital communication channels, organizing virtual property tours for potential buyers and tenants” (2020, Berry J., Deloitte). Like within the consumer retail space, commercial real estate agents are using virtual tours as a way of showing property to potential buyers. A virtual reality platform gives not only the CRE agent leverage of being able



to show more properties in a single day but it also allows the buyer to look at more options without having to drive across town during rush hour traffic.

Apart from utilizing new technology to continue business, CRE's are also now able to focus on addressing short-term liquidity issues, accessing their inventory, maintaining tenant engagement on occupied properties, and following government regulations. Cashflow and finding ways to preserve cash is one of the primary objectives of CRE owners today and is being done in many ways. Some are finding an effective way of doing this is by delaying or suspending dividend payments. To go even further to preserve cash in some situation's dividends are being paid out as additional stock rather than cash itself to help keep the company from turning to financial institutions and adding debt to the company's balance sheet. It is also common for companies investigate refinancing opportunities in order to maintain liquidity in the short to mid-term with the goal in mind of preserving cash for the future.

#### Tenancy Impact: Short-term and long-term

One of, if not, the most important components to the CRE industry is how will COVID's impact change the tenancy rates on both the short-term and long-term. Owners of commercial real estate properties have already been taking the proper steps in order to protect their tenants'. However, the elephant in the room is with the amount of people either temporarily or even permanently losing their jobs how will they be able to afford their rent? "Meanwhile, many asset owners and operators face drastically reduced operating income, and almost all are nervous about how many tenants will struggle to make their lease payments. "Concession" and "abatement" are the words of the day, and players are working rapidly to figure out for whom they apply and how much" (2020, Gujral, Palter, Sandhvi, Vickery). Not all real estate assets though are dealing with these issues the same way amidst the pandemic. For example, self-storage facilities, data centers, and industrial facilities are not seeing as sharp of a decline as other commercial real estate property type. In the future it is also expected, at least by one estimate, that the CRE industry is "...unlevered enterprise value of real estate assets had fallen 25 percent or more in most sectors and as much as 37 percent for lodging (the most extreme example). It's no surprise that—when shoppers avoid crowds, universities send students home, and retailers, restaurants, and hotels close their doors—owning and operating those properties is a less valuable proposition. As such, liquidity and balance-sheet resilience have become paramount" (2020, Gujral, Palter, Sandhvi, Vickery).

The financial implications are not the only changes we can expect to see within the commercial real estate industry. Behavioral changes are certain to change; for example, when a growing company is working with a CRE agent for a new office one of the first things they will want to look at is how safe they can keep their employees. Safety goes further than just staying six feet apart and having barriers between desks. “For example, within commercial office space, the multiyear trend toward densification and open-plan layouts may reverse sharply. Public-health officials may increasingly amend building codes to limit the risk of future pandemics, potentially affecting standards for HVAC, square footage per person, and amount of enclosed space. At the same time, just as baby boomers age into the sweet spot for independent and assisted living, fear of viral outbreaks like COVID-19 may prompt them to stay in their current homes longer” (2020, Gujral, Palter, Sandhvi, Vickery).

Habits within commercial real estate are bound to change, probably forever, not only on the consumer/investor side, but also on the CRE agency side. While consumers are being forced to shop online due to closed malls, storefronts, and just the sheer safety of shopping from home other habits will be created having a long-lasting impact on the CRE industry.

### [Business Today](#)

Preparing to reenter into the world we once lived in is going to be a challenge in almost every facet of our everyday life. Going to the grocery store was once a simple, harmless chore that we would do normally once a week. As a business owner though transitioning back into the office space, store front, restaurant, or barbershop now becomes a check list of regulations that are being followed so no future penalty ensues. Leaders of all different types of companies will need to explore different approaches to reopen their doors even if that means opening the doors virtually.

For CRE companies, they will have to adjust to their physical location and adjust to all new safety regulations and laws put in place to protect everyone within the office space for the foreseeable future. The return to a physical office will likely be guided and will potentially need to be in phases, much like our economy, over the next months if not year. One of the ways that some companies may be able to open sooner and get people back into the office is by offering a full-time work from anywhere approach, allowing only certain people back into the office while the remaining population of the staff continue to work from home. These are very blanket statements and cover the majority of industries but for an industry that is so relied on working

face to face with people in order to generate revenue alongside the economic impacts on commercial real estate; these facts carry a lot of weight for CREs.

Commercial real estate companies will not only need to approach reopening with employees in mind but also their clients, and not just for them to stop by the office but with growing technology comes greater risk for exposure. As companies reopen within a virtual environment and to run close to normal there will be the need for new programs and technologies to be implemented. Although new technology is a great thing and allows most companies within their respective industry start to run normal there is a crucial need for cybersecurity and data privacy. According to a recent Deloitte global survey more than 60% of users now work remotely and over 1,000 devices that are marked as insecure devices. CRE leaders need to take these measures seriously as data breaches happen far too often and with new data sources connecting to enterprise gateways it opens more opportunity for internal systems to be hacked. Business continuity plans and disaster recovery plans also need to be either created or updated to account for the number of remote employees. In any situation, regardless of industry, it is important that a company has a clearly stated and tested plan where if something goes wrong with their infrastructure they have a fall back where employees and the business can operate business as usual. In a March 2020 survey, it was noted that only 37% of US companies were equipped with the required and needed technology for their employees to work from home. By strategizing, planning, testing, and implementing these policies and procedures companies within their respective industries will have documentation and a plan to fall back on.

### The Future is Now

Commercial real estate companies are operating in a new world and need to start adapting now as the future is now. The days of meeting with clients in a board room, face to face, are tentatively on pause. Simple daily tasks such as meeting with the lender that backs your company are now hosted via Zoom call rather than over lunch with a large group of people on a Wednesday. It is also a new day and age in terms of investing in portfolios that make sense for the now and immediate future and not necessarily the “long play.” Commercial real estate agencies are now being very analytical and mindful of the next investment, just as much if not more as the business owner looking to purchase a new office space. As some investors and firms fold, like the financial crisis of 2008, some are finding these dire times as an opportunity to grow into sectors they have not invested in before. Acting quickly and tactfully

will determine which companies within the commercial real estate industry will survive and which ones will eventually come to an end.

## Conclusion

Regardless of industry we are all experiencing something we probably never thought we would encounter. Having video calls over Skype or Zoom, virtual happy hours from our patios at home, and hosting executive board meetings on a TV rather than in a board room. By taking the proper steps companies *can* survive, even those in competitive and economically impacted sectors such as commercial real estate. The adoption of new technology, proper practices and procedures, smart investing, and adapting to change we will be able to get through this new “normal” today so we can get back to the everyday things we took for granted.

## References

- Ehrhardt, M. C., & Brigham, E. F. (2017). *Corporate finance: a focused approach*. Australia: Cengage learning.
- Copeland, A. (2020, May 26). Career Corner: Work from anywhere. Retrieved from <https://journalrecord.com/2020/05/26/career-corner-work-from-anywhere/>
- sal19. (2020, May 28). Mark Zuckerberg explains the thinking behind Facebook's big push to let people work from home. Retrieved from <https://www.cnbc.com/2020/05/28/zuckerberg-on-facebooks-work-from-home-plans-no-meeting-wednesdays.html>
- COVID-19 implications for commercial real estate. (n.d.). Retrieved from <https://www2.deloitte.com/us/en/insights/economy/covid-19/covid-19-implications-for-commercial-real-estate-cre.html>
- About the author(s) Vaibhav Gujral is a partner in McKinsey's New York office. (n.d.). Commercial real estate must do more than merely adapt to coronavirus. Retrieved from <https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/commercial-real-estate-must-do-more-than-merely-adapt-to-coronavirus>
- Krawitz, C. (2020, May 29). Council Post: Evaluating Real Estate Investments Through A Post-Pandemic Lens. Retrieved from <https://www.forbes.com/sites/forbesfinancecouncil/2020/05/29/evaluating-real-estate-investments-through-a-post-pandemic-lens/#39f9862255d1>
- The Data Is Failing Us. (2020, April 27). *Bloomberg Businessweek*.
- Sneider, K., & Sternfels, B. (2020, May 9). From surviving to thriving: Reimagining the post COVID-19 return. *McKinsey & Company*.
- Covid-19: Briefing Materials. (2020, June 1). *McKinsey & Company*
- Boland B., De Smet A., Palter R., Sanghvi A. (2020, June 8). Reimagining the office and work life after COVID-19. *McKinsey & Company*

## **Coronavirus and the Insurance Industry**

By Julia Bonilla

[The author is an account executive at an insurance company]

## **Insurance & COVID-19**

COVID-19 struck countries with sufficient speed that in a matter of weeks economic activities slowed in the United States and around the world (Christiansen, Modi, Sachdev, & Tucker-Ray, 2020). Much of the spread within the United States can be attributed to the reluctance of the current administration to impose preventive measures to curb the spread until it was too late. The United States' death toll from Coronavirus reached a tragic milestone in May, more than 100,000 have been lost to the disease (Welna, 2020). The deaths in the United States went from two known fatalities in February to over 58,000 in April (Welna, 2020). Nearly one-third of the known lives lost in the world because of COVID-19 has been in the United States (Welna, 2020). Public health experts have stated that COVID-19 exposed the vulnerabilities and shortcomings of the United States health care system (Welna, 2020). This pandemic has shown both a high degree of vulnerability and risk for failures of the principal forms of the global integration of "nations, industries, businesses, and individuals," (Karabag, 2020, p. 2).

With the rapid progression of COVID-19, China was the first to quarantine its residents, France followed with President Macron instituting a national quarantine, and the country of Italy in the earlier months of the Pandemic as the epicenter of the virus. Afterward, the WHO declared COVID-19 a pandemic, and President Trump followed with a national state of emergency, ending with United States governors shutting down their states and imposing stay at home orders to mitigate the rapid spread of the disease. When states shut down, it generated another set of problems: it sent home people, many lost their jobs, and businesses, specifically small businesses, were impacted negatively. In forcing the shutdown of businesses, the insurance industry saw claims related to COVID, business interruption claims. The current insurance market before the pandemic was a hardening market: rates were increasing, reduction of coverages, and lower limits. The pandemic only worsened a hard insurance market, and as soon as claim denials came in, lawsuits began. Both states and insurance carriers began formalizing their COVID-19 responses to acclimate to the developing times.

### **COVID-19 Impact**

While the pandemic has forced many businesses to shut down, some insurance carriers are beginning to see catastrophic level losses. AIG (American International Group), for example, in the first quarter has taken the insurance industry's largest "CAT loss ever," (BarylIn, Hussain,

& Manjeshr, 2020). AIG in May showed a 93% drop in its quarterly adjusted profit, as it set aside money in its reserves to cover claims related to the COVID-19 pandemic, thus calling it the “single largest catastrophe loss the industry has ever seen,” an underwriting loss of \$87 million AIG posted in its first quarter compared to its profit of \$179 million in the previous year (BarylIn et al., 2020, para. 1). The insurer later set aside \$419 million in CAT losses of those \$272 million of COVID-19 related losses were attributed to travel, trade credit, and worker’s compensation (BarylIn et al., 2020, para. 1). AIG’s combined ratio for general insurance, which excludes the developments of losses incurred from prior years was 95.5 for the first quarter, compared to the 96.1 from the year before (BarylIn et al., 2020). A combined ratio below 100 simply means that the insurance carrier earns more in its premiums than it pays out in claims.

Global insurers are now facing the prospect of a double hit, a “sharp rise in payouts at a time of big investment losses as insurers’ investments come under pressure and the investments, they rely on to pay the claims unravel,” (BarylIn et al., 2020, para. 4). A recession threatens the world economy at the same time as an increment in insolvencies, many of the companies with trade credit insurance, airlines to retailers, are coming under difficulties (BarylIn et al., 2020).

This pandemic, according to Alan Lyons, chair of the insurance practice Herrick Feinstein in New York, “has the potential to be the largest insurance loss of all time” (Barlyn & Scott, 2020, para. 3). Unlike other catastrophic disasters, the pandemic has hit businesses, individuals, and all markets globally simultaneously (Barlyn & Scott, 2020). Insureds are filing claims across multiple policy types, from worker’s compensation, events cancellation, commercial insurance to broader policies (Barlyn & Scott, 2020). Although, many of the business interruption claims will not be paid in 2020 since lawsuits generally take a year or more to resolve and cost insurance companies millions to defend (Barlyn & Scott, 2020). Insured losses in the United Kingdom and the United States could venture from \$11 billion to \$140 billion, as Willis Towers Watson PLC stated (Barlyn & Scott, 2020). The estimates include variations of the social distancing measures, multiple projections for the number of deaths, and the meaning of the assumptions for the multiple insurance lines (Barlyn & Scott, 2020). According to Barlyn and Scott (2020), losses could potentially exceed the \$500 billion mark if state lawmakers require insurance companies to cover the business interruption claims for the pandemic losses as stated by the CNA Financial Corp Chief Executive Dennis Chookaszian. Most policies exclude the risk altogether; however, over time an increasing number of insurers are facing lawsuits, and as of May, eight U.S states are considering laws to retroactively force



insurers to pay business interruption claims (Barlyn & Scott, 2020).

The COVID-19 situation is exacerbated by the volatility in equity markets since the outbreak in the United States (Potential Implications of COVID-19 for the Insurance Sector, 2020). The property-casualty insurance carriers usually tend to be susceptible to stock market fluctuations, as insurers “hold more liquid assets in case of catastrophic losses” (Potential, 2020, p. 22). Carriers all around the world are cautiously considering COVID’s potential impact on both short and long terms financial outlooks on their corporations (Potential, 2020). The cost of claims will most likely “be specific to the classes of business an insurer writes and their policy language,” (Potential, 2020, p. 22). Yet, the “big-picture” concern is this pandemic’s potential effect on the economic environment – “specifically, prospects for growth and profitability in insurers’ underwriting and investment portfolios,” (Potential, 2020, p. 22).

### **Lawsuits and Claim Denial**

Legal Sea Foods like many businesses during this pandemic has sustained losses. This popular food chain has taken its insurance carrier to court to demand payment on its business interruption claims (Simpson, 2020). The chain asserts that its insurer must cover its claims as the policy does not include an exclusion for pandemics, even though the policy was issued March 1, 2020, amid COVID-19 shutdowns (Simpson, 2020). The lawsuit against Strathmore Insurance, a subsidiary of Greater New York Insurance Cos, has twice denied a claim filed by Legal Sea Foods (Simpson, 2020). Strathmore’s policy provides coverage against “all risks of loss of or damage to property and insuring business interruption and extra expense unless specifically excluded or limited in the policy,” (Simpson, 2020, para. 4).

One of the predominant arguments in favor of the payment of business interruption claims is “The insurance company intended to insure a restaurant operating as a restaurant. It’s right on the application. They intended to insure a Pilates studio as a Pilates studio. If you’ve lost the use of the function of your building to operate for its intended purpose, that is a direct physical loss. The insurance companies ignore that,” (Boggs, 2020, para, 6). Insurance carriers argue, for example using the ISO (Insurance Services) policy language, “We will pay for the actual loss of Business Income you sustain because of the necessary “suspension” of your “operations” during the “period of restoration”. The direct physical loss of or damage to property at premises which are described in the Declaration must cause the “suspension,” (Boggs, 2020, para.8).

The CP 10 30 contains two exclusions that foil attorney arguments: insurance

companies will not pay for any loss or damage resulting from the delay or loss of use or market, acts or decisions that include the “failure to act or decide of any person, group organization or governmental body” (Boggs, 2020, para. 10). The CP 10 40 is the “Virus” Exclusion, which states that the exclusion in paragraph B “applies to all coverage under all forms and endorsements that comprise this Coverage Part or Policy, including but not limited to forms or endorsements that cover property damage to buildings or personal property and forms or endorsements that cover business income, extra expense or action of civil authority” (Boggs, 2020, para. 14). One court ruling overseas will be in interest to cafes, nightclubs, and restaurants in Great Britain and the United States, as precedent dictates the insurance industry. A Paris court ruled that the insurance carrier AXA had to pay the claim to a restaurant owner for two months’ worth of COVID related business interruption losses (Pineau & Niclaeva, 2020). This carries the implication that the policies with the same clause can appeal to their insurers (Pineau & Niclaeva, 2020). Another example would be a unit of the insurer Tokio Marine is currently seeking a dismissal of a COVID-19 lawsuit by a Las Vegas restaurants business interruption claim (Souter, 2020). Egg and I LLC et al v. U.S. Specialty Insurance Co. et al, filed in a federal court, the insurer argues on the premise that they would only cover loss of income as a result of a covered cause of loss (Souter, 2020). The restaurant chain argues in its class-action suit that its policy covers the loss of income due to the “government-ordered restrictions on nonessential businesses to limit the spread of the coronavirus,” (Souter, 2020, para. 3). In Specialty Insurance’s motion to dismiss stated that courts have previously adhered to “contamination occurs if a product comes into contact with a contaminant” (Souter, 2020, para. 5). Insurance carriers argue that the majority of policies require physical damage to trigger coverage and COVID-19 does not constitute physical damage (Souter, 2020).

A U.S. federal court recently received notice of 101 filed lawsuits as of the month of May seeking coverage for business interruption losses, several which plaintiffs expect to rise into the thousands (Sams, 2020). A number that does not include suits filed in the state courts. Insurance companies have been granting blanket denials to the COVID business interruption claims, while business owners have been in part waiting for an insurance payout to survive (Sams, 2020). According to the National Restaurant Association stated that “if no assistance is given, 40% of restaurants will not survive, (Sams, 2020, para. 6). The American Property and Casualty Insurance Association stated that in forcing insurance carriers to pay these claims it would “undermine the solvency of the industry,” (Sams, 2020, para. 7). What had begun as a question for the judiciary branch has now moved on the legislature as bills requiring insurers to pay COVID-19 business interruption claims have been introduced into eight states; the

Louisiana state legislature has dropped the bill it had introduced (Sams, 2020).

### **State Responses**

States like Massachusetts, New Jersey, New York, Pennsylvania, South Carolina, Louisiana, and Ohio have proposed legislation that would mandate insurance carriers to cover the COVID-19 business interruption losses, despite the viral exclusion claims in policies (Blosfield, 2020). No bill has passed. Massachusetts' bill SD 2888, sponsored by state senator Eldridge, who consulted with both small business and restaurant owners (Blosfield, 2020). Senator Eldridge affirms that if they do not provide the financial support that businesses and restaurants need to survive, many will not reopen, and that would not bode well for anyone, including the insurance market (Blosfield, 2020). SD 2888 requires insurers in the state not to deny a business interruption claim due to COVID-19, even if the current policy specifically excludes losses resulting from viruses (Blosfield, 2020). Under this bill, insurers must cover the claim even if there is a lack of physical damage to the property of the insured or any other property (Blosfield, 2020). The bill from Massachusetts has been proposed as an emergency law, meaning that it has expedited its passage through the state legislature (Blosfield, 2020). If passed this bill would be retroactive to March 10 of 2020 (Blosfield, 2020).

The insurance industry has pushed back against this proposed legislation, arguing that these laws would place a financial strain on the insurers that did not price for virus-related losses (Blosfield, 2020). The National Mutual Casualty Insurance company stated, "while the U.S. insurance sector remains strong if insurance companies are required to cover such claims, such an action would create substantial solvency risks for the sector, significantly undermine the ability of insurers to pay other types of claims, and potentially exacerbate the negative financial and economic impacts the country already is experiencing," (Foggan & Sabino, 2020, 48). This is because it took the insurance industry to take action about fifteen years ago to limit insurance coverage for the next pandemic with the ISO exclusion because of losses due to viruses and bacteria approved by regulators in 2006 (Blosfield, 2020).

If other states follow in the steps of New Jersey, Massachusetts, and other states considering a bill such as this it could set a dangerous precedent for the insurance sector (Blosfield, 2020). Another argument against these proposed bills potentially may violate the contracts clause of the U.S Constitution, placing limitations of the ability of the states to interfere with private contracts (Blosfield, 2020). The President and CEO Charmness of the National Association of Mutual Insurance Companies summarized the issue in a statement, "If elected

officials require payment for perils that were excluded, never underwritten for, and for which no premium was ever collected, catastrophic results will occur and we may deal with a second crisis: insurance insolvencies and impairments. There will also be irreparable harm done to contract law, and the impact of this will be felt by every business in America,” (Blosfield, 2020, para. 17).

### **New Normal or the Post Pandemic World**

Pandemics leave everyone altered and its effects are equal to those of war. Although pandemics are often forgotten, as the first historical account of the 1918 flu pandemic was not published until the year 1976, America’s Forgotten Pandemic (Mann, 2020). According to Mann (2020), we will never be able to disentangle the war and the flu, but the one way to summarize the pandemic of 1918 is that it was on the same scale as “the war to end all wars.” The implications of COVID-19 are still unclear. The world economy will need to recover. As we turn to a ‘new normal’ in the post-pandemic world some companies will be forced to rely more on technology, others will have to create contingency plans for situations such as this, and governments will need to address the issue as the threat of a new pandemic is not extinguished.

Lloyd’s of London revealed it is set to pay claims in the ranges of \$3 billion to \$4.3 billion as a result of COVID-19 (Howard, 2020). The payout is on par with the attacks on September 11, 2001, which cost it's market \$4.7 billion, and the combined hurricane losses (Harvey, Irma, and Maria), for a total of \$4.8 billion in paid claims (Howard, 2020). There is no doubt that the commercial insurance carriers will drastically hit by the pandemic related losses, thus delaying profits until the second half of 2021 (Wilkinson, 2020).

Representative Maloney of New York introduced legislation to establish a federal pandemic risk reinsurance program (Wilkinson, 2020). H.R. 7011 would establish a “federal backstop for business interruption, including event cancellation losses resulting from a future pandemic or public health emergency from Jan. 1, 2021,” (Wilkinson, 2020, para. 2). PRIA would be triggered when the insurance market losses exceed the \$250 million threshold, with an aggregate capped at \$750 billion (Wilkinson, 2020). Insurance carrier participation in PRIA would be voluntary (Wilkinson, 2020). Pandemics are unique and its economic effects have the potential to be devastating, and without government assistance, it remains unclear if insurance companies could or would cover pandemics (Wilkinson, 2020). Much like the Terrorism Risk Act, enacted after 9/11, under the PRIA Act, the government would act solely as a backstop and to maintain the insurance marketplace stability (Wilkinson, 2020).

TRIA is a useful starting point, yet any Pandemic Risk Insurance Program needs to incorporate lessons learned about in public-private insurance partnerships (“Why,”2020). TRIA remains based on that insurer’s “must “make available” coverage for losses caused by a terrorism event on the same terms and amounts they cover (or do not cover) losses caused by a non-terrorist event; and in return” and TRIA promises to reimburse insurers for 80% of the terrorism losses they pay above individual insurer backstop deductibles (“Why,”, 2020, para. 3). Insurance companies adhere to TRIA’s “make available requirement” by offering an insurance policy that does not exclude or limit losses by terrorism (“Why,” 2020). A program similar to TRIA for pandemics, insurers would need to incorporate a similar make available requirement; yet for nearly fifteen years insurers have issued policies with the exclusion “a virus, bacterium or other microorganisms that induce or are capable of inducing physical distress, illness or disease” (“Why,” 2020). With a TRIA like PRIA, it would be a requirement to offer policies without the viral exclusion (“Why,” 2020).

Commercial insurance companies are facing extraordinary pressures to respond to the devastation the COVID pandemic is causing to the economy (Foggan & Sabino, 2020,). All while bearing the “losses to their investment portfolios, launching remote work plans, and taking necessary steps to protect their workforce from unnecessary risk,” (Foggan & Sabino, 2020, p. 50). The insurance industry as stated by Foggan and Sabino (2020) is crucial to society, yet as the NAIC stated concerning Congressional action to COVID, “insurance is not typically well-suited for a global pandemic where virtually every policyholder suffers significant losses at the same time for an extended period” (Foggan & Sabino, 2020, 50). It remains pivotal that legislators and courts “recognize the limits of insurance in accordance with policy terms and exclusions,” (Foggan & Sabino, 2020, p. 50).

### **Post Pandemic Insurance Industry Conclusion**

After COVID, insurance companies will meet with actuaries, underwriters, and management to reevaluate their forms and language. The 2021 insurance market has the potential to be one of the hardest insurance markets seen. After a meeting with some of the world's leading insurance carriers, Wells Fargo Securities asserts that warning signs are present for 2021 to one of the hardest insurance markets seen in past years (Wood, 2020). According to Wood, this pandemic has the potential to be the largest insured loss of the industry, even though the situation is still fluid (Wood, 2020). Analysts have sensed that half of the losses of

the pandemic will be attributed to the primary market and the other half to the reinsurance markets (Wood, 2020).

All the underwriters at Lloyd's of London "took home their stamps and [...] fountain pens [...], which they use to sign insurance contracts, but they won't need them," (Cohn, Hussain, & Saul, 2020, par. 1). The pandemic affected the underwriters at Lloyd's of London, slightly more than others, as they had been forced to abandon the tools of their trade and had to turn to emails, zoom calls, and other technologies to meet the demands agent and brokers had (Cohn, et al., 2020). This created a drastic change from the norm at Lloyd's. Here the underwriters "[received] queues of brokers at their desks to haggle over terms, before sealing the deals with an old-fashioned company stamp and an ink signature," (Cohn et al., 2020, par. 2). For the first time since Lloyd's was founded, the carrier went fully online. Many insurance carriers around the world went fully online for the first time. The shutdown caused by COVID-19 only served to highlight how it placed brakes on "centuries-old traditions," (Cohn, et al., 2020). Brokers and underwriters alike both have argued that the complex accounts are better handled in person. Long gone were the days of agency and loss control visits. The pandemic forced insurance carriers and agents to conduct zoom calls and employ other creative measures to obtain the same productivity especially as the industry headed into COVID-19 claims, hurricane season, and the largest month for renewals July first.

The United States let alone the world is not near the end of the pandemic. The dangers the pandemic poses are not gone, at least until we develop a vaccine. The threat of a second wave looms over countries as they reopen them and their economies. As the world and the United States enter the next six months, the development of a vaccine will be further along as Moderna and other companies enter a more extensive version of human trials. During these six months the insurance industry "will need to adopt a [...] hybrid approach both for how companies view internal operations and for how they view customers, many of which will be open for business," (Carroll, 2020, par. 3).

For insurers, some personal will return to the office, while most will need to work remotely (Carroll, 2020). Sales and claims for the moment and in the near future will need to be handled remotely. Companies around the world, not just insurance carriers will continue to capitalize on this opportunity to speed up digitizing their operations and becoming more efficient (Carroll, 2020). An article published by McKinsey established an aggressive outline for the following three months stating that corporations have a rare opportunity in front of them to shape their customers' behavior (Baig, Hall, Jenkins, Lamarre, & McCarthy, 2020). Insurance

companies should heed that 35% of their customers interact with them online compared to 27% before the beginning of COVOD (Carroll, 2020).

In the next three months, corporations should identify the business areas in which it requires digital execution velocity and plan support (Baig, Hall, Jenkins, Lamarre, & McCarthy, 2020). At the same time assess where and how remote work models could lead to productivity benefits (Baig et al., 2020). These two set the beginning for the change to the internal operating model (Baig et al.,2020). In the second month designing newer models that take into consideration “staffing level, expertise mix, governance, and operating procedures” (Baig et al., 2020, par. 6). In the third month, implementation and operation of the designs; from what we have seen banks, insurance companies, and other companies can pivot their entire field forces to work from home in a matter of days to weeks (Baig et al.,2020).

The pandemic has forced the insurance industry to go online or virtual as the carriers have restructured their workforces completely. As stated by the CEO of Austbrokers Coast 2 Coast Insurance brokers, “We don’t have people sitting in gigantic ivory towers and offices like we’ve had in the past. We’ve got people being more flexible,” (Theakstone, 2020, para. 4). The pandemic has forced a change in not just the insurance industry but in the labor market as well. Zoom meetings are the norm now (Theakstone, 2020). Some international insurers write business all over world; Hansen CEO of Austbrokers states they do not need to be physically present all over the world, so long as they are meeting the needs of the client (Theakstone, 2020). While the insurance industry is steeped in tradition as Lloyd’s of London demonstrated, it still requires that sense of human touch for the industry to be successful. The future of the industry will head towards a hybrid of impeding more technology into the workforce and keeping the human touch. The best of both worlds and the balance seems to be the future for the insurance industry.

## References

- Baig, A., Hall, B., Jenkins, P., Lamarre, E., & McCarthy, B. (14, May 2020). The COVID-19 recovery will be digital: A plan for the first 90 days. Retrieved from <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/the-COVID-19-recovery-will-be-digital-a-plan-for-the-first-90-days?cid=other-eml-nsl-mip-mck&hlkid=0522e932405d434eaa5a7f74490b4918&hctky=2165780&hdpid=e45df143-813b-4117-8bf3-68d8aaa805ad>
- Barlyn, S., & ManjeshR, B. (2020, May 5). AIG takes hit from Coronavirus in Q1; sees industry's 'Biggest CAT Loss Ever' ahead. Retrieved from <https://amp-insurancejournal.com.cdn.ampproject.org/c/s/amp.insurancejournal.com/news/national/2020/05/05/567462.htm>
- Blosfield, E. (2020, April 23). Massachusetts joins Ohio, N.J. in proposing COVID-19 business interruption bill. Retrieved from <https://www.insurancejournal.com/news/east/2020/03/31/562855.htm>
- Blosfield, N. E. (2020, April 17). More States Introduce COVID-19 Business-Interruption Bills. Retrieved from <https://www.claimsjournal.com/news/national/2020/04/16/296600.htm>
- Boggs, C. J. (2020, May 15). Business Income, COVID-19, and plaintiff attorneys: they keep trying. Retrieved from <https://amp-insurancejournal.com.cdn.ampproject.org/c/s/amp.insurancejournal.com/blogs/big-i-insights/2020/05/06/567690.htm>
- Carroll, P. (2020, June 9). COVID-19: 'The end of the beginning'? Retrieved from <https://www.insurancethoughtleadership.com/covid-19-the-end-of-the-beginning/>
- Cohn, C., Hussain, N. Z., & Saul, J. (2020, March 30). How Coronavirus crisis has changed underwriting at Lloyd's of London. Retrieved from <https://www.insurancejournal.com/news/international/2020/03/30/562705.htm>



Foggan, L., & Sabino, M. A. (2020). Feeling the Effect: The possible impact COVID-19 will have on commercial property insurance lines remains uncertain, but it is likely many claims will be coming before the courts. *Best's Review*, 5, 46.

Howard, L. S. (2020, May 14). Lloyd's expects US\$4.3B in COVID-19 claims – on par with costs of 9/11 terror attacks. Retrieved from <https://amp-insurancejournal.com.cdn.ampproject.org/c/s/amp.insurancejournal.com/news/international/2020/05/14/568472.htm>

Mann, C. C. (2020, May 7). Pandemics leave us forever altered. Retrieved from <https://www.theatlantic.com/magazine/archive/2020/06/pandemics-plagues-history/610558/>

Pineau, E. & Nikolaeva, M. French Court orders AXA to pay restaurant's COVID-19 business interruption losses; AXA vows to appeal. (2020, May 22). Retrieved from <https://amp-insurancejournal.com.cdn.ampproject.org/c/s/amp.insurancejournal.com/news/international/2020/05/22/569710.htm>

Potential implications of COVID-19 for the insurance sector: how the Coronavirus outbreak may impact insurers operationally and economically. (2020). *Insurance Advocate*, 131(5), 14.

Sams, J. (2020, May 28). Coronavirus business interruption suits top 100; More Expected. Retrieved from <https://amp-insurancejournal.com.cdn.ampproject.org/c/s/amp.insurancejournal.com/magazines/mag-features/2020/06/01/570293.htm>

Souter, G. (2020, May 26). Tokio Marine unit seeks dismissal of COVID-19 suit. Retrieved from <https://www.businessinsurance.com/article/20200528/NEWS06/912334808/Tokio-Marine-unit-seeks-dismissal-of-COVID-19-suit>

Theakstone, C. (2020, May 12). What does the post-pandemic world look like for the insurance industry? Retrieved from <https://www.insurancebusinessmag.com/au/news/breaking-news/what-does-the-postpandemic-world-look-like-for-the-insurance-industry-222196.aspx>

Why “PRIA” can’t just be TRIA. (2020). Reactions, N.PAG.

Wilkinson, C. (2020, May 8). Pandemic to jolt commercial insurers: Fitch. Retrieved from

<https://www.businessinsurance.com/article/20200508/NEWS06/912334479>

Welna, D. (2020, May 27). 'We all feel at risk': 100,000 People Dead From COVID-19 In The U.S.

Retrieved from <https://www.npr.org/2020/05/27/860508864/we-all-feel-at-risk-100-000-people-dead-from-covid-19-in-the-u-s>.

## **Covid-19's Impact on the Global Supply Chain**

By Yiyun (Jenny) Wang

[The author is a production manager for a manufacturing company]

## **Introduction**

The Novel Coronavirus outbreak is a significant public health crisis in the world in a century. It has the potential to become the new pandemic that accompanies our production activities and social activities for a very long time. In the absence of effective vaccines and specific drugs, the current effective way to deal with new coronavirus is to isolate and strengthen people's immunity. However, the segregation can cause stagnation and disruption of consumption, investment, trade, logistics, business, and people flow, as well as national economic cycles and industrial interaction activities such as upstream and downstream of supply chains. The global impact of the coronavirus outbreak will trigger changes in the international landscape, the world order, global supply chains, and China's economic trade and industrial distribution. When the outbreak is over, and we step out of our homes, we will indeed face a different world and a different global supply chain.

## **Covid-19 Pandemic**

### **Background**

A coronavirus is a group of viruses that have a halo or crown-like (corona) appearance when viewed under an electron microscope. Coronaviruses typically result in respiratory and enteric infections affecting both animals and humans; they were considered relatively benign to humans before the SARS outbreak in 2002 and 2003 in China. Recently, in December 2019, the Novel Coronavirus (Covid-19) appeared in Wuhan, China, and has become a global health problem, and later developed into a pandemic (Milstein, 2020). On January 23, 2020, the city of Wuhan was locked down. By the end of February 2020, the virus was called the Covid-19 by WHO. On March 11, 2020, the World Health Organization announced that Covid-19 is not only a pandemic, but also the first recorded pandemic caused by a coronavirus (Kretchmer. 2020). On June 14, 2020, Johns Hopkins University (2020) reported 7,873,221 confirmed cases all over the world and provided below Figure 1 to compare the confirmed cases for the top few countries.

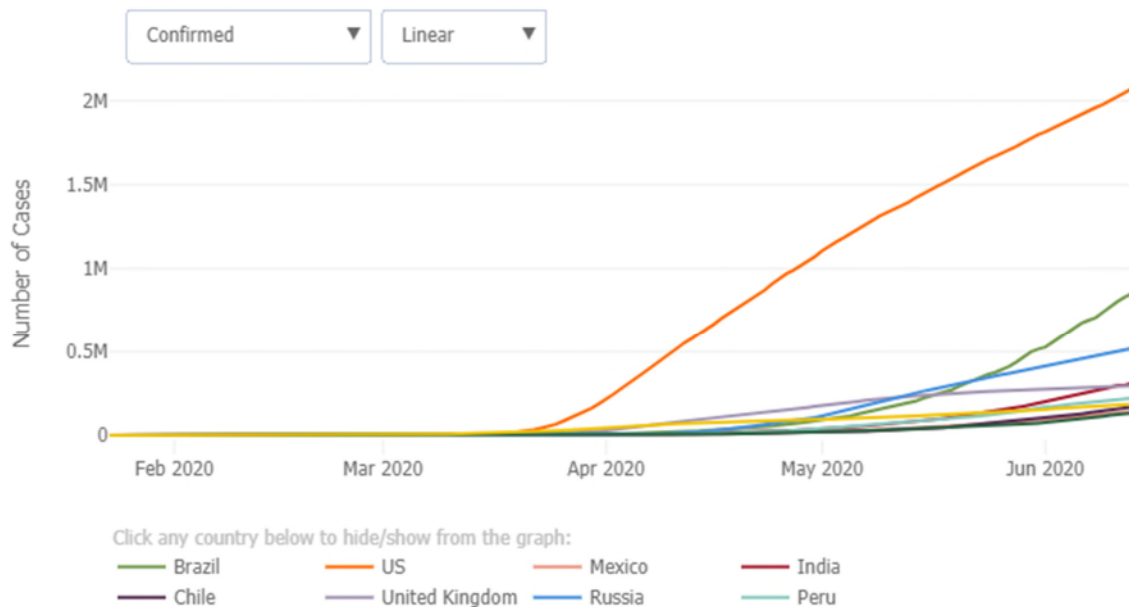


Figure 1: The Confirmed Number of Cases for Top Few Countries (Johns Hopkins University, 2020)

## Pandemic Definition

A pandemic refers to a new infection that has not been faced before. It spreads globally and leads to a high incidence of morbidity (disease) and mortality (death). It refers to the incidence of diseases that have seriously exceeded historical averages and spread rapidly over the years. It covers a wide range, has a large population ratio, and has crossed provincial borders, national borders, and even continental borders in a short time, forming a global pandemic (Doherty, 2013). Therefore, the global medical community recognizes that the "pandemic" mainly includes the following three criteria: the virus is pathogenic and lethal, that is, the disease caused by the virus is extremely harmful; the virus can continue to spread between human; there is evidence that the disease is endemic worldwide (Doherty, 2013).

## Pandemics in History

Throughout history, infectious diseases such as influenza (flu), plague, cholera, and smallpox have caused many world pandemics. The most impressive pandemic should be the Black Death (plague) in the 14th century, the Spanish Flu in 1918, Asian Flu in 1957, and the H1N1 Influenza A in 2009.

Black Death in the 14th century. The plague, known as the "Black Death", swept across Europe from 1347 to 1353. It originated in Central Asia and was introduced to Europe when the Mongolian army attacked the port city of Kfar in the Black Sea (now the Ukrainian city of Feodosia) in the year 1347 (Roos, 2020). Later, it was spread by merchant ships and fleas everywhere. The Black Death in Europe in the Middle Ages is the most severe social-ecological disaster in European history. It was not only prevalent but also very destructive, causing heavy losses to the European population, causing an estimated direct death toll of more than 20 million people across Europe, about 1/3 of the total European population at that time. Florence, which was the hardest hit, lost 80% of its population when the epidemic ended (Roos, 2020).

Spanish Flu in 1918. Spanish Flu first appeared in the Finston Barracks in Kansas, USA, in spring 1918. It was only called Spanish Flu because the epidemic in Spain was the most serious at that time. The estimated infected population with this virus was about 500 million people or one-third of the world's population. The estimated death due to this disease was at least 50 million worldwide, with about 675,000 occurring in the United States (CDC, 2018).

Asian Influenza (H2N2 virus) in 1957. A new influenza A (H2N2) virus emerged in East Asia in February 1957, triggering a pandemic—Asian Flu. The first reported case was in Singapore in February 1957, then the virus was found in Hong Kong in April 1957; after that, in summer 1957, it was found in coastal cities in the United States. The estimated deaths were 1.1 million worldwide and 116,000 in the United States (CDC, 2018).

Influenza A (H1N1 virus) in 2009. A novel influenza A (H1N1) virus emerged in the spring of 2009 by being first detected in the United States. It was then quickly spread across the United States and all over the world. On August 10, 2010, the World Health Organization announced that the H1N1 influenza pandemic had ended. The 16-month worldwide H1N1 flu caused approximately 18,500 deaths and reached 214 countries and regions (CDC, 2018).

### **Impact on the Economy**

The Covid-19 pandemic has created simultaneous shocks to supply chains, consumer demand, and the energy sector; it has hit the poor harder, and it has created severe knock-on effects. Overall, the necessary protection measures are also impacting economic activities. Table 1 explains the negative supply shocks and demand shocks from the containment measures (Sonora, 2020).

Table 1: *Negative Supply Shocks and Demand Shocks from the Containment Measure (Sonora, 2020)*

Containment measures	Negative Supply Shocks	Negative Demand Shocks
Quarantines	Factory closures	Consumer/Firm confidence
Travel restrictions	Reduction in services	Travel plans
Close public space/meetings	Supply chain	Education and entertainment

The IMF predicted in January this year that the global economic growth rate was 3.3% for the whole year. However, in April, the global economy is projected to drop by 3% in 2020 as a result of the pandemic. It is much worse than during the financial crisis from 2008 to 2009. If it is assumed that Covid-19 pandemic fades in the second half of 2020 and containment efforts can be gradually unwound—the global economy is forecasted to grow by 5.8% in 2021 as economic activity normalizes, helped by the support of government policies (World Economic, 2020).

### Unemployment in the USA

On a domestic scale, more than 40.8 million Americans filed for unemployment insurance over the ten weeks from mid-March to late May 2020. As below Table 2, on May 8, 2020, the Bureau of Labor Statistics reported that, in April 2020, 20 million Americans lost their jobs, the national unemployment rate has been updated to 13.0% (Division of Labor, 2020).

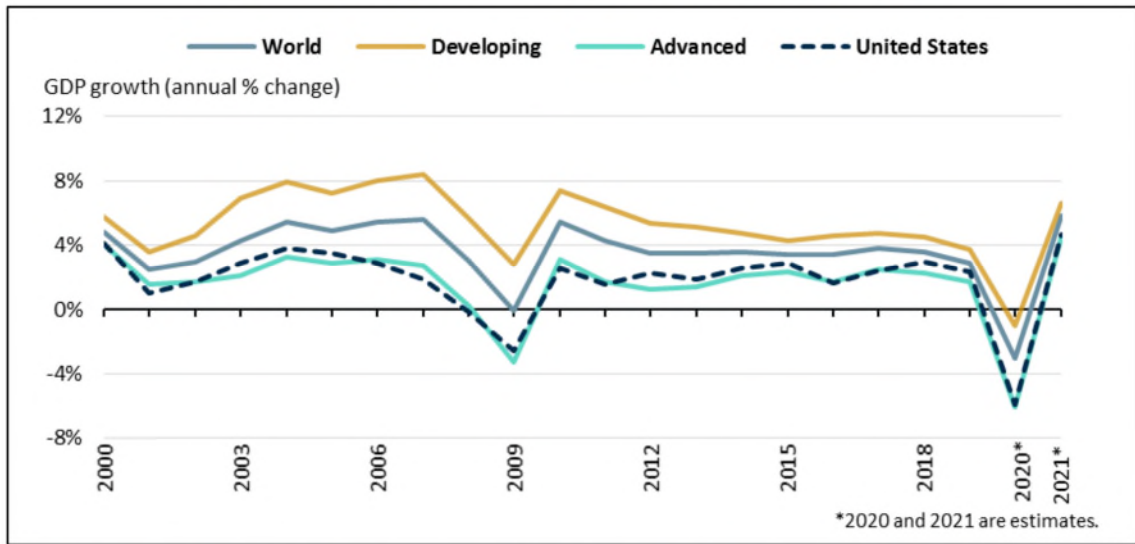
Table 2: *Unemployed Data May 2020 vs May 2019 (Division of Labor, 2020)*

Industry and class of worker	May 2019	May 2020	nt rates					
			Total		Men		Women	
			May 2019	May 2020	May 2019	May 2020	May 2019	May 2020
Total, 16 years and over <sup>(1)</sup>	5,503	20,514	3.4	13.0	3.4	11.9	3.3	14.3

### GDP of the USA

On top of unemployment, Figure 2 shows that the USA GDP fell by 5.0% in the first quarter of 2020. It is the most significant quarterly decline in GDP since the fourth quarter of 2008 during the global financial crisis (Congressional Research Service, 2020).

**Figure 2. Gross Domestic Product, Percentage Change**

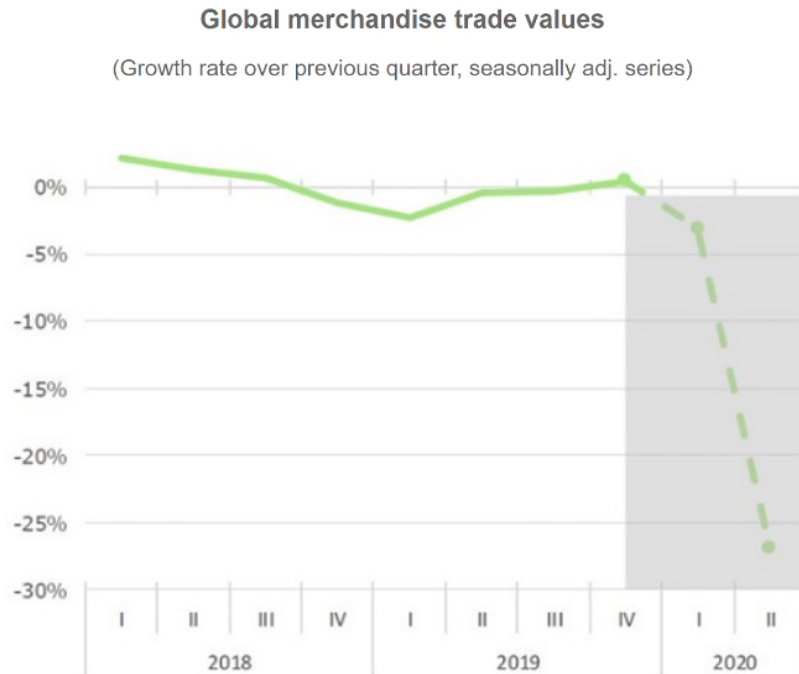


Source: World Economic Outlook, International Monetary Fund, April 14, 2020. Created by CRS.

### Global Trade

On a global scale, based on data from WTO, the trade values in the first quarter of 2020 have fallen 3% (see below Figure 3). The estimated decline for quarter-on-quarter is expected to be 27% in the second quarter. At the same time, commodity prices fell by a record 20% in March, driven by steep drops in oil prices World merchandise trade is set to drop by between 13% to 32% in 2020 due to the Covid-19 pandemic. A trade recovery in 2021 is expected, but it depends on the duration of the outbreak and the effectiveness of response policies. Global regions will suffer double-digit declines in trade volumes in 2020, with exports from North America and Asia hit hardest. Sectors with complex value chains, such as electronics and automotive products, will face sharper trade fall. Also, through transport and travel restrictions, the services trade may be most directly affected by Covid-19 (WTO, 2020).





*Figure 3: Global Merchandise Trade Values (WTO, 2020)*

### Impact on Supply Chain

Over the past 30 years, global technology, trade, and investment have developed rapidly, pushing various links of production to multiple countries. The research and development of a product can be completed in the United States, the industrial design is in Germany, the production of various parts is carried out in East Asian countries, and the assembly is completed in Vietnam. The final product distribution depends on the channel of the country where the consumer is located. This transnational distribution of production links forms a chain and network of production activities. From the perspective of the country and industry, this is a global value chain that creates value-added. From the perspective of the enterprise, this constitutes a supply chain connecting upstream and downstream.

With the deepening of opening to the outside world, China's participation in global value chains is also a relatively high level among major open economies. China, the United States, and Germany are tied for the three cores of the value chain in terms of scale and are the center of the world's manufacturing industry. At the same time, China continues to strive to improve the upstream level in the value chain through industrial upgrading, improve the quality of participating in the global value chain, and consolidate China's comparative advantage in the international division of labor. As of today, about 20 percent of global trade in manufacturing intermediate products originates in China (up from 4 percent in 2002; UNCTAD, 2020).

## Immediate Impact

In any discussion of global supply chains, China is a vital part because it is the "factory of the world." It produces most vehicles, industrial parts, mobile phones, and active pharmaceutical ingredients in the world. Currently, the impact of Covid-19 on global supply chain processes is pronounced; due to insufficient labor, insufficient raw materials or components, and declining logistics capabilities, China's production and export capabilities have been destroyed. Due to the unexpected Covid-19 outbreak not only in China but also in many other countries, the destruction of supply and demand relations from China is repeating itself globally. In return, it leads to huge uncertainties between the supply chains of industries that are primarily global. Industries that rely on commodities and parts from China (and other disaster-affected countries) face the most significant risks from below:

- **Shut Down of Operations:** Most businesses were shut down in China due to the beginning outbreak of Covid-19.
- **Risk of Insolvency:** Many suppliers are demanding earlier payment, and customers are delaying payment due to the spread of Covid-19.
- **Supply Disruption:** Businesses outside of China had delayed direct impact from Covid-19, but fulfillment lead-times started to become doubled or infinitely extended.

Based on the same trade data collected by UNCTAD, this epidemic will inevitably affect global value chains and supply chains. As the world's largest exporter and part of the global production network, China has become an essential supplier of raw materials and spare parts for many products (such as automobiles, mobile phones, medical equipment, and other products), as well as an essential supplier of intermediate products. About 20% of global manufacturing intermediate trade comes from China. In February, due to the spread of new coronaviruses, China's manufacturing PMI fell sharply to the lowest level since 2004. Shipping indicators also showed that China's exports fell in February. The number of container ships departing from Shanghai decreased in the first half of February. The data shows that China's 2% economic contraction rate has had a ripple effect on the global economy. "Made in China" is essential to many global value chains, especially in precision instruments, machinery, automobiles, and communication equipment. Chinese suppliers dominate many companies worldwide, which means that any production disruption in China will also affect the fact that

many companies around the world are worried about this. Measures taken to prevent new coronavirus outbreaks, such as restricting economic activity and the movement of people, may hinder the supply of critical raw materials for Chinese producers and thus affect their production (UNCTAD, 2020).

By taking another in-depth look at the data from UNCTAD, a reduction in the supply of intermediate inputs in China will affect production capacity while slimness will affect exports from any country. This is the degree of dependence of the country's industry on Chinese suppliers. For example, some European automakers may face the problem of reduced vital components. Overall, the most affected economies will be the European Union (machinery, automobiles, and chemicals), the United States (machinery, automobiles, and precision instruments), Japan (machinery and automobiles) and South Korea (machinery and communications equipment), Taiwan (communications Equipment and office machines) and Vietnam (communication equipment). The report pointed out that although the impact of the new coronavirus epidemic on China's production capacity is still uncertain, the latest statistics indicate that China's production capacity will change. In the future, the overall impact of epidemics on global value chains will become more and more apparent. The assessment of the global impact of the epidemic may change, which will inevitably change the virus prevention system and supply source (UNCTAD, 2020).

### **Long-term Change**

This crisis shows that the dominant form of global integration by countries, industries, companies, and individuals creates a high degree of vulnerability and risk of failure. It also shows the risks of complex global supply chains and their impact on critical health-related sectors (Karabag, 2020). It has been determined that wherever the epidemic spreads, it will inevitably lead to the interruption of local and cross-border logistics, business flow and human flow, and the interruption of local and cross-border consumption, investment, imports, and services. The interruption of the global industrial chain, supply chain, and value chain has a massive impact on the local economic, social, and cultural life.

The globalization of the supply chain has always relied on a specific mentality: the idea of ubiquitous choice, consumers can have all choices in real-time on-demand. Friction-free trade and travel have meant abundant hi-tech, low-cost imports from China, and a beach holiday in Cancun, Mexico, rather than Manchester, U.K. Covid-19 means that the age of ultra mobility is over. Just as the 9.11 terror attacks fundamentally changed our thinking about

security, coronavirus will reinforce the innovations with the global supply chain once again. Companies will not abandon global supply chains, but the age of “cheapest is best” is over (Barber, 2020).

During this pandemic, the global economy has undergone a sharp and deep recession, which has severely damaged the confidence of producers and consumers. Isolationism, unilateralism, and trade protectionism are very popular. International economic and trade conflicts may escalate again, thereby accelerating the regression and contraction of globalization, and even accelerated reverse the process of globalization. After the pandemic, countries around the world will make adjustments to the global layout of the supply chain with long-term, strategic, and global impact.

First, the pandemic changes the way of interpersonal communication, the frequency of people gathering, and the density of service space. It promotes the development of new formats such as online conferences, online canton fairs, and online shopping, and promote the deep integration of traditional manufacturing with digital technology, productive service industries, and urban agglomerations. Digitalized working, shopping, and learning platforms will become the new norm to expedite the formation of a new supply chain network that is more decentralized, fragmented, and personalized. Among them, the rapid development of customized supply chains to meet individual needs, the cross-border e-commerce supply chains to meet diverse needs, and the virtual supply chains to satisfy personal and experiential consumption have fully met the pain points of consumer demand and enhanced the level of global economic welfare.

Second, after the pandemic, more and more countries will implement the strategy of ensuring the national safety of the supply chain as a significant systemic risk response. The impact of the pandemic has a characteristic: the more profound the participation in the global process division system, the higher the technical and industrial complexity, the longer the supply chain, and the higher the dependence on the global integrated logistics network, the higher the impact. Therefore, after the pandemic, it is expected that the strategic industry supply chain will return to the homeland, and the safety considerations of the supply chain layout of some industries will be higher than the efficiency considerations. Emphasis on the self-sufficiency of key core links will become a new trend, and relevant laws and regulations will be formulated to implement and guarantee the system. Furthermore, to reduce the potential damage in a future crisis like this, companies should also look into automating their warehouses and distribution centers, which have particularly high population densities and would result in a significant disruption if one was to be temporarily shut down (Greenstein, 2020).

Third, with the above being said, the trend of reversing globalization and shortening the supply chain will accelerate, and the decentralization of the supply chain will become the mainstream trend. The interaction of the pandemic, de-globalization, and the revolution of the new technology industry has accelerated the trend towards shorter, more localized, and more decentralized global supply chains. Multinational corporations will further shrink the global layout of multinational operations to avoid the risks of broken chains, broken supply, and broken links caused by excessively long supply chains, excessive globalization of value chains, and excessive diversity of industrial chains (Rice Jr., James B., 2020).

### **Conclusion**

After the pandemic, the world will face slow global growth. It gives a timing for the entire supply chain to re-think about the supply chain structure. Giving the damages from this pandemic, it reminds business of the volatility of the market, leading to more risk management consideration. Localization the manufacturing to homeland and shorten the supply chain to reduce risks will be the new trend. More warehousing capacity will also be in demand instead of chasing just-in-time philosophy as the toilet paper shortage during pandemic has revealed the limits of lean supply-chain management (Wieczner, 2020). More and more digitalized working, shopping, and learning life will also accelerate the technology innovations of the entire supply chain.

## References

- Barber, L. (2020, April 4). World of difference: What will post-coronavirus economies and societies look like? *Spectator*, 342(9997), 18.
- CDC. (2018, August 10). *Past Pandemics*. Retrieved May 22, 2020, <https://www.cdc.gov/flu/pandemic-resources/basics/past-pandemics.html>
- Congressional Research Service (2020, June 4) *Global Economic Effects of Covid-19* retrieved from <https://fas.org/sgp/crs/row/R46270.pdf>
- Division of Labor Force Statistics. (2020, June 5). *Labor Force Statistics from the Current Population Survey*. Retrieved from Us Bureau of Labor Statistics: <https://www.bls.gov/web/empstat/cpseea31.htm>
- Doherty, P. C. (2013). *Pandemics: What Everyone Needs to Know*®. Oxford University Press.
- Greenstein, T. (2020). Coronavirus: Impacts to the Supply Chain, Crucial Contingency Plans. *WWD: Women's Wear Daily*, 12.
- Karabag, S. F. (2020). An Unprecedented Global Crisis! The Global, Regional, National, Political, Economic and Commercial Impact of the Coronavirus Pandemic. *Journal of Applied Economics & Business Research*, 10(1), 1–6.
- Kretchmer, H. (2020, April 24). *Key Milestones In The Spread Of The Coronavirus Pandemic* Retrieved from World Economic Forum <https://www.weforum.org/agenda/2020/04/coronavirus-spread-covid19-pandemic-timeline-milestones/>
- Milstein, R. L. . P. D. (2020). Coronaviruses. *Magill's Medical Guide (Online Edition)*.
- Rice Jr., James B. Prepare Your Supply Chain for Coronavirus. *Harvard Business Review Digital Articles*, February 27, 2020, 1. <https://search-ebshost->

[com.xxproxy.smumn.edu/login.aspx?direct=true&db=edb&AN=142018386&site=eds-live](http://com.xxproxy.smumn.edu/login.aspx?direct=true&db=edb&AN=142018386&site=eds-live).

Roos, J. (2020). How plagues change the world. *New Statesman*, 149(5520), 24.

Sonora, R. (2020). The Economic Impact of a Global Pandemic: Can We Expect a Recession? *Montana Business Quarterly*, 58(1), 12.

UNCTAD. (2020, March 4). *Global Trade Impact Of The Coronavirus (Covid-19) Epidemic*.

Retrieved June 5, 2020, from <https://unctad.org/en/PublicationsLibrary/ditcinf2020d1.pdf>

Wieczner, J. (2020). The case of the missing toilet paper: How the Coronavirus exposed U.S. supply chain flaws. *Fortune.Com*, N.PAG.

WORLD ECONOMIC OUTLOOK REPORTS. (2020, April). Retrieved from International Monetary Fund: <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/World-Economic-Outlook-April-2020-The-Great-Lockdown-49306>

WTO. (2020, April 8). *Trade Set to Plunge as Covid-19 Pandemic Upends Global Economy*.

Retrieved June 5, 2020, from [https://www.wto.org/english/news\\_e/pr855\\_e.htm](https://www.wto.org/english/news_e/pr855_e.htm)

**Fulfillment Impacts in Supply Chain:  
A COVID-19 Research Paper on Consumer Choice**

[The author is a lead supply chain team manager for a retail company]



## INTRODUCTION

The primary goal for most companies is figuring out how to get consumers to buy their products or to use their services. What a pandemic does, however, is showcase which products and services are truly necessary: what people need and what services/utilities are required. For those necessary goods and services also comes a new way of fulfilling those goods and services. This puts a constraint on these companies' supply chains and how they source their materials, labor, manufacturing, transportation, and how consumers receive their goods.

Austrian economist Joseph Schumpeter in the 1940's proposed the idea of "creative destruction" to describe the collapse of an established order and the innovation and entrepreneurship that replaced it with something new. The idea is fitting given the current way e-commerce, and companies such as Amazon, have changed retail. Under a wave of bankruptcies and store closures, the old world of retail is crumbling, supplanted by one that's increasingly digital as well as physical. The consequences are more significant than just which company's quarterly sales are up or who has a hot stock. How we shop is changing, and that's affecting how supply chains operate.

Specifically, due to COVID-19, the new laws, rules, and regulations on social distancing forced humanity to reconsider commerce; COVID-19 affected consumers across the globe which altered shopping behaviors. From a supply chain perspective, a disruption the size of a pandemic causes tidal waves of impacts- from the material sourced, how it's transported, how it's manufactured, sold, fulfilled, and lastly, consumed. Historically, major world events have caused similar disruptions. Not just with pandemics or epidemics like smallpox, 1918 & 2009 H1N1, polio, measles, or even HIV, but also World Wars and terrorist attacks have caused major disruptions for how the world interacts.

This paper is intended to research what changes COVID-19 has caused in consumer behavior thus far, the options that consumers have (and expect) to receive their products, the services and companies that have answered this need, and what fulfillment capabilities and supply chain advancements we may see as a result of its impact. I will present analysis and research on how the world has reacted in the past, how present-day consumers shop and what services are at their disposal, and lastly, what fulfillment alternatives the world may expect post-COVID-19.

## CONSUMER BEHAVIOR & TRENDS

With an estimated one-third of the global population under lockdown, services that deliver groceries, medicines, prepared food, and other essentials have never been in higher demand. Amazon, a logistics juggernaut, is even struggling to cope with the onslaught of orders. On-demand delivery companies have long said their technologies allow them to scale as they grow in popularity. Now, the coronavirus is giving them a chance to prove it. In the first half of 2020, these companies have transformed from a “luxury of the rich” to the connective tissue holding much of the economy together. Whether they can deliver in a time of global need may also determine if they find their businesses permanently altered, with millions more customers comfortable ordering food and other essentials online. An early sign of the new pandemic world order arrived in March, when Amazon halted “non-essential” shipments from third-party merchants to free up space in its warehouses for “essential” categories (baby products, health and household, beauty and personal care, groceries, industrial and scientific items, and pet supplies).

The shift in supply chains and consumer behavior is more pronounced in some countries than others so far, but it’s happening all over. Brick-and-mortar retailers have registered the effects in very different ways. In the US, for instance, some types of stores are thriving, such as cosmetic and beauty supply chains that have benefited from shoppers seeing trends online but wanting to try products in stores.

Retail has historically been an important source of US employment. At its high point in 1987, the industry employed 12.2% of the US population, according to US Bureau of Labor Statistics. Now just 10.4% of the population works in retail. For decades the number of total jobs it offered was still increasing overall as the US population grew, but more recently it has slumped. From 2016 to 2019, the number of people working in retail fell by about 150,000 people slightly less than 15.8 million. The trend looks set to continue.

The weakness in retail stands out given the current strength of the job market overall and how an industry such as health care has grown. It’s worth noting, though, the tally of retail jobs doesn’t include employment in the warehouses and fulfillment centers Amazon and other online retailers have built. Michael Mandel, Chief Economic Strategist at the Progressive Policy Institute in Washington D.C., has argued e-commerce is a net job creator in the US when you take into account those additional jobs. A separate analysis by Morgan Stanley focused specifically on Amazon arrived at a similar conclusion, finding US cities with Amazon fulfillment centers saw job growth above the national average. One counterargument, however, contends

jobs in fulfillment centers are more vulnerable for being automated, meaning the gains could be temporary. And there have been numerous allegations of labor abuses in Amazon's warehouses.

Within retail, not all jobs have suffered. The number of employees in food and beverage, to take one example, is still rising. But the gains in some areas are offset by declines in others, such as clothing stores. These trends aren't limited to the US. Most countries providing data to the Organization for Economic Co-operation and Development have recorded drops in their share of the labor force working in wholesale or retail. Schumpeter's theory, destruction clears room for new creation. While e-commerce may create more jobs around retail, one recent analysis by Euler Hermes, a credit insurance and risk analysis firm, compared the jobs created in e-commerce specifically against those lost in retail. It argued creation in the former isn't keeping up with destruction in the latter. Among the reasons were that e-commerce requires fewer employees, it has eroded retail's profitability, putting a crunch on stores whose productivity was already down as more shoppers bought online, and it tends to be a "winner-take-most" business dominated by a small number of companies.

E-commerce isn't the sole reason for retail's problems, the firm acknowledged. Changes in consumer behavior, such as declining readership of books and shoppers opting for digital copies over physical ones, have played their part too. Still, e-commerce had an indisputable impact and warned some segments of retail in countries such as Germany, France, and the UK are experiencing similar effects.

## **GLOBAL IMPACT AND ECONOMIC CHANGES**

As the coronavirus pandemic plunged the world toward a likely recession, Nestlé, the Swiss-based food provider, has remained strong. While major companies such as Marriot and Macy's saw layoff-inducing downturns in the first quarter of 2020, Nestlé's sales grew by 4.3%.

It helped, of course, that Nestlé makes a lot of products that were in particularly high demand during global lockdowns, such as coffee, pet food, and shelf-safe prepared foods. But it was also able to get its products to consumers worldwide, thanks to rock-solid supply chains.

"Our supply chain strategy and business continuity plan in place are set to manage disruption," says Vineet Khanna, a senior vice president and global head of supply chain at Nestlé. "We have been able to deliver what consumers needed thanks to the resilience of our supply chain, thanks to the collaboration with our customers, retailers, transporters."

Globalization has made our trade system more fragile and vulnerable to disruption. This is, perhaps, counterintuitive—there are more places to source more products, so you'd think that would give companies more options. Instead, nodes in a supply chain have become more singular and specialized, and the need to transport various components across borders creates potential snags.

The pandemic is forcing the world to confront that fragility in real time. In the past, disruptive events like hurricanes or civil unrest might have been isolated to a specific country or region—if part of a product was made in a factory in Fukushima around the time of its nuclear disaster, for example, a company could simply rely on a factory elsewhere to make it, causing few delays to the creation of finished goods.

The coronavirus outbreak is different. It's shuttering factories almost simultaneously worldwide. "The problem in this scenario is that every part of the world is impacted. There's nowhere to pivot to," says Alexis Bateman, the director of the MIT Sustainable Supply Chains program. "There's never been an event like this. There is no contingency plan."

That's not to say the disruption the pandemic caused was a complete surprise. Indeed, some supply chains have fared better than others. Companies that have responded best have a few things in common in the way they approach their supply chains. For others, this moment offers the opportunity for introspection that just might help them survive the next crisis.

For many people, the process of how goods reach our stores and homes has never been more top-of-mind. Toilet paper, face masks, coffee—the absence of these items on grocery store shelves is part of why the average consumer is more aware of these networks than perhaps ever before. Of these essential categories, grocery has arguably emerged as the most essential. As lockdowns loomed, panicked consumers stripped shelves of their products. Supermarkets had to put buying limits on popular items like hand sanitizer, long-life milk, and toilet paper. Meanwhile, online grocers and stores that offered delivery quickly became so overwhelmed they had to take drastic measures, from implementing a "virtual queue" to get on the site to closing their digital doors to new customers. On a March 19, 2020 call with investors, Duncan Tatton-Brown, the Chief Financial Officer of British online grocer Ocado, likened the surge in traffic the company had seen to its website to a malicious denial-of-service attack. Online grocery has long been the holy grail of delivery. Groceries are the ultimate staple: something every household needs and buys fairly frequently. That makes them a valuable anchor category for online retailers looking to keep customers coming back.

The trouble is, selling groceries online is a lot harder than selling other things. Fresh food needs to be stored and transported at specific temperatures and delivered before it goes

bad. That either requires sophisticated warehouses and inventory management or traditional grocery stores with extra staff dedicated to picking and packing online orders. Then, the delivery network needs to dispatch orders to customer homes. None of this is cheap, and the net profit margins of most supermarkets already barely exceed 1%.

On top of these logistical challenges is the simple fact that most shoppers like, or at least are accustomed to, going to the grocery, and consumer habits are hard to change. They like to pick out their own tomatoes and compare deals in the cheese section. They have little tolerance for online grocers that ship orders with missing items, substitutions, and spotty produce. Traditional grocery stores have also spent decades perfecting shelving and aisle layouts, creating a universal grocery language. Shoppers know stores tend to offer their own private label items next to name brands, and to look for deals flagged with brightly colored price tags. Similar cues are difficult to replicate on store websites.

All of this might explain why consulting firm Bain found “a humble 3%” of US grocery spending occurred online in early 2019. Even in more mature markets like the UK and South Korea, it topped out at around 10% to 15%. Analysts have predicted global online grocery sales will grow at around 15% to 20% a year, for a total market opportunity of around \$375 billion in major markets by 2023, still a small fraction of the roughly \$8.3 trillion in global grocery sales expected at that time. No one expected a pandemic to bring a big chunk of that trillion-dollar industry online overnight.

The past decade brought a boom in the global market for delivery, and food delivery in particular. Grubhub, the US incumbent, expanded its turf while new entrants grappled for footholds around the world: Uber Eats, Postmates, Shipt, and DoorDash in the US; Delivery Hero and Deliveroo in Europe; GrabFood in Southeast Asia. On-demand delivery held the most promise in urban areas packed with young, wealthy, tech-savvy customers who had learned from services like Uber to expect instant service at the touch of a smartphone button. In its 2019 filing for an initial public offering, Uber optimistically estimated the market for food delivery to be the entire \$2.8 trillion consumer food services business.

Until a few months ago, the first challenge for any on-demand service was getting customers through the virtual door. Startups tended to tackle this with referral promotions (the “refer a friend to get money off your next order” strategy) and steep discounts for new users—subsidies made possible by generous backing from venture capitalists. The nonstop promotions made on-demand companies popular but also concealed the true cost of delivery from customers who were rarely, if ever, asked to pay it.

While one discount might help a company by getting a customer to try their service, systematic discounts hurt the industry by acclimating customers to artificially low prices. Aggressive discounting has also led to some companies losing money on every order, what's known in industry parlance as "negative unit economics." Last summer, a report from analysts at investment firm Cowen estimated Uber Eats lost \$3.36 on every order and would continue to lose money on each order until at least 2024.

Most unit economics boil down to a simple calculus: the revenue the company generates per delivery should exceed the costs of completing that task (wages paid to a delivery person). Companies can pull a few levers to change the equation in their favor. They can charge higher prices to customers, they can take a bigger cut of sales from the store or restaurant, they can pay workers less, or they can increase efficiency so that they complete more deliveries, bringing in more revenue for each fixed unit of expense (hourly wage).

Delivery companies have typically preferred the latter strategies of cutting worker pay or focusing on efficiency gains. Restaurants have little financial wiggle room, and consumers are highly price sensitive. In June 2016, a research report from Morgan Stanley on US online food delivery found that 71% of adults surveyed said they would spend no more than \$5, excluding tip, for a \$30 order of restaurant food that was "guaranteed to be delivered fast." An updated report by Morgan Stanley this past November found that nearly 60% of consumers said promotions influenced or determined whether they ordered food delivery. Among Americans ages 18-34, price was the most important factor in deciding where to order from, beating out food quality and delivery time.

It wasn't clear how companies planned to wean their customers from discounts, and many never did. Instead, they cut other perks, or pursued veiled price increases by stuffing transactions with new and ever-changing fees. But thanks to the coronavirus, delivery companies for the first time may be able to justify their price premium. The unprecedented surge in demand for delivery means that some, and probably many, customers will be willing to pay the real prices these companies must charge to make their unit economics viable.

Amazon, for instance, used to charge Amazon Prime members an additional \$14.99 a month to access its Amazon Fresh grocery delivery service. It dropped that Fresh fee in October 2019, contributing to a spike in shipping costs, as online grocery competition intensified in the US. Demand for grocery is now so high that Amazon is signing up new customers for Fresh service by invitation only and making existing one's queue for slots. Fresh sales were up an estimated 323% year over year in March. It seems likely that if Amazon were to reintroduce that \$14.99-a-month fee, a lot of people would agree to pay it, at least while the pandemic

rages. Whether these companies choose to charge more for their service is another matter. Raising prices in a crisis risks looking like profiteering, even if the increases are designed to make the business financially sustainable. Higher prices would also hurt poorer and more vulnerable consumers, who are already disproportionately affected by the coronavirus.

In the US, food delivery is most prevalent among young, urban men, and higher income households, according to Morgan Stanley. Of people who said they didn't order food delivery, nearly 40% blamed it on the cost. In the early days of the pandemic, some food delivery companies actually swung the other way and dropped or reduced their fees to encourage customers to keep ordering from restaurants.

Consumers aren't the only ones clamoring for delivery services right now. Businesses small and large are looking at delivery as a way of staying afloat. Nicholas Potts is founder and chief executive of ScriptDrop, a healthcare tech company based in Columbus, Ohio, that partners with pharmacies to deliver prescriptions in the US. Potts told Quartz in early April that deliveries spiked 500% in the second half of March, to a rate of around 1 million a month. He estimated that within two months, ScriptDrop would be handling between 5 million and 6 million deliveries per month. "We're absolutely fortunate to have the opportunity to help so many people," he said.

ScriptDrop's customers are pharmacies. It works with around 20,000 of them, or close to a third of US pharmacies, so that pharmacists can offer their customers a same-day delivery option for prescriptions. ScriptDrop charges \$8 for a delivery, a cost the pharmacy can choose to pass onto customers. Since the coronavirus arrived, Potts said ScriptDrop has launched service for "two large pharmacy chains" (the details aren't public yet) and a pharmacy group based in Ohio.

Giant Eagle, a US supermarket chain based in Pittsburgh, Pennsylvania, recently increased its pharmacy delivery capacity from 30 to 170 stores after expediting a deal with ScriptDrop. Demand for pharmacy delivery at the 30 locations that already had it "doubled overnight" once the severity of the coronavirus crisis became clear, said Michael Chappell, Giant Eagle's VP of pharmacy operations. Giant Eagle is currently offering pharmacy delivery through ScriptDrop to customers free of charge.

As the virus spread, Potts said pharmacies and some state officials also approached him about developing a patient-facing service. ScriptDrop had already been working on something similar for several months, so it accelerated those efforts and recently launched a texting-based service for patients to arrange a delivery from their local pharmacy. The company designed the

customer service to be as simple as possible since many pharmacy patients are elderly and might struggle with steps like downloading an app and creating an account.

Another company seeing a surge in business interest is Uber. The ride-hail company's Eats restaurant delivery service positions it well for a broader push into delivery. Uber recently struck a deal to deliver from French supermarket Carrefour in Paris, e-tailers Flipkart and BigBasket in India, and Galp, a convenience store chain in Spain.

Uber's Eats restaurant delivery service positions it well for a broader push into delivery. Uber has also launched a delivery-only grocery service in Naples, delivery of essential items from supermarkets and convenience stores in South Africa, and a government partnership to deliver household staples in Sri Lanka. Uber said sales from groceries and convenience stores have more than doubled in some cities since the pandemic began. Restaurants have found themselves in a particularly tricky position. Like grocery stores, they have notoriously thin margins. Many have contentious relationships with delivery platforms like Uber Eats, Postmates, Grubhub, DoorDash, and Deliveroo, which can charge between 15% and 30% of sales for a delivery. Restaurant owners have caught delivery apps adding them to their platforms without permission, artificially inflating menu prices, and even creating fake websites and phone numbers for their businesses to charge extra commissions.

But delivery and takeaway are also the only real business option most restaurants have at the moment. That means many are dependent on the same delivery apps they fear could squeeze them out of business, and whose hygiene and safety standards they can't control. San Francisco's mayor recently announced a temporary cap of 15% on the commission delivery companies can charge to restaurants for the duration of the state of emergency, or until restaurants are able to re-open their dining rooms. In New York, three consumers recently sued Grubhub, DoorDash, Postmates, and Uber Eats, alleging they are taking advantage of restaurants during the pandemic to impose high fees that lead to increased menu prices.

It's also important to keep in mind that the dependency cuts both ways: without restaurants, food delivery companies have no business. The reality is that delivery alone is unlikely to sustain many independent businesses through the coming months, as food delivery apps know all too well. "The industry isn't large enough for all restaurants to survive just on delivery, but they can survive for a matter of weeks potentially," Grubhub CEO Matt Maloney said in an interview in late March. "It's definitely not a long-term solution to bridge across restaurants."

It can be hard to remember that, about a month ago, a third of the globe was not in some sort of government-mandated lockdown. Already, the nascent consensus is that life is not going



back to normal, certainly not any time soon, maybe not ever. Where does this leave delivery? In the short term, it's here to stay. So long as society remains under lockdown, or in a cycle of relaxing-and-then-tightening measures to keep the virus under control, delivery services will be an essential piece of our infrastructure. Even as restrictions loosen, customers may remain wary of going to shops, and prefer to make purchases online. Even as restaurants and storefronts slowly reopen, they will have a difficult time returning to full capacity while some level of social distancing remains in effect.

Tougher to say is whether the delivery boom will last beyond the pandemic. After months of quarantine, people may jump at the chance to eat in a restaurant again or browse the shelves of their favorite bookshop. They may miss scouring grocery aisles for the ripest tomatoes and a loaf of freshly baked bread. The technology for a shut-in lifestyle has existed for some years now, but it's not one most of us have chosen.

One reason analysts believe online grocery has struggled to catch on is that most of the services are not very good. The typical supermarket carries more than 33,000 items. The typical online grocer offers about 20,000, a report from Bernstein analysts found, a level at which choices start to feel "limited" to consumers. Most online grocers also only manage between 90% and 95% product availability at any given time, a number that may sound high, but Bernstein reports is too low to satisfy customers. The UK's Ocado, a rare online grocery success story, achieves 99.5% product availability.

The pandemic has brought online grocers not just increased demand, but relief from some of these consumer grievances. Right now, any grocery delivery is a good delivery. Issues that might normally drive away customers—out-of-stock products, orders with lots of substitutions or missing items, late deliveries—are far less likely to alienate consumers who fear going to a physical store. Many customers also understand that grocers are coping with unprecedented demand, supply chains are strained, and, for the most part, everyone is doing their best in a difficult situation.

The opportunity to build habits over many months also can't be discounted. Consulting firm Bain, for instance, found that less than half of first-time online grocery shoppers said it saved them time, but that by the third order that figure had jumped to 63%. Bain also found that customers overwhelmingly tend to stick with the first online grocery service they try. "Our judgement is that you're definitely going to have a retention of more delivery and curbside convenience moving forward," Michael Chappell, Giant Eagle's VP of pharmacy operations, said. "I don't think it's going to be 100% retention because a lot of folks today are doing it out of fear, and they would rather go into the store to shop. But I do think there's going to be another

part of the population out there that's going to say, wow, we made it easy with curbside, we made it easy with delivery.”

## **SUPPLY CHAIN GROWTH**

Supply Chain refers to the series of suppliers and manufacturers through which a product flows before it reaches a consumer. “A simplistic way of looking at what supply chain entails is that it's everything up and down a stream of supply, from the customer up through distribution, manufacturing, production, raw materials, and whatever else,” says John McKeller, the former director of the supply chain programs at the Wisconsin School of Business. What's flowing are goods and money.

Supply chains have become increasingly more advanced as the economy has become more globalized. Now, more than two thirds of the world's goods cross at least one border during production. Though the term supply chain brings to mind an orderly diagram of goods that move from supplier to manufacturer, the reality is more like a complex, linked network, McKeller explains. “You look at the number of suppliers that Volkswagen has for example, extrapolate that out to second- and third-tier suppliers, and you're talking about thousands and thousands of suppliers.”

That can make it hard for some companies to truly know the ins and outs of the process that goes into assembling each of their products. To develop a new supply chain, managers consider a number of different factors, including where their customers are located and how the products will reach them; where the source materials will come from; and how much inventory (and what kind) to keep on hand.

You may not be aware of every step in the supply chains of most of the goods you buy or consume. That's not an accident. Specifics are often kept secret and are considered proprietary. Supply chain transparency, however, has come under renewed focus as consumers of goods like food and clothing want to be sure the items are produced ethically and sustainably.

The ideal supply chain is resilient—it can continue to meet consumer demand even when it is disrupted by things like natural disasters or geopolitical spats.

The ideal supply chain is resilient—it can continue to meet consumer demand even when it is disrupted by things like natural disasters or geopolitical spats. Supply chain managers spend a lot of time thinking about how to reduce the likelihood that some single event or factor will throw a wrench in the flow of goods, which could imperil the company's business.

“The nature of this problem is not forecasting, but anticipating,” says Morris Cohen, a professor of manufacturing and logistics at the University of Pennsylvania. “Can we anticipate risk—worst-case scenario, best-case scenario? We don’t know which will happen, but we can examine what will be most likely and be prepared for different scenarios.”

And yet, most managers don’t know how risky their supply chains are, in part due to their inherent complexity. “Most companies don’t know what’s happening in the supply chain beyond their direct supplier,” Bateman says. “They know them potentially well, but they don’t know where the raw materials come from, and they can’t trace them back to their source. That opacity has created a lot of disruption.” Managers with resilient and flexible supply chains intimately understand every node in the complex process to create a good and have systems to track them.

That’s part of what has helped Nestlé continue to deliver its products and “weather the crisis,” Khanna believes. “Internal supply chain transparency played a key role,” he says. “Knowing which ingredient comes from where, in the end-to-end Supply Chain (Tier 1, Tier 2 or Tier-3 supplier) and having a clear visibility on the real-time demands and needs of consumers in any market help line up supply alternatives and anticipate risk and disruptions.”

An inventory of goods or key components can also act as an important stopgap against supply chain failures, and businesses constantly evaluate how much they should keep on hand. During times when demand outstrips supply, inventory can stop interruptions in the output of goods. Some companies, such as Toyota, eschew a big inventory since it takes longer to recoup their production expenses. But small inventories can also make supply chains more fragile.

To find potential weaknesses in the supply chain, companies undergo a process called scenario planning. Once a year or so, they will come up with different hypothetical scenarios that could potentially disrupt their supply chains (“I’m not sure any supply chain fully planned ever for a global pandemic, but there may have been scenarios where they had imagined where global borders were being shut,” Bateman says). They consider where their suppliers are and the effect if access to those suppliers was restricted for some reason.

Knowing where the production process could fail allows managers to make changes that could increase its resilience. They could seek new suppliers in new locales or change the amount of inventory they have on hand. They could change the design of their products to use more standardized components, as Boeing when designing its 787. They could find new ways to use data to anticipate future weaknesses or respond to disruptions. Some may jump headlong into automating factories.

The coronavirus pandemic may provide some companies just the opportunity they needed to act on all this advice. They could map every nook and cranny of their supply chain, provide failsafe to any gaps the pandemic may have revealed, and give consumers the transparency they crave. Of course, the coronavirus pandemic was the most immediate disruption, but that caused Post-Secondary disruptions, such as plants empty of laborers (meat) and fewer commercial flights that limited the import of key components (hand sanitizer). The resulting picture is of a global supply chain that's a little less mysterious, but still complex and primed for further disruption.

## **CONCLUSION**

Companies that survive the crisis may use the opportunity to fully map their supply chains, to realistically consider their risk at every stage, to rethink the parts that are most likely to break down in the future. For observers, too, the ways supply chains have broken down give us a sense of the kind of world we can expect once the pandemic has ended. It's unlikely that we'll see an end to globalization, as some have predicted. But some companies may move manufacturing facilities outside of China or closer to home in order to avoid potential future hurdles in getting goods to their final destinations. Consumers may also have different expectations for supply chains in the future—they will expect them to continue to function even in the face of disruption, and to understand them better. “[Supply chains] used to be under the radar in terms of their role and function. That will never be true again,” Bateman says. “For a lay consumer, that knowledge that your product has been moved and produced and had all these actors involved [means] they're going to be asking for more transparency.

It's hard to anticipate exactly how that transparency will change industries in the long term but reassessing the supply chain networks opens up new opportunities for companies to meet shifting corporate goals, that allow them to take responsibility for the ethical treatment of workers and to the communities they serve. The challenge for all delivery companies is to serve as many customers as well as possible at the current moment, in hopes that some of them will stick around after the pandemic ends. The extreme societal changes demanded by the virus have given these services an unprecedented opportunity. The measure of success will be whether the world's consumers keep coming back when it's a choice, and not simply a necessity.

## BIBLIOGRAPHY

- Azevedo, D. (n.d.). Trade set to plunge as COVID-19 pandemic upends global economy. Retrieved from World Trade Organization: [https://www.wto.org/english/news\\_e/pres20\\_e/pr855\\_e.htm](https://www.wto.org/english/news_e/pres20_e/pr855_e.htm)
- Bariso, J. (n.d.). Amazon Almost Killed Best Buy Then Best Buy Did Something Completely Brilliant. Retrieved from [www.Inc.com](https://www.inc.com/justin-bariso/amazon-almost-killed-best-buy-then-best-buy-did-something-completely-brilliant.html): <https://www.inc.com/justin-bariso/amazon-almost-killed-best-buy-then-best-buy-did-something-completely-brilliant.html>
- Crets, S. (2019, April 16). Best Buy speeds fulfillment and delivery. Retrieved from [www.Digitalcommerce360.com](https://www.digitalcommerce360.com/2019/04/16/best-buy-speeds-fulfillment-and-delivery/): <https://www.digitalcommerce360.com/2019/04/16/best-buy-speeds-fulfillment-and-delivery/>
- Deloitte. (2020). COVID-19: Managing supply chain risk and disruption. Canada.
- e-Commerce Failures & Mistakes: Why do so many shut down? (n.d.). Retrieved from Failory: <https://www.failory.com/blog/ecommerce-failure>
- McKinsey & Co. (2020, May 11). Jump-starting resilient and reimagined operations. p. 13.
- (2020). Reimagining the post- pandemic organization. McKinsey & Co.
- Sengupta, A. (2020, April 14). Impact of COVID-19 On Global Supply Chains and Opportunities In the Post-COVID World. Retrieved from Entrepreneur: <https://www.entrepreneur.com/article/349229>
- Spross, J. (2018, October 22). How Best Buy survived the retail apocalypse. Retrieved from [www.Theweek.com](https://theweek.com/articles/802800/how-best-buy-survived-retail-apocalypse): <https://theweek.com/articles/802800/how-best-buy-survived-retail-apocalypse>
- Top 10 US Companies, Ranked by Retail Ecommerce Sales Share, 2019. (2019, February 12). Retrieved from eMarketer: <https://www.emarketer.com/chart/226336/top-10-us-companies-ranked-by-retail-ecommerce-sales-share-2019-of-total-retail-sales>
- What's In store. (2020). The Economist, 1.
- Agha, M., Agha R., Al-Jabir, A., Alsafi, Z., Iosifidis, C., Kerwan, A., Nicola, M., & Sohrabi, C. (2020, April 15). The Socio-Economic Implications of the Coronavirus Pandemic (COVID-19): A Review. *International Journal of Surgery*, 78, 185-193. DOI: [10.1016/j.ijso.2020.04.018](https://doi.org/10.1016/j.ijso.2020.04.018)
- Andrews, J. (2020, April 23). How Coronavirus is Impacting the Housing Market. Retrieved from <https://www.curbed.com/2020/3/6/21163523/coronavirus-economic-impact-housing-market>

Business continuity in a COVID-19 world. (2020, March 18). Retrieved May 24, 2020, from <https://home.kpmg/xx/en/home/insights/2020/03/business-continuity-in-a-covid-19-world.html>

Geipele, I., & Kauskale, L. (2016). Integrated Approach of Real Estate Market Analysis in Sustainable Development Context for Decision Making. *Procedia Engineering*, 172, 505-512. <https://doi.org/10.1016/j.proeng.2017.02.059>

Kaiser, J. (2020). Disease experts call for nationwide closure of U.S. schools and businesses to slow coronavirus. *Science*. doi: [10.1126/science.abb7544](https://doi.org/10.1126/science.abb7544)

Lewis, H. (2020, May 15). Mortgage Interest Rates Forecast. Retrieved from <https://www.nerdwallet.com/blog/mortgages/mortgage-interest-rates-forecast/>

Lewis, H. (2020, April 29). What Coronavirus Means for Mortgage Rates and Your Home. Retrieved from <https://www.nerdwallet.com/blog/mortgages/what-coronavirus-means-for-your-home-loan-and-mortgage-rates/>

Loizos, C. (2020, April 8). Commercial Real Estate Could Be in Trouble, Even After COVID-19 is Over. Retrieved from <https://techcrunch.com/2020/04/08/commercial-real-estate-could-be-in-big-trouble-even-after-this-is-all-over/>

Long, H. (2020, March 12). Small Business Used to Define America's Economy. The Pandemic Could Change That Forever. Retrieved from <https://www.washingtonpost.com/business/2020/05/12/small-business-used-define-americas-economy-pandemic-could-end-that-forever/>

Ode to the Shopping Mall. (2020, May 09). *The Economist*. Retrieved May 30, 2020, from <https://www.economist.com/united-states/2020/05/07/ode-to-the-shopping-mall>

## **Covid-19 Impact on the M&A Market and How it will Change Moving Forward**

[The author is an accountant for a manufacturing firm]

## **COVID-19 Impact on the M&A Market and How it will Change Moving Forward**

In order for companies to be successful and remain in business, both growth and profitability are essential and required for a company to survive and remain attractive to investors and analysts. Of course, profitability is critical to a company's existence, but growth is crucial to long-term survival (Maverick, 2020). The recent coronavirus pandemic has been a difficult test for companies but has also had some interesting impacts on the merger and acquisition market. Financially stable companies may be searching for possible M&A target businesses in order to promote company growth. On the other hand, businesses that are financially unstable may be more intrigued to take an offer from another company. This has caused a thought-provoking scenario of possible business activity and the ability to study the impact the current pandemic has had on future deals compared to prior transactions. A merger or acquisition transaction is one way for a company to successfully and quickly generate growth and strive for long-term existence. This paper will focus on mergers and acquisitions and how businesses and M&A transactions have changed from before coronavirus (BC) and after coronavirus (AC).

### **Mergers & Acquisitions Overview**

Mergers and acquisitions (M&A) are common terms within the business environment. They are used to represent the consolidation of organizations or assets through varying types of financial transactions such as mergers, acquisitions, tender offers, purchase of assets, consolidations, and management acquisitions (Hayes, 2019). Even though mergers and acquisitions are common terms in the business environment, they are generally misunderstood words as they are often combined into one meaning. However, a merger is more appropriately defined as a combination of organizations whereby at least some of the owners from both organizations become owners of the new combined, joint company. An acquisition refers to the takeover of one entity by another. There are also transactions where only a portion of the owners of the newly acquired company become owners of the new joint company (Sinkin & Putney, 2017). This type of acquisition transaction is known as a hybrid transaction. M&As are a typical way for companies to grow, expand into new markets, build expertise, and provide for succession. There are many factors that go into an M&A. Not all mergers are true



combinations of equals, not all organizations are the right fit for each other, and not all acquisitions are structured the same way (Sinkin & Putney, 2017).

### **Reasons for M&A**

A successful M&A transaction will provide the acquiring company with increased market share, greater core capabilities, and more capital, proficiency, knowledge, and talent at a lower cost. Several factors drive the reasons for businesses to participate in merger and acquisition activities such as the global economy, advanced technology, specific market forces, and government regulations (Kongpichayanond, 2009). The global economy continues to provide challenges each day. An M&A opportunity may give a company the tools necessary to adjust to the fluctuating economy swiftly. Advanced technology assists companies by accessing the right knowledge and skills required to innovate and perform the various tasks required by jobs. That area has become increasingly valuable as technology continues to advance. Combining these shared resources and services will create economies of scale for the company (Kongpichayanond, 2009). Another significant advantage is the potential tax benefits and financial advantage that comes with that. While emphasizing business strategy and financial issues is very important, it is also important to consider human resources and the people that would be acquired in the deal (Kongpichayanond, 2009). Companies are only as good as the people they employ. Whether participating in an M&A transaction as a buyer or seller, all parties have a particular strategy they believe will help themselves in the future.

### **Stages Involved in M&A**

Steps taken throughout the M&A process will help evaluate and execute the transaction. The beginning discussion should take place around the company's strategy regarding growth markets and services. Leadership should study and identify the growth opportunities available in their business and markets currently being served. Extensive data such as demographics (population, age, income, employment/unemployment rates), competitors, employers, employees, demand projections, and consumer preferences are all areas that should be considered ("7 Steps", 2018). The second step of the process requires the proactive identification of potential merger and acquisition targets to meet the strategic growth objectives in identified markets. During this step, it is essential to identify "likely targets" as well as "outside the box" possibilities based on research, experience, consultant opinions, and other various

methods (“7 Steps”, 2018). During the third stage, it is necessary to answer questions to access strategic financial position and fit. These questions will provide answers as to what the anticipated benefits of a deal with the acquisition target are, what are the risks, and how this target compares to other potential opportunities. This evaluation process would include an extensive review of the targeted firm’s financial and credit position and utilization of financial forecasts for revenue, cost, volume, and balance sheet considerations (“7 Steps”, 2018). During the fourth stage of the process, corporate leadership must determine all of the anticipated benefits and drawbacks of the proposed acquisition or merger and make a “go/no-go” decision. Company leaders will identify whether the strategic value-added case for a joint entity is convincing enough to proceed further or not (“7 Steps”, 2018).

The fifth step in the M&A process involves assessing the value of the target and evaluate, develop, and select the structure that would best enable the company to achieve its objectives. Discounted cash flow analysis, comparable transaction analysis, and comparable publicly traded company analysis are the three key valuation methods used. Leadership should select the best method for the company to determine a realistic valuation range (“7 Steps”, 2018). The sixth stage requires the company to perform due diligence, negotiate a definitive agreement with the targeted firm, and execute the M&A transaction. Comprehensive due diligence of the target company is necessary to fully comprehend the issues, opportunities, and risks associated with the transaction. The due diligence would revolve around financial, legal, and operational position to confirm the accuracy of the details (“7 Steps”, 2018). During the final stage, the implementation of the transaction will take place, and the company will need to monitor ongoing performance. Management will be able to determine if operational changes will need to occur, how the company culture has evolved throughout the process if there are any legal and regulatory challenges, and if there are financial, organizational, and community-related risks of failure. A successful M&A will reach the goal of maximizing strategic value while minimizing disruption or distraction to existing operations (“7 Steps”, 2018).

## **Valuation**

As mentioned above in the fifth state of the M&A process, it is critical for a buyer to determine a proper valuation for the target business. There are typically two different methods when determining the valuation of the target firm: the first being the liquidation value. The second is the firm’s value as a going concern, or if it is assumed the business stays in operation for the foreseeable future. The valuation process is more accurate for distressed businesses or

businesses that require restructuring (Kennedy, 2016). It is more challenging to determine an accurate valuation if the company is an ongoing concern because it is assumed that the company will continue to operate in the future. When determining the value of a company, buyers will look at the earning power of the selling business, and the cash generation ability of the company's assets that make up the operations (Kennedy, 2016).

There are a few ways to approach valuations in the M&A market. One option is the price-earnings ratio that compares the company's current share price to its per-share earnings. A higher ratio can be a sign of expected high earnings growth in the future compared to those that have a lower ratio (Kennedy, 2016). It can also show how much investors are willing to pay per dollar of earnings. When using this approach, it is recommended to compare the ratios of companies in the same industry (Kennedy, 2016). Another approach is the enterprise-value-to-sales ratio that compares the company's enterprise value to its sales. It provides a base estimate of the price it would cost to purchase the company's sales. Typically, a lower ratio is more attractive to buyers, but a higher ratio could push investors to believe that future sales could significantly increase (Kennedy, 2016).

The book value approach is excellent for companies that don't have intangible assets and important assets like intellectual property, trade secrets, and brand value. Varying accounting practices that a business uses will play a factor when using the book value as liabilities are frequently disputed when discussing the valuations (Kennedy, 2016). Liquidation value can be used for businesses that are in financial distress or have an uncertain future. The liquidation value is the value of the sale of all the assets for the company (Kennedy, 2016). Other approaches that can be used are the replacement costs method or the discounted-cash-flow method. They measure the cost of replacing the selling company and its ability to generate and grow cash flow (Kennedy, 2016). The last valuation approach is the market value of securities, which is common for public companies. It is typically used to measure the company's equity by taking the number of outstanding shares and multiplying it by the stock price. As each situation is different, it is up to the buyers to choose the approach that best works for them (Kennedy, 2016).

### **M&A Market before COVID-19**

Before the coronavirus pandemic hit, the M&A market had been healthy. However, some alarming trends began taking place. Through the first quarter of 2018, the M&A market continued a strong trend of activity that goes back to 2010. M&A value increase by roughly

seven percent for the globe, which is near the five-year average. While the values increased, overall deal activity declined with about 35,800 deals announced during the year, a decrease of about three percent (Kengelbach et al., 2020). While the yearly figures remained strong, after the first quarter, deal volume and deal value began to decline. In the first quarter alone, there were seventeen megadeals announced (value of at least \$10 billion), compared to the quarterly average of six out of the ten previous years. Throughout the rest of 2018, only fourteen megadeals were completed (Kengelbach et al., 2020). This decline of activity can be attributed to several factors, such as increase volatility in equity markets, macroeconomic uncertainty, and decreasing valuations. The decline in 2018 carried over into 2019. Merger and acquisition activity decreased to 15,395 deals, roughly 3,000 less than that same period in 2018, potentially signifying an end to the current M&A cycle (Kengelbach et al., 2020). Although volume was down, the M&A value stabilized close to the long-term average. Throughout the first half of 2019, the United States was the only country to see an uptick in deal value, especially in the second quarter (Kengelbach et al., 2020). What may be more concerning, for the first time since 2011, the cumulative abnormal returns (CARs) were negative for buyers of public targets. This may indicate that investor sentiment towards mergers and acquisitions is going back to the historical standard (Kengelbach et al., 2020).

Before the coronavirus pandemic drastically changed the M&A market, four major trends were influencing both buyers and sellers in the M&A market, as well as the larger business atmosphere. One trend was the support of supply by corporate divestitures, spinoffs, and private equity exits (Kengelbach et al., 2020). The market was on the rise for these, and businesses aimed to take advantage of high valuations or sell risky underperforming assets before the next recession takes place. Although total volume fell somewhat, total deal value almost reached recent highs that were experienced in 2014 and 2015. A portion of the selling was a result of activists' demands, and some antitrust concerns in the merger-approval process, specifically for megadeals (Kengelbach et al., 2020).

Elevated cash levels for both corporations and private equity firms have also been a driving factor that will support deal activity in the near future. A view of the S&P Global 1200 (not including insurance companies or financial institutions) shows total cash holdings of \$2.4 trillion, which is up 21 percent from its level in 2013 (Kengelbach et al., 2020). The total cash holding appears to have peaked at \$2.5 trillion in 2017, which may cause organizations to hold onto their cash due to the expectation of a dip in the economy (Kengelbach et al., 2020). Activist investors, who can serve as a catalyst for deal activity and divestitures, also managed

\$384 billion worth of assets in 2018, accounting for a 34% increase from 2013. On top of that, recent interest rates have been favorable to complete M&A deals (Kengelbach et al., 2020).

Another trend in the M&A market is the rise of ecosystems, creating unconventional transactions. The objective of these transactions is not just to take control of a company but also to gain access to precise capabilities, technologies, or talent. As technology becomes increasingly integrated into the products and services provided by companies, complex ecosystems are forming. Companies are being required to join multilateral cross-industry partnerships instead of the traditional bilateral partnerships within a single industry (Kengelbach et al., 2020). Dealmakers are required to have new skills related to scouting and negotiation to handle these unconventional deals. For example, in 2018, Amazon, Berkshire Hathaway, and JPMorgan Chase announced they were going to form an independent healthcare company for its employees. In 2019, Toyota partnered with Uber, Softbank's Vision Fund, and Denso to fund the possibility of Uber's self-driving car (Kengelbach et al., 2020).

The final factor that was influencing the market was that resilience supports merger and acquisition activity. Businesses making recent deals tend to look past political and economic uncertainty, which is the opposite of the historical trend where deal activity has slowed as uncertainty increased. Market instability generally causes the total volume of deals to decline. The M&A market's resilience shows that parties involved generally focus on macroeconomic fundamentals, such as economic growth, forecasts, and trends (Kengelbach et al., 2020). These fundamentals have persisted enough to support a healthy level of M&A activity despite several risks, including trade wars, Brexit, the showdown of China's economy, and fraying international alliances. While an economic downturn will take place again, and one was already looming, the impact of the coronavirus pandemic sped up when the recession would hit (Kengelbach et al., 2020).

## **Impact of COVID-19 on M&A Moving Forward**

### **Deal Activity**

As the coronavirus continues to spread around the world, economies are experiencing varying degrees of impact. There have been rapid developments as researchers continue to learn additional information about the virus (McDermott, 2020). Due to the economic and financial implications that coronavirus has had, the companies in the merger and acquisition market have experienced several changes forcing them to change their plans. It is apparent that the coronavirus pandemic impacted on merger and acquisition transactional activity, at

least in the short term for buyers and sellers across a wide range of industries (Kogan & Levinson, 2020).

Overall, the M&A deal activity has dropped since COVID-19 was first publicized. It is estimated that in the Pacific region alone, 25% to 30% of live deals have been abandoned as a result of the pandemic. People in the M&A world have observed that the valuation gaps between buyers and sellers have worsened due to the continual vagueness associated with COVID-19. It is believed that there will be an increase in deal activity by opportunistic buyers. Companies that have maintained strong financials through the pandemic may be actively looking to acquire businesses that are struggling financially and are likely to be susceptible. It is crucial for buying companies to ensure that the target business is a clear strategic fit (McDermott, 2020). Immediately after COVID-19 hit, the pandemic has flipped the global economy and has tipped the scales of leverage in favor of buyers and investors who have capital readily available. Selling companies should anticipate valuations to throttle back off their all-time highs. They should also expect buyers to push back on seller-friendly legal terms (Kogan & Levinson, 2020).

### **Timing and Delay in M&A Deals**

If merger and acquisition deals are agreed upon, both buyers and sellers should expect a lengthening of the time required to close the deal. The virus has pushed a majority of the workforce to work from home, and even though technology enables employees to continue moving the business ahead, it still possesses challenges. It may slow down the efficiency of all the work being completed. Additionally, with the majority of the public and private offices closed, and the limited workforce due to layoffs and furloughs, it should be expected to take longer to receive specific items that would be required to close a deal (Kogan & Levinson, 2020). For example, there may be several third parties participating in the closing process. Those third parties may take longer to return the necessary documentation to make the transaction final. Some of the items needed, such as lien and litigation searches, title searches, and other similar conditions to closing, might take much longer than the standard time to complete. Thus, the parties involved will want to take any time limitations under consideration (Kogan & Levinson, 2020).

## Clauses

Going forward, it is likely that buyers and sellers will see clauses in the proposed agreement documentation. Provisions that may be seen in these contracts could be material adverse change (MAC) or force majeure clauses (Lewis, 2020). These are intended to provide a party the ability to be excused from completing its commitments of a contract upon the occurrence of specific events that are measured to be outside the control of that party (Lewis, 2020). While these clauses need to be negotiated on a case-by-case basis, parties involved may want to include a pandemic to the list of events that would apply to the clauses to be covered. Buyers may also be inclined to add force majeure or material adverse change-related diligence items to their list of requests (Lewis, 2020).

These contract clauses may start to cause unrest in the business world. According to PitchBook data, at least six private equity M&A deals in the US have been called off in 2020 after the coronavirus swept across the United States (Lewis, 2020). Sellers are beginning to push back on agreed-upon deals, and in at least one case, that selling company is heading to court hoping to force the buyers to move forward and complete the ten-figure investment (Lewis, 2020). For example, The Carlyle Group is taking Singaporean sovereign wealth fund GIC to court after they abandoned a signed agreement in December. They would have acquired a twenty percent stake in American Express Global Business Travel (Lewis, 2020). The deal would have given GIC an enterprise value of around five billion. Carlyle referenced material adverse change clause, which is a “common feature of buyout contract that allows buyers to walk away from a deal in the event of an ‘act of God’ or another abrupt change in the target’s valuation” (Lewis, 2020, para. 3).

Each side of the agreement believed they could make a case in their favor. Carlyle claimed the buyers violated several terms of the purchase agreement and therefore have no obligation to finalize the transaction. On the other hand, the sellers claim that Carlyle is merely having buyer’s remorse after it posted a massive \$612 million loss in the first quarter alone (Lewis, 2020). Another example happened in April when Sycamore Partners walked away from a deal to purchase Victoria’s Secret and Pink lingerie brands for \$525 million (Lewis, 2020). They claimed there was a breach of contract since the company was required to close its store due to the coronavirus pandemic. According to PitchBook, only 160 private equity deals were completed in the United States during April 2020, which is down almost 64 percent year over year and over 50 percent less than any month in all of 2019 (Lewis, 2020).

## **Financial Strain**

As the economy has fallen since the pandemic hit, businesses under financial strain may be forced to participate in M&A activity. Stringent levels of debt continue to mount for some companies and may result in the deferral of highly leveraged buyouts and impacting overall liquidity (McDermott, 2020). Buyers will most likely begin asking for a reduced purchase price for any deals currently in process. It is even more likely that the price of future offers will account for attributable risk caused by a pandemic. In an effort to push the risk to sellers, buyers may also consider using earnouts as part of the purchase price. Another consideration by parties is to delay or extend the time limitations where earnouts are used to account for the present market environment and their influence on the business's short-term performance (Kogan & Levinson, 2020).

## **Conclusion**

As the coronavirus continues to spread across the globe and affect everyone differently, companies and mergers and acquisitions participants are juggling the increased risk and uncertainty associated with the virus (Amdur & McKenna, 2020). During these times, participants should look beyond its core business to create value, learn from experience dealmakers, don't take value creation granted, and consider de-risking M&A strategies (Kengelbach et al., 2020). The pandemic may push buyers and sellers to reassess valuations, adjust pricing calculations and create and implement new methodologies for operations (Amdur & McKenna, 2020). Participants involved in various transactions should take the necessary steps to mitigate the potential disturbance throughout the deal-making process and adjusted timelines triggered by the coronavirus. Buyers and sellers will also need to think through risk allocation and how the terms and conditions of deals have changed and how they will continue to develop once the pandemic has passed (Amdur & McKenna, 2020). While the coronavirus pandemic has injected a degree of uncertainty into the overall deal-making process, one could anticipate that the level of M&A activity will rebound to prior COVID-19 levels and mainly the structure of the deals will change from before the virus hit (Amdur & McKenna, 2020).



## References

- 7 steps to successful merger & acquisition (M&A). (2018, January 30). Retrieved May 24, 2020 from <http://huconsultancy.com/7-steps-to-successful-merger-acquisition/>
- Amdur, S., & McKenna, B. (2020, March 29). M&A in times of COVID-19. Retrieved June 20, 2020 from <https://corpgov.law.harvard.edu/2020/03/29/ma-in-times-of-covid-19/>
- Hayes, A. (2019, June 21). Mergers and acquisitions – M&A. Retrieved May 17, 2020 from <https://www.investopedia.com/terms/m/mergersandacquisitions.asp>
- Kengelbach, J., Keienburg, G., Gell, J., & Nielsen, J. (2019, September 25). 2019 Mergers & Acquisitions (M&A) Report: Downturns Are a Better Time for Deal Hunting. Retrieved June 11, 2020 from <https://www.bcg.com/publications/2019/mergers-and-acquisitions-report-shows-downturns-are-a-better-time-for-deal-hunting.aspx>
- Kennedy, J. (2016, November 18). Mergers and acquisitions: Valuation methods. Retrieved June 07, 2020 from <https://www.lskfirm.com/publications/mergers-acquisitions-valuation-methods/>
- Kogan, E., & Levinson, L. (2020, April 15). How will COVID-19 impact M&A? Retrieved May 30, 2020 from <https://www.natlawreview.com/article/how-will-covid-19-impact-ma>
- Kongpichayanond, P. (2009). Knowledge management for sustained competitive advantage in mergers and acquisitions. *Advances in Developing Human Resources*, 11(3), 375-387. <https://doi-org.xxproxy.smumn.edu/10.1177/1523422309339725>
- Lewis, A. (2020, May 14). Carlyle's fight with AmEx Global shows perils of COVID-19 for dealmakers. Retrieved June 01, 2020 from <https://pitchbook.com/news/articles/carlyles-fight-with-amex-global-shows-perils-of-covid-19-for-dealmakers>

Maverick, J. (2020, January 30). Is profitability or growth more important for a business?

Retrieved May 24, 2020 from <https://www.investopedia.com/ask/answers/020415/what-more-important-business-profitability-or-growth.asp>

McDermott, C. (2020, March 30). COVID-19: What are the impacts on merger and acquisition

activity? Retrieved May 12, 2020 from <https://www.marsh.com/au/insights/risk-in-context/covid-19-impacts-on-mergers-and-acquisitions.html>

Sinkin, J., & Putney, T. (2017). Mergers and acquisitions of accounting firms: When, how, and why to merge. *CPA Journal*, 87(12), 30.

## **International Taxation and Tax Environments Post COVID**

[The author is a lending officer at a commercial bank]

## International Taxation and Tax Environments

### Introduction

In recent years, the United States has made a concerted effort to refine its international taxation laws and policies, and by doing so affirm its commitment to national wealth maximization and other strategic national priorities. These policies are not made in a vacuum, and frequently are made at the expense of economic efficiency or other side-effects, intended or otherwise. International taxation is a complex and controversial topic, and the ongoing COVID-19 pandemic layers yet another level of convolution into the subject. Because of the pandemic, the world is being rapidly thrust into a new paradigm where the digital is taking a sudden, unplanned shift in priority over the physical. This dramatic transformation coincides with international taxation laws refining how digital services are taxed. As the U.S. navigates the pandemic and the resulting economic upheaval, decisionmakers will need to balance international relations and investment, while also maintaining national international taxation priorities.

When a country determines its international tax policy, they decide what tax environment and policies will be most appropriate to meet their specific national goals. A country may decide, for example, that administrative efficiency, economic efficiency and national wealth maximization are vital, and that tax equity and international compatibility should have a lower priority, or may potentially even be sacrificed, to promote the economic conditions they are seeking. To reiterate, these decisions cannot be made in a vacuum; the complexity of creating the ideal system is impractical to implement, if it is even possible at all. A country therefore must prioritize the most desired outcomes and create a taxation environment that seeks to fulfill those outcomes (Holmes, 2014).

The importance of the international taxation system is paramount to a country's economic success, as the country's firms must work within the bounds of that system if they wish to transact between themselves and anywhere else in the world. If the system is designed poorly, it can stymie foreign investment and prevent capital inflows, or potentially cause outflows of capital out of the country that otherwise would not have left. As countries and companies worldwide have moved to adjust to the pandemic and embrace employees working from home, the global interchangeability of human talent and the importance of an effective international tax system has never been more evident.

## **Objectives of International Taxation Policies**

There are five primary objectives a country must consider when preparing its international tax strategy: National wealth maximization, Tax equity, Economic efficiency policy, Administrative efficiency and International compatibility (Holmes, 2014). National wealth maximization is the prioritization of a country to maximize both the private return of nationals who invest abroad, and maximize the tax revenue on both that investment as well as from foreign investors who invest in that country. This objective seeks to maximize wealth in that nation, and to structure their international taxation laws to incentivize capital investment, provided they create a net positive effect for that nation.

The objective of tax equity is to provide a level playing field for domestic and foreign taxpayers. A country that promotes tax equity seeks to cause all taxpayers to pay the same taxes on both domestic and foreign income. In conjunction with tax equity, a country will have an objective of economic efficiency. The purpose of promoting an economically efficient system is to allow for capital to naturally flow to the investment that provides the highest potential pretax return. A system that does not provide both tax equity and economic efficiency will distort the flow of capital to the highest pretax return, and instead cause capital to seek the highest post-tax return, thereby causing a wealth-destroying distortion in the markets (Elkins, 2019).

The objective of administrative efficiency is to minimize the destructive forces of compliance. The cost of international tax compliance is an expense comprised purely of economic waste, as compliance costs are administrative overhead expense that produce no economic wealth or efficiencies. From a corporation's perspective, this cost of compliance provides no benefit and reduces the potential pre- and post-tax returns on investment. The more complex the international tax system, the less profitable it is for a company to operate in that country, and the greater the potential for a market distortion steering capital investment away from the natural flow of capital toward the highest potential pretax return. Further, compliance cost reduces the taxable income of the corporation, which then results in lower tax receipts.

The objective of international compatibility is to have a competitive and desirable international tax system. The purpose of this is twofold. First, in today's increasingly global economy, countries are competing against each other for capital investments. Countries that do not have a competitive international tax system will not be able to attract foreign investment. They may even find domestic investments flow out to other countries as investors seek more competitive tax environments. Second, a country should tailor its tax policies to be compatible with those of other countries to limit the ability of investors to create transactions that have a

detrimental impact on the country's tax base (Holmes, 2014). If a country's tax environment is not compatible with other countries, investors will inevitably structure business operations and transactions to take advantage of the incongruence among the international tax systems, potentially costing the country substantial tax receipts.

As a country prioritizes its goals and objectives, it must choose between two primary international tax approaches, the worldwide approach and the territorial approach. Each approach has its own advantages and disadvantages in achieving a country's international tax policy objectives. In the worldwide approach, taxes are levied on firms based in the host country regardless of whether the income is earned in the host country or internationally. The foreign taxes paid by the firm on profits generated in the foreign country are then offset by tax credits in the home country. In the territorial approach, taxes are levied on income earned within the host country, and levies the tax equally on domestic and foreign firms. In a territorial system, income earned in a foreign country is not taxed, and taxes are paid only on income earned in that country (Eiteman, Stonehill, & Moffett, 2016).

### **The United States' International Policies**

The United States has adopted a worldwide approach, emphasizing national wealth maximization and tax equity by creating a highly complex system of foreign tax credits, tax deferrals, and tax credits on exports (Toder, 2019). The benefits of this system, generally speaking, are the maximization of tax receipts for US-based firms and investors, and a somewhat limited level of economic rent and capital flow distortions. Through a number of reforms and the Tax Cuts and Jobs Act of 2017 (TCJA), the US has eliminated a number of distortions and tax avoidance loopholes (Toder, 2019). One major area of change has been the reduction of the benefit of tax inversions.

A tax inversion is where a firm in a high-tax country purchases or merges with a firm in a low-tax country, and moves the headquarters of the new combined firm to the low-tax country with the intention of reducing the firm's tax liabilities. Prior to the TCJA, the US marginal corporate income tax rate was 35%, placing it among the highest marginal tax rates in the world. For years, this created an environment that implicitly encouraged companies to find legal ways to minimize their tax burden, including through tax inversions. This issue came to a head with the proposed merger of the American firm Pfizer and the Irish firm Allergan, where Pfizer would have converted to an Irish company while remaining headquartered in the United States. This inversion was only prevented by the U.S. Treasury department creating specific rules that

greatly reduced the benefit of the merger, but not before stirring up a national controversy about corporations maneuvering to avoid the U.S. tax rates (Humer & Pierson, 2016). Although Pfizer ultimately abandoned the Allergan inversion, the core international taxation issue and corporate tax rates remained.

The United States' high marginal tax rate of 35% made both international compatibility and economic efficiency difficult by incentivizing tax inversions by decreasing the post-tax return of corporations such that they stopped seeking the highest potential pretax return in exchange for a lower tax rate. The year after the proposed Pfizer-Allergan inversion, the TCJA was passed, cutting the corporate income tax rate to 21%. This new, lower rate not only made the United States' tax environment more appealing and competitive for capital investment, but it also substantially reduced the benefit of a tax inversion. With the lower tax rate that is now competitive with other countries, investors are no longer faced with such a substantial additional cost to investing in the U.S. versus in other countries.

A major disadvantage of the United States' worldwide approach is that foreign subsidiaries of U.S. company's do not have to pay tax on their foreign earnings until those earnings are remitted to the United States, which is called the repatriation tax. The net effect of this policy is that firms limit their earnings repatriations to avoid the repatriation tax. In 2005, the U.S. implemented a repatriation tax holiday, which was met with a higher than expected demand from corporations bringing their capital to the United States. The enthusiasm and level of capital brought to the United States demonstrated that the U.S. system, as designed, was dramatically hampering the economic efficiency of the United States. The tax holiday demonstrated the policy was limiting the return of capital that had been earned overseas by U.S. corporations, as the corporations chose instead to leave the capital overseas rather than pay the repatriation tax (Gruber & Altshuler, 2013).

### **COVID-19 Impact on U.S. Policy Perspective**

In the pre-COVID-19 world, the United States placed a premium on employment and manufacturing creation and retention. The ongoing pandemic has not changed this perspective or priority, but it has accelerated the timeline and added urgency to recent U.S. protectionist policies. Although not explicitly linked to international taxation policy, the goal is nevertheless related: The United States wants to aggressively retain and add manufacturing, beginning-to-end supply chains, and employment within the United States. In particular, the pharmaceutical

and defense industries are under examination to limit the exposure to foreign manufacturing and supply chains (Clark, 2020).

The impact, of course, is the reduction in the globalization of supply chains. As the limitations of supply chains were exposed during the pandemic, the importance of multiple channels of supply, particularly local redundant suppliers, has increased. As the supply chains are nationalized and even duplicated, the efficiency of the flow of capital is negatively impacted. This supply chain nationalization runs precisely the opposite of the U.S. international tax policy goals of the maximization of economic efficiency and wealth creation. The international tax policies of the United States seek to create an environment where capital is allowed to seek the highest pre-tax return. When the United States instead creates employment, supply chain, and manufacturing requirements on U.S. firms, they are explicitly undermining the underlying economic principles that provide the foundation for wealth maximization by distorting the flow of capital. Further, these market distortions come with a destructive cost: they increase the cost of the goods to the U.S. government. All spending is necessarily a zero-sum game because the government only has so much purchasing power from the wealth created and taxed in their country. By choosing to spend funds on nationally-produced goods, the U.S. necessarily is opting to spend less on any other potential competing goods or government services (Lincicome, 2020).

Conversely, a proponent of protectionist policies would argue that the goal should be the maximization of national wealth only, and that capital should be allowed to seek the highest pre-tax return only if it aligns with the national interests. In these situations, the nation should pursue outcomes in the nation's best interest, even if it comes at the expense of the global economy and principles of economic efficiency and wealth maximization (Elkins, 2019). The pitfall to this ideology is we live in a global world, and protectionist policies can be viewed antagonistically by other countries across the globe, again reinforcing the concept that no decisions involving international taxation can be made in a vacuum.

The competing policy to nationalize the U.S. defense supply chain is surely defensible if not laudable; after all, in the event of an unexpected violent conflict, it would be ill advised to rely on other nations, who may or may not be allies in such a conflict, to supply the U.S. with good or services vital to the defense of the nation. However, the implications of global supply chains adjusting to the post-COVID-19 world extend far beyond defense spending. Firms across the globe have been forced into a new reality where change has been quickly forced upon them. The examples are ubiquitous: firms are embracing work from home policies (Whitesite, 2020), direct-to-consumer online sales models (Naughton, 2020) and are digitalizing processes and



workplaces virtually overnight. This issue is further exacerbated by employers' recognition of the interchangeability of remotely-performed labor on an international basis.

The requirement of a firm to set up a supply chain, particularly without a required physical footprint, in a country will be dictated by the availability and cost of qualified labor. All business restructuring comes at a cost. The business restructure must be first researched, property designed, and then implemented. In the post-pandemic world, the research and unknown of the globalization of the supply chain has suddenly received a tremendous amount of data that companies and investors can now draw on. This dramatically flattens the cost of a firm choosing to globalize or restructure their supply chain, and perhaps most importantly substantially reduces the uncertainty of the impact of such decisions. The option and capacity of firms to make such moves are not new, but the sudden influx of data from the world's response to COVID-19 has provided a wealth of data to investors seeking to create a more efficient enterprise.

However, the creation of a more efficient enterprise can come in many forms. In the context of international taxation, it can also involve how to minimize taxation by utilizing the data available due to the pandemic. Large multinational corporations often have large vertically integrated supply chains, frequently involving intangible assets and services. The firms that have the ability to choose where to allocate processes, particularly ones involving low-skilled labor, digital goods, or intangible assets, can strategically look to invest their capital where they earn both the highest pre-tax and post-tax return. If a country does not have a truly neutral international tax system, the highest pre-tax and post-tax return will be in conflict, and the multinational firm will be able to capitalize on this variance to its advantage.

### **Hot Button U.S. and Worldwide Policy Considerations**

Before COVID-19 took the world by storm, a hot button issue that has been simmering for the past several years is the taxation of digital goods. In particular, giant U.S. tech corporations such as Apple, Google, and Facebook have users worldwide that provide value to the corporations, and many countries, particularly in Europe, determined they would like to fundamentally change how international revenue is taxed. A primary issue appears to be that there is no international agreement on whether the current international taxation system is fundamentally misstructured, or if the digital economy should specifically be singled out for special tax rules (Grinberg, 2019).

Under consideration are what are described as two pillars: first, that countries should have an underlying right to tax revenue 'created' in their jurisdictions, and second, that there should be a minimum global corporate tax rate to provide support to each of the international tax goals of tax equity, economic efficiency policy, and international compatibility (Osborn, Lebovitz, & Pieron, 2020). These considerations seek to flatten the advantages investors and corporations find through the allocation of capital, geographical investment, and labor in low-tax countries.

The United States has been fundamentally opposed to the first pillar because the U.S. is the clear global leader in the tech space. Many of the largest tech firms and global digital-service-providing companies are based out of the United States. As such, the U.S. would be disparately impacted through the first pillar, and U.S. Treasury Secretary, Steven Mnuchin, recently announced the U.S. would withdraw from negotiations because they are currently at an impasse in negotiations (Fleming, Brundsdon, Giles, & Mallet, 2020). The U.S. is unlikely to yield to international demands given the impact hitting U.S. firms the hardest, but the resulting international showdown has yet to play out. In the interim, some countries have begun to implement unilateral tax policies with Value Added Taxes (VAT) with a minimum threshold, but these policies can be seen as both antagonistic and inherently administratively burdensome (Osborn, Lebovitz, & Pieron, 2020).

The second pillar, however, appears much more likely to come to fruition. A global minimum tax rate, when implemented in conjunction with other countries, will have a noticeable impact on creating a tax-neutral tax environment for international investors. In turn, as long as this pillar is introduced with a large degree of international compatibility among the world's largest economies, it could fundamentally reshape how much flexibility firms have in using tax-friendly jurisdictions to increase their post-tax returns. What remains to be seen is whether unilateral actions by any countries are viewed as antagonistic and subsequent retaliatory actions hamper the progress of an international agreement on this issue.

## **Conclusion**

In the absence of international cooperation, the United States is left with unilateral tax policies to achieve its international taxation goals. With the understanding that investors and firms are better equipped than ever to implement strategies to alter business operations to minimize tax liabilities, the U.S. must continue to refine its tax policies. The incredible complications of doing so should not be underestimated; unilateral actions work only as well as

the international compatibility with other countries' systems. Further, as demonstrated by COVID-19, the goals of the United States' international tax policies can be undermined by competing priorities such as maintaining a national defense supply chain at the expense of what the system is designed to encourage. After all, an international tax policy is designed to be neutral in effect, while the effects of COVID-19 have resulted in direct government intervention to steer capital investment.

The United States' is a general outlier among the largest world economies in international taxation with a worldwide approach, complicating efforts to come to an international agreement on international taxation cooperation. The TCJA brought the US closer to an ideal state that meets more objectives with a more-neutral effect on the markets, but the United States still has room for substantial improvement. As the world learns and responds to the new normal post-COVID-19, the importance of a properly designed and implemented international tax policy will only increase in importance, and U.S. lawmakers will need to respond with innovation and prudence to ensure the U.S. remains a desirable investment environment.

## References

- Clark, M. (2020, April 27). *How the Pentagon Is Protecting Defence Supply Chains From COVID-19*. Retrieved from The Daily Signal Website: <https://www.dailysignal.com/2020/04/27/how-pentagon-is-protecting-defense-supply-chains-from-covid-19/>
- Eiteman, D. K., Stonehill, A. I., & Moffett, M. H. (2016). *Multinational Business Finance, 14th Edition*. Boston: Pearson.
- Elkins, J. (2019). A Critical Reassessment of the Role of Neutrality in International Taxation. *Northwestern Journal of International Law & Business*, 1-45.
- Fleming, S., Brundsdon, J., Giles, C., & Mallet, V. F. (2020, June 19). *Europeans vow to pursue digital tax plans after US "provocation"*. Retrieved from ARS Technica Website: <https://arstechnica.com/tech-policy/2020/06/europeans-vow-to-pursue-digital-tax-plans-after-us-provocation/>
- Grinberg, I. (2019). International Taxation in an Era of Digital Disruption: Analyzing the Current Debate. *International Tax Journal*, 39-71.
- Gruber, H., & Altshuler, R. (2013). Fixing the System: An Analysis of Alternative Proposals for the Reform of International Tax. *National Tax Journal*, 671-712.
- Holmes, K. (2014). *International Tax Policy and Double Tax Treaties: An Introduction to Principles and Application*. Amsterdam: IBFD.
- Humer, C., & Pierson, R. (2016, April 5). *Obama's inversion curbs kill Pfizer's \$160 billion Allergan deal*. Retrieved from Reuters Website: <https://www.reuters.com/article/us-allergan-m-a-pfizer-idUSKCN0X21NV>
- Lincicome, S. (2020, April 28). *On 'Supply-Chain Repatriation,' It's Buyer (and Nation) Beware*. Retrieved from The National Review Website: <https://www.nationalreview.com/2020/04/coronavirus-crisis-supply-chain-repatriation-protectionism-not-solution/>
- Naughton, N. (2020, June 20). *The Pandemic Has Pushed Car Buying Online. It's Expected to Stick*. Retrieved from The Wall Street Journal Website: <https://www.wsj.com/articles/the-pandemic-has-pushed-car-buying-online-its-expected-to-stick-11592658001>
- Osborn, J., Lebovitz, M., & Pieron, A. (2020). Unilateral Taxation of the Digital Economy. *Tax Executives Institute Inc.*, 27-35.
- Toder, E. (2019). Harry Grubert's Evolving Views on International Tax Policy. *National Tax Journal*, 193-213.
- Whitesite, J. (2020, April 25). *COVID-19 - accelerating the digitalisation of operations*. Retrieved from Supply Chain Digital Website: <https://www.supplychaindigital.com/technology/covid-19-accelerating-digitalisation-operations>

## **Coronavirus and the Loss of Tourism Tax Revenue**

By Shae Nehiba, M.A.

[The author is a property manager for a real estate company]

## Abstract

The Coronavirus Pandemic has caused a stark change in daily lives around the world. Social distancing, quarantine, and closures of many businesses has led to record unemployment numbers, almost non-existent tourism, and questioning when our “new normal” will be established. This paper examines what a tourism tax is, how the City of Duluth MN utilizes this revenue, historical data from loss of tourism around the world, legislative solutions to the pandemic, Duluth Budget and the effects of loss of tourism revenue, and predictions/suggestions for the future. The Coronavirus Pandemic will cause long-term changes in how we operate and interact with one another.

### What is Tourism Tax and the City of Duluth, MN

Tourism tax is a source of revenue for a municipality that may have higher numbers of tourists than other areas. Tourism or tourist tax is defined as “city tax, known more commonly as tourism tax is a small fee charged to visitors by the municipality. This goes towards financing and maintaining facilities in the area, producing brochures, tourist activities, and modernizing tourist attractions...” (ONeill, 2018). Tourism tax is a large revenue source for the City of Duluth, Minnesota. Over the last ten years, revenue has been steadily increasing, from about \$7.5 million in 2010 to about \$12.4 million in 2019.

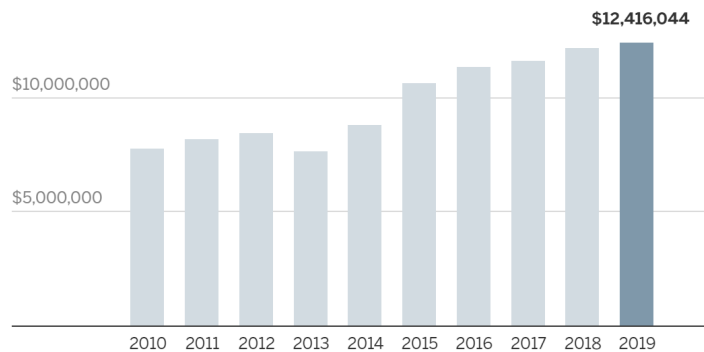


Chart: Katie Galioto, Star Tribune • Source: City of Duluth

Figure 1 (Galioto, 2020)

This revenue serves many areas and projects within the city. The City of Duluth states: “Tourism taxes were established by State Statute and City Ordinance. They are designated for Tourism related uses to promote and support the City of Duluth as a Tourist and Convention

destination. This includes the Duluth Entertainment and Convention Center, Spirit Mountain and Tourism related public improvements and activities” (Finance, n.d.).

The tourism tax rate in Duluth is 2.25% on food and beverage sales and a 3% lodging tax, with an additional 2.5% tax for establishments with more than 30 rooms (Galioto, 2020). Clearly this tax is not only levied on tourists, but also residents as they are frequently patronizing restaurants, bars, breweries, etcetera. In fact, the onset of the large increase of tourism tax revenue that can be seen around 2014 seems like it coincides with the craft brewery boom in Duluth. Showing that a greater number of establishments within the city could have had some effect on the level of tourism tax collected (Galioto, 2020).

### **Lessons from Historical Events that included Loss of Tourism and Tourism Tax Revenue with Analysis of Current COVID-19 Solutions**

There are, unfortunately, quite a few examples of times throughout modern history that tourism has been disrupted. From previous pandemics, to the September 11<sup>th</sup>, 2001 Terror Attacks, to The Great Recession, the effects of these events can be analyzed to understand the possible outcomes and policy changes that may result from the current Coronavirus Pandemic. For the most part, these historical events did not include major shutdowns of entire countries, but the events and aftermath can still be studied as an example of what could aid economic recovery from the Coronavirus Pandemic.

First, analyzing the September 11<sup>th</sup>, 2001 terror attacks in the United States offers a glimpse into what fearful tourists may be experiencing during the Coronavirus Pandemic. This event is relatable in the sense of a loss of tourism related to fear, and a large economic downturn in many sectors. Blake and Sinclair offer guidance in their *Tourism Crisis Management: US Response to September 11*. Blake and Sinclair state “tourism demand is particularly sensitive to security and health concerns” (Blake & Sinclair, 2003). They suggest if an “economic shock” is expected to endure for a long period or indefinitely, “policymakers should concentrate their attention on minimizing adjustment costs as the economy moves toward a new equilibrium” (Blake & Sinclair, 2003). This makes sense as current policymakers have endeavored to support the economy through multiple programs that have been legislated including stimulus payments, increased unemployment benefits, Paycheck Protection Program loans, etc. These programs all serve to ease the economic hardship of both individuals and businesses during the economic downturn. This swift legislation is perhaps the result of experience through economic shock brought on by the terror attacks on 9/11 and similar

experiences. Sinclair and Blake's final recommendation is "directing subsidies to the sector that is most severely affected by the crisis is the most efficient policy response in terms of both GDP and the total number of jobs saved" (Blake & Sinclair, 2003). Clearly, the Coronavirus Pandemic affected many more sectors than the terror attacks, but their recommendation holds true. Legislation during the Coronavirus Pandemic supported most areas involved in tourism, as well as individual citizens – this is what Sinclair and Blake ultimately recommended as a result of the terror attacks.

Analyzing historical health crises/outbreaks is also helpful. While the widespread effects occurred mostly outside of the United States, tourism data can be extrapolated to apply to any city that relies on tourism behaviors and tourism taxes. The H1N1 Outbreak in Australia in 2009 included social distancing and quarantine measures, much like those that have been imposed during the Coronavirus Pandemic (Kavanagh, et al., 2012). This outbreak differed from COVID-19 in that it affected a majority of children early on, prompting schools to close (Kavanagh, et al., 2012). Kavanagh, et al. explain that "paid leave entitlements" during an outbreak that involves quarantine are important to ensure that parents (and those that are sick) are able to stay home and care for their dependents or other family members (2012). They describe that a "supportive environment in which parents are able to respond appropriately" is important (Kavanagh, et al., 2012). They state, "the public and private sector should work to alleviate financial burdens that arise from loss of pay and financial hardship due to the need for affected parents to take time off work" (Kavanagh, et al., 2012). This is an interesting case study as the quarantine did not last nearly as long as that required by COVID-19. Kavanagh, et al., made a great point that the financial burden should be lessened on those that are sick, caring for the ill, or have to care for children that are not able to go to school/daycare. This is important as a measure to help quell the spread of disease and ensure that the vulnerable are cared for. During the COVID-19 Pandemic in the United States, this has been achieved through legislation. The Coronavirus Aid, Relief, and Economic Security Act" or the "CARES Act" passed by Congress offers support described as of the utmost importance by Kavanagh, et al. (McConnell, 2020).

The Great Recession is the least similar event to the COVID-19 Pandemic currently, however, the effects of a recession should be studied. This is important because the downturn caused by COVID-19 mitigation efforts may very well result in a long-term recession. The effects of the Great Recession were felt across the world for years. The global economy has been on the upswing for the better part of seven to eight years, reaching record highs in the stock market.



The Great Recession began with the stock market crash in 2008. While the COVID-19 stock market crash is starkly different and has somewhat started recovering, it is important to study the long-term effects of such a crash from 2008. Cellini and Cuccia explain that the Italian GDP decreased by about 8% from 2008 to 2012, and industrial production decreased by about 20% (Cellini & Cuccia, 2015). It is important to note that Italian unemployment dropped only 2% during this time, a stark difference from the loss of employment during the COVID-19 Pandemic (Cellini & Cuccia, 2015). Cellini and Cuccia analyzed the effects of the Great Recession on Tourism in Italy. They found that the most noticeable drop in revenue was for low-quality accommodations (Cellini & Cuccia, 2015). They also note that in Italy “the tourist sector represents a share about 10% of the Italian GDP, and a share above 11% of employment” (Cellini & Cuccia, 2015). They noticed that the tourism sector was more resilient than other sectors, and that it began trending to more high-priced attractions/accommodations and shorter stays (Cellini & Cuccia, 2015). This is important information to analyze when considering advertising for future tourism in a post-COVID-19 world. Cellini and Cuccia found that people will modify their travel plans but overall “to go is more important than to stay” (2015). This is important as it may involve more localized travel in a post-pandemic world, as people still have the desire to get away from home.

Chernick, Reimers, and Tennant looked at tax structure and revenue instability as it related to The Great Recession in the United States. They found that states that have a more progressive tax structure were more hard-hit by the recession (Chernick, Reimers, & Tennant, 2014). They found that states that rely heavily on tourism like Nevada and Florida suffered the greatest reductions in state tax revenues (Chernick, Reimers, & Tennant, 2014). It took at least four years for most states to recover and regain their pre-recession income (Chernick, Reimers, & Tennant, 2014). This information would lead anyone to believe that we have at least a few years of recovery before we are able to economically recover from the effects of the COVID-19 Pandemic.

The historical information presented is just a sampling of what can be found on previous health crises, outbreaks, and economic downturns. All of these events have a profound effect on tourism and tourism tax revenues. States and municipalities that rely on these revenues will need to likely make drastic cuts as the effects of an economic downturn from COVID-19 are likely to last at least until a vaccine is in place (early 2021 as most reports predict). The Federal Government has offered support to states and local governments, businesses, and individuals but consideration should begin for more robust support to all of the mentioned areas to help bolster the economy and avoid a drawn out recession.

## Current Climate and Legislation Amid COVID-19 Pandemic

A timeline of the spread of Coronavirus, COVID-19, is important to understand the swift, widespread effects of the virus. The first cases of COVID-19 were treated on December 31<sup>st</sup>, 2019 in Wuhan China, at the time it was described as pneumonia without a known cause (Taylor, 2020). On January 11<sup>th</sup>, 2020, China reported its first death (Taylor, 2020). Japan, South Korea, Thailand, and the United States reported their first cases on January 20<sup>th</sup>, 2020 (Taylor, 2020). On January 23<sup>rd</sup>, 2020 the lockdown in Wuhan began, “Chinese authorities closed off Wuhan by canceling planes and trains leaving the city, and suspending buses, subways, and ferries within it (Taylor, 2020). By this date, 17 people had died as a result of COVID-19 and 570 had been infected in China and the other countries with recorded cases from January 20<sup>th</sup> (Taylor, 2020). On January 30<sup>th</sup>, 2020 The World Health Organization declared a global health emergency (Taylor, 2020). From January 31<sup>st</sup> to February 7<sup>th</sup>, the United States restricted travel from China, multiple deaths occurred, and the first cruise ship identified with an outbreak was quarantined (Taylor, 2020). On February 11<sup>th</sup>, the disease caused by the novel coronavirus is officially named COVID-19 (Taylor, 2020). Throughout February and early March multiple countries emerge as hotspots for coronavirus outbreaks. On March 13<sup>th</sup> President Trump declared a national emergency (Taylor, 2020). On March 15<sup>th</sup>, the Centers for Disease Control (CDC) begins recommendations to limit gatherings of people to 50 or less and schools began closing (Taylor, 2020). On March 27<sup>th</sup>, Trump signed a stimulus bill into law (CARES Act) (Taylor, 2020). By March 30<sup>th</sup> a majority of the states are under “stay-at-home” directives, affecting 265 million Americans (Taylor, 2020). By April 2<sup>nd</sup>, COVID-19 cases exceeded 1 million, and millions were without work (Taylor, 2020). On April 14<sup>th</sup>, the global economy is described as heading for the worst downturn since the Great Depression (Taylor, 2020). Throughout April and May, more cases and deaths from COVID-19 and greater economic downturn occurs (Taylor, 2020). By May 21<sup>st</sup> COVID-19 cases topped 5 million worldwide, amid widespread re-openings and “return to new normal” behaviors (Taylor, 2020).

The most relevant impact of COVID-19 has been the closure of most service-based industry activities. This has resulted in an enormous loss of employment. The levels of loss are unprecedented and nothing similar has been seen since the Great Depression. In April 2020, over 20 million jobs were lost, almost solely due to the pandemic. In May 2020, however, 2.5 million jobs were gained, likely to due to the phased/slow re-opening of service-based industry (Tappe, 2020)

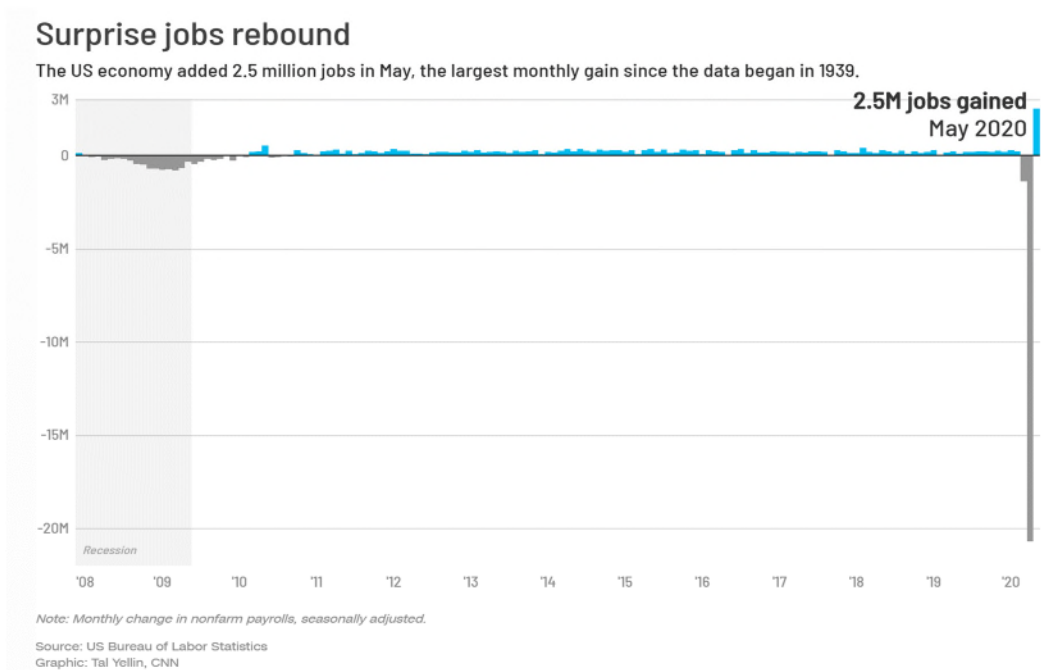


Figure 2 (Tappe, 2020)

The “Coronavirus Aid, Relief, and Economic Security Act” or the “CARES Act” is likely the most important legislation that will come out of this pandemic, barring any future aid packages that could be passed. The CARES Act encompassed four areas of support: Assistance for American Workers and Families, Assistance for Small Business, Preserving Jobs for American Industry, and Assistance for State, Local, and Tribal Governments.

The CARES Act provides direct “Economic Impact Payments up to \$1200 per adult, \$500 per child under 17, or up to \$3400 for a family of four” (U.S. Department of the Treasury, 2020). This falls under the assistance for American workers and families portion of the CARES Act. This is a way to support those who may be experiencing job loss, lag in unemployment benefits, and is supported by research as a way in which to provide influx to the economy.

Assistance to Small Business may be the most important economic impact from the CARES Act. The CARES Act offers the Paycheck Protection Program, which is implemented by the Small Business Administration (U.S. Department of the Treasury, 2020). The PPP is able to “authorize up to \$349 billion toward job retention and certain other expenses” (U.S. Department of the Treasury, 2020). This program is designed “to provide small business with funds to pay up to eight weeks of payroll costs including benefits. Funds can also be used to pay interest on mortgages, rent, and utilities” (U.S. Department of the Treasury, 2020).

The third area of concern for the CARES Act is preservation of jobs for American Industry. There are several ways in which the CARES Act accomplishes this. First, they are offering an “Employee Retention Credit” (U.S. Department of the Treasury, 2020). Through this program, “employers of all sizes that face closure orders or suffer economic hardship due to COVID-19 are incentivized to keep employees on the payroll through a 50% credit on up to \$10,000 of wages paid or incurred from March 13, 2020 through December 31, 2020” (U.S. Department of the Treasury, 2020). Also offered are two additional tax credits: payroll tax deferral and payroll support (U.S. Department of the Treasury, 2020).

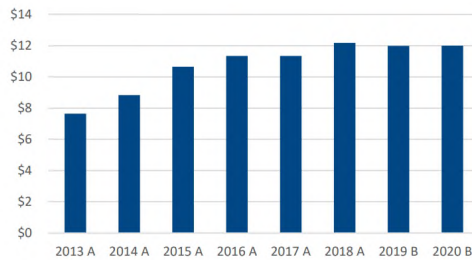
Finally, assistance for state, local, and tribal governments is the fourth area of focus for the CARES Act. “The CARES Act established the \$150 billion Coronavirus Relief Fund” (U.S. Department of the Treasury, 2020). These funds can be used for various expenses incurred due to the Coronavirus and will be paid out to state, local, and tribal governments via the Treasury (U.S. Department of the Treasury, 2020).

### **Duluth, Minnesota Budget Information and Response to and Effects of Coronavirus Pandemic**

It is important to have knowledge of the Duluth, MN Budget relating to Tourism Tax to understand the current and potential future impacts of the Coronavirus Pandemic on the city. Duluth relies on tourism tax revenue for various projects, city funded programs, and more. As previously mentioned, the tourism tax revenue is levied on food and beverage sales, as well as overnight accommodations. This revenue has been steadily increasing over the last nine years, and the impacts of Coronavirus related shutdowns and a reduction in overall tourism will likely have a profound effect on this revenue stream.

The Duluth, MN 2020 Budget was approved on December 16<sup>th</sup>, 2019 (Finance, n.d.). This approval came before any inkling of the effects the Coronavirus may reap on our economy in 2020. Revenue from tourism taxes was expected to remain about the same according to the budget documents provided by the city, this can be seen in the following figure provided from the budget booklet.

**Tourism Taxes (in millions)**



Tourism Taxes in millions	
2013 A	\$7.64
2014 A	\$8.83
2015 A	\$10.64
2016 A	\$11.34
2017 A	\$11.34
2018 A	\$12.17
2019 B	\$11.99
2020 B	\$12.00

**Description and 2020 Budget**

Tourism taxes are applied to food and beverage and hotel/motel establishments. Revenues are recognized in a special revenue fund and distributed by Council action. Tourism tax revenue in 2020 is projected to remain flat with the 2019 budget. Approximately 50% of tourism taxes go to fund existing debt on the Amsoil Arena and the St. Louis River Corridor projects. In 2015, the .5% hotel/motel tax and the .5% food and beverage tax were reinstated to be used for tourist-related capital improvement bond projects along the St. Louis River Corridor.

Figure 3 (Finance, n.d.)

Tourism tax dollars go to “Special Revenue Fund” projects (Finance, n.d.). The 2020 budgeted revenue for the Tourism Tax Fund is \$12 million (Finance, n.d.). The \$12 million is budgeted to go toward the following;

“\$1.7 million is budgeted to make debt payments for the projects along the St. Louis River Corridor. Visit Duluth will receive a total tax allocation of \$2 million. The Great Lakes Aquarium, Spirit Mountain, and the Lake Superior Zoo will receive operating subsidies from tourism taxes in the amounts of \$.36 million, \$.42 million, and \$.51 million respectively. Debt service payments totaling \$4.4 million funded by tourism tax fund go toward DECC improvements and Spirit Mountain. New tourism allocations will go to the Duluth Area Family YMCA in the amount of \$.07 million; Ecolibrium in the amount of \$.01 million; Catalyst Independent Television Festival in the amount of \$.05 million; and Zeitgeist in the amount of \$.03 million” (Finance, n.d.).

Clearly, the tourism tax supports many projects within the City of Duluth. Loss of tourism, and local dining/drinking, will have a huge impact on the tourism tax revenue fund, especially since the shutdowns occurred at the beginning of the peak tourism season in Duluth. Considering a deeper effect on the city budget as a whole would include the dip in sales tax revenue that will inevitably coincide with the decline in tourism tax. This will have more impact on the improvement projects proposed by the city throughout the 2020 budget and 2020-2024 improvement plan (Finance, n.d.).

Effects from the pandemic on tourism and tourism tax revenue is obvious from the stay at home orders and closures alone. Businesses (especially small businesses) have been forced to pivot to new models if they are able. One example is North Shore Coffee in Duluth, MN. Speaking with co-owner John Smith gave some insight into the effects of closures and stay at home orders. While North Shore opened approximately a year before the closures took effect, John was able to give some anecdotal evidence based on his experience at North Shore during the pandemic. John stated “without interventions, the coffee shop is about 50% of normal”. He did also add “sales are up around 150%, people are drinking, but tourists aren’t coming”. This is important information, as a business that relies on direct sales is able to sustain those sales, just in a different manner. As phased openings continue, one would expect coffee shop sales to increase, but can sales would likely remain at their high with the reduced seating capacity, fear in public, etcetera.

This may not be the experience of all local businesses, however. Many faced forced total shutdowns, like bars. These establishments are now looking to phased re-openings as well with reduced seating and reduced staff, but will certainly face an economic blow with the loss of tourism. Additionally bars and restaurants that do not normally provide outdoor seating, or very limited outdoor seating are looking for creative ways to begin their own phased re-openings as well. This pivot is likely costing money in the short term but will hopefully drive up current and short-term summer revenue as we grapple with the “new normal” of social distancing.

Locally, Duluth is already seeing the effects of budget shortfalls. “About 500 city employees must take 18 unpaid days off over the next year and a half as officials continue to reckon with a budget shortfall of up to \$38 million due to the COVID-19 pandemic” (Galioto, 2020). This is affecting mostly the employees in the American Federation of State, County and Municipal Employees Union (AFSCME) (Galioto, 2020). Employees voted to take on these unpaid days to support the city with their loss of revenue. Most of the days off are to be planned around federal holidays, or with supervisors when it is most appropriate (Galioto, 2020). It is likely that there will be more solutions like this, or perhaps even lay offs or furloughs to help the city meet any budget shortfalls.

The Duluth City Council addressed the concerns with the budget shortfall at their April 27<sup>th</sup>, 2020 meeting (this will also be updated with more information and solutions at the June 22<sup>nd</sup>, 2020 meeting). For Tourism Taxes, Duluth is projecting a 50-75% shortfall in 2020, this equates to \$6 million to \$9 million of the budgets \$12 million (“COVID-19 2020 Budget Implications”, 2020). According to the city, of the budgeted \$12 million, \$6.7 million is allocated

to fixed commitments, which include debt service ("COVID-19 2020 Budget Implications", 2020). In addition to this, it has been determined the city benefits from spending \$1.1 million to aid in lakewalk repairs, and parks and event costs ("COVID-19 2020 Budget Implications", 2020). This could leave the city with a potentially \$1.8 million deficit in this fund or more if the shortfall is as predicted. The total shortfall for the city is predicted as the following:

## Total Projected 2020 COVID Related Shortfalls

Sales Tax to General Fund	\$2.8M - \$7M
Streets Sales Tax	\$1.4M - \$4M
Tourism Tax	\$6M - \$9M
City Property Tax Levy	\$1.7 - \$7.1M
Parks Levy	\$130K - \$520K
Licenses & Permits	\$200K - \$500K
Inspection Fees	\$700K - \$1.7M
Parking Revenues	\$400K - \$1M
<u>Additional COVID19</u>	<u>\$7.4M</u>
<b>Totals</b>	<b>\$20.73M - \$38.22M</b>

Figure 4. ("COVID-19 2020 Budget Implications", 2020)

The city has laid out a plan to address the predicted revenue shortfalls:

## Addressing Revenue Shortfalls

- Closure of Facilities: public buildings and social / recreation activities
- Focus of operating expenses: no travel, purchasing, etc.
- Hiring Freeze
- Temporary and seasonal employee layoffs
- Layoffs of full-time staff
- Use of fund balance reserves
- Planning with all Bargaining Units
- Federal and State funding available



Figure 5. ("COVID-19 2020 Budget Implications", 2020)

With the various budget implications in mind, the city projects a full recovery in 2022. Duluth will focus on unemployment and supporting small businesses through this crisis ("COVID-19 2020 Budget Implications", 2020). They are also looking to pivot service offerings such as curbside library services and virtual story times ("COVID-19 2020 Budget Implications", 2020). In addition to these, the city has decided to focus on safety measures as well, like mask drives and mask wearing campaigns, as well as street closures to allow for more outdoor experiences (expanding patio dining, etc.) ("COVID-19 2020 Budget Implications", 2020).

Beyond this information and focusing on the tourism tax fund. Clearly, the city must prioritize any debt they are required to pay first that would normally come from the Tourism Tax Fund. This is an enormous burden and may not be able to be met this year. There have also been discussions surrounding other projects or failing entities that are supported through the Tourism Tax Fund and their indefinite closure as a result of the loss of revenue. For example, the already failing Spirit Mountain will remain closed for the summer (Rahman, 2020). This closure will also include the continued lay off Spirit Mountain employees (Rahman, 2020). Spirit Mountain is subsidized by the city and has been failing, requiring bail outs in 2019. Mayor Emily Larson had previously established a task force to look into the viability of Spirit Mountain as a sustaining attraction (Rahman, 2020). As we move forward through the beginning of this pandemic and economic downturn we will see more closures and more in depth looks into what can feasibly be funded and what should continue.



## **Predictions, Recommendations, Areas of Concern, and Living in the “New Normal”**

This section will contain my personal impressions of what a post-COVID-19 normal could look like. This will be marked by a continued economic downturn as we slowly begin reopening our service based and other industries. It is hard to predict exactly what this new normal will look like, but historical data and budget shortfalls will aid in an imaginative analysis of what cities could look like with reduced tourism.

It is fair to assume there will be a marked decrease in tourism for at a minimum, into 2021, likely expanding into 2022. Loss of events like Grandma’s Marathon and other competitions will surely cause a huge deficit in the tourism tax budget. If there is travel it will likely remain close to home and be focused on “higher end” experiences as Cellini and Cuccia found in Italy during the Great Recession. This reduction in tourism coupled with the reduction in capacity for businesses and spaces will result in reduced tourism tax revenue and tourism spending. This effect is two-fold, affecting both the municipality and the small businesses. Both municipalities and these businesses will need to prioritize initiatives that will help them to mitigate the most risk while trying to operate at as close to normal as possible.

Loss of tourism tax revenue will undoubtedly cause permanent closures. I would not be surprised if already struggling entities in Duluth, like Spirit Mountain, shutter indefinitely. This of course, is a specific example but there are costs associated with an indefinite closing of Spirit Mountain so the potential savings in closing must outweigh the costs associated (Rahman, 2020). Unfortunately, these closures will result in long-term job loss. Since we are largely a service-based economy (as evidenced by the immense unemployment claims associated with the shutdowns), the job loss is inevitable. It would be my recommendation for municipalities to consider projects that are within their budgets (considering any losses) that would be job creators. Things like road construction projects or the like would be good uses of budget dollars and job creation.

Municipalities that rely on tourism tax should begin taking a stark look at those projects/offices funded through that revenue. It is likely that tourism revenue will remain low at least through 2021, with a slow rebound beginning in 2022. Duluth must make some decisions on what is most important and perhaps shift some funding to keep those services running. If these projects are deemed essential, the city should change the funding source for the future. Projects that are essential to the city should be funded by a more steady, reliable stream of revenue. It should also be considered that any debt that is currently funded through the tourism

tax revenue stream should possibly be funded through other reliable sources in the future. Defaulting on payments should not be an option. Duluth city leadership should take a critical look at the budgeting process and reconsider what is funded through tourism tax revenue.

I believe our “new normal” in the United States should be accompanied with a shift in our overall economic culture. Since we are largely service based, we rely heavily on other countries for most of our industrially produced goods, and our jobs rely heavily on the service industry. As evidenced through the huge job loss during this pandemic, a shift from service-based jobs to industry-based jobs could provide a huge boost. This loss of jobs will have a profound effect on almost all market areas, as Americans are left with less money to spend and uncertainty about job security. As Hasan Minhaj states in a recent episode of *Patriot Act with Hasan Minhaj* “America is made in China” (Minhaj, 2020). This quote is powerful in that it shows that we have sent most of our manufacturing jobs overseas to save money (Minhaj, 2020). In this new normal, we should look to a return to manufacturing in the United States. This is not just to support production of PPE, which is the focus of Minhaj’s discussion, but all goods that can be consumed. The return of production to the United States would be a huge job creator and help our economy to be more stable during an economic downturn. Not only have we lost millions of jobs, most of those jobs are in a service industry that is unsure of when it will be back to full operation. This leaves millions of Americans unsure of when they will be back to work, and if that will happen before their unemployment benefits run out.

It is likely that we will see our new normal taking shape in 2021, with a normalization occurring in 2022. The new normal will be expected to follow the administration of a coronavirus vaccine, and will depend on the willingness of the public to get the vaccine. Our new normal will likely include changes in how we interact with others in the long term, maintaining some form of social distancing, wearing masks, etcetera. Aside from these social aspects, the coronavirus pandemic has also caused an economic downturn that will likely prove to be a depression. An economic depression often takes years to turn around, this will require patience and a crucial reimagining of the American Economy and base. As I have mentioned, our new normal should include a shift in our economic base, ensuring Americans have access to more reliable jobs and the goods that are essential to our safety and perhaps more self-reliance. It is important that the United States learns from PPE shortages, supply chain failures, unprecedented unemployment, etc. to build up our economy and provide some job replacement for those that have been lost. Previous epidemics, terror attacks, and economic downturns have given us a blueprint for how to move forward and we are well on our way to finding the new normal to which we can all become accustomed.

## Bibliography

- Bartik, A., Bertrand, M., Cullen, Z., Glaeser, E., Luca, M., & Stanton, C. (2020). How Are Small Businesses Adjusting to COVID-19? Early Evidence from a Survey. doi: 10.3386/w26989
- Blake, A., & Sinclair, M. T. (2003). Tourism Crisis Management: US Response to September 11. *Annals of Tourism Research*, 30(4), 813–832. doi: 10.1016/S0160-7383(03)00056-2
- Cellini, R., & Cuccia, T. (2015). The economic resilience of tourism industry in Italy: What the 'great recession' data show. *Tourism Management Perspectives*, 16, 346–356. Retrieved from <http://dx.doi.org/10.1016/j.tmp.2015.09.007>
- Chappelow, J. (2020, April 21). The Great Recession Definition. Retrieved June 05, 2020, from <https://www.investopedia.com/terms/g/great-recession.asp>
- Chernick, H., Reimers, C., & Tennant, J. (2014). Tax structure and revenue instability: the Great Recession and the states. *IZA Journal of Labor Policy*, 3(1). doi: 10.1186/2193-9004-3-3
- COVID-19 2020 Budget Implications. (2020, April 27). Retrieved from <http://duluth-mn.legistar.com/gateway.aspx?M=F&ID=b2d1f2df-9ef9-4042-9841-e571e36aa08a.pdf>
- Finance. (n.d.). Retrieved from <https://duluthmn.gov/finance/budget/>
- Galioto, K. (2020, February 6). Duluth rakes in record \$12.4M in tourism revenue. Retrieved from <https://www.startribune.com/duluth-rakes-in-record-12-4m-in-annual-tourism-revenue/567602662/>
- Galioto, K. (2020, June 04). 500 city employees must take unpaid days off as Duluth faces budget shortfall. Retrieved June 05, 2020, from <https://www.startribune.com/500-city-employees-must-take-unpaid-days-off-as-duluth-faces-budget-shortfall/570998532/>
- Kavanagh, A. M., Mason, K. E., Bentley, R. J., Studdert, D. M., Mcvernon, J., Fielding, J. E., ... Lamontagne, A. D. (2012). Leave entitlements, time off work and the household financial impacts of quarantine compliance during an H1N1 outbreak. *BMC Infectious Diseases*, 12(1). doi: 10.1186/1471-2334-12-311
- McConnell, M. (2020, March 21). Text - S.3548 - 116th Congress (2019-2020): CARES Act. Retrieved June 05, 2020, from <https://www.congress.gov/bill/116th-congress/senate-bill/3548/text?q=product+actualizaci%C3%B3n>
- Minhaj, H. (Writer). (2020, June 1). How Coronavirus Broke America [Television series episode]. In *Patriot Act with Hasan Minhaj*. Netflix.
- O'Neill, E. (2018, September 07). Tourist Tax in Europe: Your simple guide - Hostelworld. Retrieved June 05, 2020, from <https://www.hostelworld.com/blog/tourist-tax/>

- Page, S., Song, H., & Wu, D. C. (2011). Assessing the Impacts of the Global Economic Crisis and Swine Flu on Inbound Tourism Demand in the United Kingdom. *Journal of Travel Research*, 51(2), 142–153. doi: 10.1177/0047287511400754
- Palacios, A. (2020, May 21). Spirit Mountain will remain closed for summer season. Retrieved from <https://www.wdio.com/duluth-minnesota-news/spirit-mountain-closing-summer-season-5736106/>
- Rahman, A. (2020, May 27). Duluth Council Approves Spirit Mountain Summer Closure; Extra \$350K Still Needed for Winter Reopening. Retrieved June 05, 2020, from <https://www.fox21online.com/2020/05/26/duluth-council-approves-spirit-mountain-summer-closure-extra-350k-still-needed-for-winter-reopening/>
- Sergo, Z., Grzanic, J., & Cevra, M. S. (2017). The tourism and travel industry and its effect on the Great Recession: A multilevel survival analysis. *Zb. Rad. Ekon. Fak. Rij*, 35(2), 427–458. Retrieved from <https://doi.org/10.18045/zbefri.2017.2.427>
- Tappe, A. (2020, June 05). America's unemployment rate falls to 13.3% as economy posts surprise job gains. Retrieved June 05, 2020, from <https://www.cnn.com/2020/06/05/economy/may-jobs-report-2020-coronavirus/index.html>
- Taylor, D. (2020, February 13). How the Coronavirus Pandemic Unfolded: A Timeline. Retrieved June 05, 2020, from <https://www.nytimes.com/article/coronavirus-timeline.html>
- Ulrich-Schad, J. D., Henly, M., & Safford, T. G. (2013). The Role of Community Assessments, Place, and the Great Recession in the Migration Intentions of Rural Americans. *Rural Sociology*, 78(3), 371–398. doi: 10.1111/ruso.12016
- U.S. Department of the Treasury. (2020, June 03). Retrieved June 05, 2020, from <https://home.treasury.gov/policy-issues/cares>

## **The Restaurant Industry and COVID-19**

By Elvisa Colakhodzic

[The author is a business analyst for a health care institution, and  
a restaurant entrepreneur]

## **Restaurant Industry and COVID-19**

As households are evolving to both parents being in the workforce, there's a drastic change in schedules and demand. Families are looking for more dining options, as they don't have the time or inclination to cook. Aspiring entrepreneurs can definitely grow within the restaurant industry as the restaurant industry can be a very successful industry. Especially considering that food service operations has skyrocketed from 155,000 restaurants about 40 years ago to over 960,000 restaurants now (Entrepreneur Press, 2012). However, as with any industry where there is potential for success, there is also risk associated with it. Which is exactly what the restaurant industry is currently experiencing with the pandemic they are facing.

During past recessions or traumatic events, it has always been that the restaurant industry ends up being hit the hardest. This continues to stand during the pandemic we are currently experiencing novel coronavirus also known as COVID-19. The COVID-19 pandemic has resulted in over 11.3 million confirmed cases worldwide and carrying a death toll of over 533,000 (Coronavirus Cases, 2020). The virus has also sparked fears of impending economic crisis and recession, as social distancing, self-isolation, and travel restrictions have lead to reduced workforce across all economic sectors (Nicola, 2020).

The restaurant industry has sustained one of the heaviest blows from COVID-19. According to Dixon, the restaurant industry started feeling impact of covid-19 in January 2020, before the virus even made its appearance in the United States. As it's believed that the first outbreak of covid-19 occurred in Wuhan, China, throughout the months of January and February some Americans had a xenophobic reaction to the outbreak thus they stopped dining at Chinese restaurants. By March 2020 the covid-19 cases were increasing drastically which then required actions to be taken by each state governing bodies. This paper will discuss the before COVID-19 opening of a restaurant and also changes we may see after COVID-19 and opening of a restaurant. Additionally, a comparison of the similarities and differences in two neighboring states, Minnesota and Wisconsin. In both the states of Minnesota and Wisconsin, Governors Tim Walz of Minnesota and Tony Evers of Wisconsin, ordered on March 17, 2020 that all restaurants and bars close (Summers, 2020). However, the re-opening of these restaurants and timing of the reopening of restaurants varied drastically between the two states.

## **Restaurant Industry before COVID-19**

Starting a business is a very good decision as it can be very successful, however, it can also be stressful, and challenging even for the aspiring entrepreneurs who have been down the path before. There are many financial and legal implications that need to be taken into consideration prior to deciding what type of a business one wants to start, even in the restaurant industry. One of the biggest factors to consider is the type of formation. Entrepreneurs can choose from forming a single proprietorship, a partnership or a corporation.

Additionally, entrepreneurs must follow state specific guidance. Each state may have variances in the food licenses and permits that are required for the opening of a restaurant. These steps involve a lot of paperwork, time and patience. However, with all things considered it's nothing when compared to the pandemic and all of the additional requirements it has placed on the restaurant industry.

## **Restaurant Industry During and After COVID-19**

Not only has the restaurant industry been hit the hardest during the 2020 pandemic, but restaurant owners are faced with several changes that are being made to the regulations for the opening of a restaurant following the outbreak of COVID-19. Some of the challenges the owners are facing end up with the restaurants needing to close permanently. Especially with the news that emerged where the governments have the obligations to close restaurants when an employee of the restaurant test positive for COVID-19 (McCarthy, 2020). Fortunately, these closures are temporary, sometimes lasting days or weeks, requiring the restaurant owners to close and engage in intensive deep-cleaning and potentially revise their health and safety protocols. Several states across the country are currently mandating this policy for restaurants to close following a positive COVID-19 outbreak within their restaurant. However, as of now the states of Minnesota and Wisconsin have not taken these measures, and closures are highly recommended and encouraged but voluntary if an employee tests positive for COVID-19.

## **How Covid-19 Changed the Restaurant Industry**

Business Insider projected that 85% of independent restaurants may go out of business by the end of 2020, according to the Independent Restaurant Coalition (Jiang, 2020). Unfortunately, the independent restaurants comprise nearly 70% of all restaurants and rely

heavily on dine-in revenue than chains (Jiang, 2020). These restaurants also don't have the infrastructure of chain restaurants and don't have corporate safety nets to fall back on or support systems to help them out. Already 3 percent of the restaurants have already permanently closed, and according to a study conducted another 11 percent may be permanently closing within the next 30 days (Maze, 2020). The restaurant industry operates on a weak foundation of thin margins and excessive debts as is. The additional decline in the industry is what will drive many restaurants to permanently close.

Shortly after COVID-19 hit the country and forced restaurants nationwide to close the federal government provided restaurant owners Paycheck Protection Program loans and grants, while this program provided immediate relief for many independent restaurants as many of the bills still continued even if they didn't have any customers and were required to be closed. Restaurant owners appreciate the Paycheck Protection Program, but many feel that it's a temporary band-aid for their long-term problems. Restaurants already seem to operate on razor thin margins, and for restaurants that rely heavily on capacity and sit-down meals these margins are decimated by capacity limits which will likely be in place until a vaccine is found (Jiang, 2020).

For those owners who will continue to fight for their restaurants there are many changes that they will be required to make prior to the re-opening of their doors, and for the near future. Businesses and employers across the country that provide food and beverage for on-site consumption must develop and implement a COVID-19 Business Preparedness Plan. However, this plan differs from state to state, and the states of Minnesota and Wisconsin have had different approaches to the reopening of the restaurant industry.

### **Minnesota Covid-19 Regulations**

In the state of Minnesota each restaurant is to develop and implement a COVID-19 Business Preparedness Plan. This plan must be evaluated, monitored, executed and updated under the supervision of a designed Plan Administrator. Additional key requirements are as follows; ensuring a minimum of 6 feet of distance between tables, limited indoor occupant capacity to no more than 50% up to 250 persons, outdoors spaces not to exceed 250 persons, limiting table service to 6, requiring reservations, and requiring workers to wear masks and encourage customers to wear masks (StaySafeMN, n.d.).



## **Wisconsin Covid-19 Regulations**

With over 15,000 restaurants which employ more than 275,000 workers in the state of Wisconsin, the restaurant industry is considered an essential component of the quality of life that attracts new visitors and residents to the state (Wisconsin Department of Health Services). On May 13, 2020 the Supreme Court struck down the Safer at Home extension via the Emergency Order 28. Although the state of Wisconsin allowed their restaurants to re-open a month earlier than the state of Minnesota, the regulations in the two states remain pretty close to one another. The regulations include but are not limited to employee health and hygiene, cleaning and disinfecting of facility, food and beverage handling and preparation, and social distancing among employees as well as customers.

## **Comparing MN to WI**

Covid-19 forced all restaurants to close in mid-March, this caused for a drastic financial impact on the restaurant industry. Although, most restaurants were able to re-open and offer carry out dining it still wasn't enough of a recovery as consumers are worried about the food preparation process as even food processing plants have been shut down due to COVID-19 exposure within the facilities. Currently the restaurant industry is under strict guidance from each governing state. In order for restaurants to reopen fully they have very specific guidelines that they are required to follow.

The differences in regulations between the two states seems to be mostly relating to the occupancy levels of the restaurants. The state of Wisconsin encourages restaurants to decrease their occupancy levels but not by a specific amount or percentage. While the state of Minnesota has set expectations in regards to capacity for each restaurant depending on their size and if it's indoor or outdoor seating that the restaurants offer.

Minnesota Governor Tim Walz and Wisconsin Governor Tom Evers both closed the restaurants on the same date March 17th, 2020 (Summers, 2020). However, the reopening of the restaurants was drastically different. Especially considering that Wisconsin Supreme Court struck down Governor Tom Evers orders and opened up their restaurants on May 13th, 2020 (Beck, 2020). While Minnesota Governor Tim Walz waited to open up the restaurants until June 10th, 2020 (Summers, 2020). Even with the reopening of the restaurants in Minnesota there were many regulations set for restaurants. Although, the reopening of restaurants was drastically different in the two states, the impacts the states experience in regard to positive

COVID-19 cases wasn't that different. As most studies have suggested the incubation period for COVID-19 is two weeks, looking at the data from the state of Wisconsin that opened almost a month earlier than Minnesota their positive cases were averaging around 400 cases per day. While Minnesota, which only hit the two-week mark last week, the positive cases are averaging around 300 cases.

### **Future Impacts on Restaurant Industry**

As the restaurants have reopened and people returned to dining out, the concern for COVID-19 has not decreased. People are still very cautious with any interactions they may have outside of their home and any contact they may make, especially with any surfaces that they touch which could possibly pass on the virus. Restaurant owners are aware that major changes are coming to the industry and they will need to take all of this into considerations when looking at the impact and solution that COVID-19 will have on the industry. Specific impacts that may result will be an increased interest in outdoor seating and increase desire of contactless experiences. Restaurant owners are required to adjust their flow of service and focusing on outdoor seating and contactless experiences will result in a positive outcome. Additionally, marketing campaigns should emphasize sanitation and sterilization efforts in order to make the customers feel safe and reassured that their health is important, and they can enter the restaurants safely (Laura Smythe, 2020).

### **Outdoor Options**

As restaurants were given the green light for opening, they were also faced with the challenge of outdoor dining options. In the first phase of reopening of the restaurant industry in the state of Minnesota, owners were advised that only outdoor dining options would be allowed. This presented a new challenge to many of the restaurant owners that did not already have outdoor patios. However, owners were given the ok to get creative with their patio furniture and even use their parking lots to offer outdoor seating. The tables are required to be six feet apart, however, this is also an added benefit as this provides the guests more privacy.

Restaurants have seen an increase in interest for outdoor patios. This trend has been around for many years in Europe and is starting to trend in the United States. This option is popular in temperate climates and in the spring, summer and fall months, especially when the weather is beautiful. The style is casual, yet festive and creates almost a party-like atmosphere

as mother nature provides its own ambiance and great views (Shuda,2017). Customers will be drawn to the outdoor seating option as they feel safer eating outside, and it affects their senses and seem to make the food taste fresher (Shuda, 2017). Additionally, by eating outside the risk of spread is as low as it can be, especially when everybody is six feet apart and the wait staff are all wearing masks, according to an Infections Disease Expert Dr. William Schaffner at Vanderbilt University School of Medicine in Nashville, TN (CNN, 2020).

## **Contactless Experiences**

Restaurant owners recognize that the industry has an unprecedented need to try new things, and the available technology will help with trying new things. Contactless experiences are becoming an important tool for managing and exceeding guest expectations. According to a study conducted by the NPD Group in February 2019, restaurants were noting an annual growth rate of 23 percent in digital orders since 2013, and an increase in delivery and takeout (Gentile, 2020). That same study projected that the growth would triple by the end of 2020, and it's clear that the pandemic has helped that growth tremendously. There are several ways that restaurants can offer contact-less experiences such as curbside pickup, delivery and in house end-to-end contactless dining experience.

Offering an end-to-end contactless dining experience is one step owners can take in order to offer in-house services rather than pick-up and delivery. By allowing guests to make reservations online and then seating themselves at their designated table reduces one point of contact. Second step would be allowing the guests to view and place their orders after viewing the complete menu via their personal devices or a sanitized restaurant device. With this service only point of contact will be when the food is delivered to the customers, as payment option will also be accessible via their personal device or restaurant device. Ultimately, the human contact can't be completely taken away but with this type of a service it can be reduced, which reduces the spread of the virus as well. Presto offers a contactless dining kit which will help with implementing such a process, currently they have over tens of thousands of customers all over the country offering various services (Presto, n.d.).

Another popular concept that could possibly grow with this pandemic is ghost kitchens (Gentile, 2020). Ghost kitchens are essentially just establishments that offer no dine-in or walk-in options and only serve as a location to prep and cook food. This is another option restaurant owners have with contactless experiences. This option would be very beneficial as it would decrease rent costs associated with dine-in restaurants and also help with the shift towards

delivery services. An additional service that flows with the ghost kitchen and is becoming popular during the pandemic is contact-less delivery, and with moving towards online or mobile ordering this option is very much feasible. Contact-less delivery is a service in which the customer will have no human contact, as their order is placed either via a telephone call or online order and the order is delivered and dropped off, typically at their front doors. Immediately upon drop off the customer is notified of the delivery, thus providing a contact-less experience for the customer.

### **Conclusion**

There are numerous policy implications that have risen from the COVID-19 pandemic and a lot of time and resources will be devoted to unpacking what we can learn from the crisis. At this early stage of the pandemic, as we haven't even entered the post-pandemic stage a few observations can be made with respect to the restaurant industry. Based on the research it's evident that the restaurant industry has been hit the hardest from the COVID-19 pandemic. Not only did the restaurant industry suffer during the pandemic but will also experience some of the biggest changes and challenges once the country is in post pandemic times. For aspiring entrepreneurs who are interested in investing in the restaurants industry, the biggest take away is that following the pandemic the restaurant industry will require a significant amount of resources, when compared to other industries and guidelines. Additionally, entrepreneurs that are interested in the advancing technology and trying new things can easily use it to grow their restaurant.

## References

- 13 Things That Could Change for Restaurants After COVID-19. (n.d.). Retrieved from <https://www.qsrmagazine.com/outside-insights/13-things-could-change-restaurants-after-covid-19>
- Adapting Post-COVID: What's Changing For Restaurants?: Modern Restaurant Management: The Business of Eating & Restaurant Management News. (2020, May 11). Retrieved June 14, 2020, from <https://modernrestaurantmanagement.com/adapting-post-covid-whats-changing-for-restaurants/>
- Cnn. (2020, July 02). Indoor vs. outside dining: Which restaurant tables are safer? Retrieved July 05, 2020, from <https://kesq.com/entertainment/2020/07/02/indoor-vs-outside-dining-which-restaurant-tables-are-safer/>
- Contactless Dining Kit. (n.d.). Retrieved July 05, 2020, from <https://presto.com/lp/contactless/>
- Coronavirus Cases:. (n.d.). Retrieved July 05, 2020, from <https://www.worldometers.info/coronavirus/>
- COVID-19 Historical Data Table. (n.d.). Retrieved June 29, 2020, from <https://data.dhsgis.wi.gov/datasets/covid-19-historical-data-table/data?page=7>
- Dixon, V. (2020, March 24). By the Numbers: COVID-19's Devastating Effect on the Restaurant Industry. Retrieved June 01, 2020, from <https://www.eater.com/2020/3/24/21184301/restaurant-industry-data-impact-covid-19-coronavirus>
- Ehrhardt, M. & Brigham, E. (2020). Corporate finance: A focused approach, 7th edition. Mason, OH: Cengage Learning.

- Gentile, A. (2020, April 01). How COVID-19 is Changing the Restaurant Industry. Retrieved June 29, 2020, from <https://www.fsrmagazine.com/expert-takes/how-covid-19-changing-restaurant-industry>
- Hobbs, J. E. (2020). Food supply chains during the COVID-19 pandemic. *Canadian Journal of Agricultural Economics/Revue Canadienne D'agroeconomie*. doi:10.1111/cjag.12237
- How to reopen your restaurant safely after COVID-19: Womply. (2020, May 12). Retrieved from <https://www.womply.com/blog/how-to-reopen-your-restaurant-safely-after-covid-19/>
- Jiang, I. (2020, June 14). 85% of independent restaurants may go out of business by the end of 2020, according to the Independent Restaurant Coalition. Retrieved June 29, 2020, from <https://www.businessinsider.com/85-of-independent-restaurants-could-permanently-close-in-2020-report-2020-6>
- Laura Smythe, P. (2020, April 11). How the coronavirus pandemic could impact the future of Philly's food economy. Retrieved July 05, 2020, from <https://why.org/articles/how-the-coronavirus-pandemic-could-impact-the-future-of-phillys-food-economy/>
- Malbec, T. (n.d.). Restaurant Business Model Changes in a Post COVID-19 World. Retrieved from <https://hospitalitytech.com/restaurant-business-model-changes-post-covid-19-world>
- Maze, J. (2020, March 27). A lot of restaurants are already permanently closed. Retrieved June 25, 2020, from <https://www.restaurantbusinessonline.com/financing/lot-restaurants-are-already-permanently-closed>
- Nicola, M., Alsafi, Z., Sohrabi, C., & Kerwan, A. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19). Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7162753/>

Restaurant Bar Industry Guidance (n.d.). Retrieved from [https://mn.gov/deed/assets/restaurant-bar-industry-guidance-ACC\\_tcm1045-432897.pdf](https://mn.gov/deed/assets/restaurant-bar-industry-guidance-ACC_tcm1045-432897.pdf)

Shuda, D. (2017, March 15). Pros And Cons Of Al Fresco Dining. Retrieved July 05, 2020, from <https://restaurantengine.com/pros-and-cons-of-alfresco-dining/>

Situation Update for COVID-19. (n.d.). Retrieved June 29, 2020, from <https://www.health.state.mn.us/diseases/coronavirus/situation.html>

Summers, J. (2020, March 17). Minnesota's Governor Orders All Bars and Restaurants to Close as Gathering Places. Retrieved June 25, 2020, from <https://twincities.eater.com/2020/3/17/21183222/all-minnesota-bars-restaurants-ordered-closed-governor-tim-walz>

Welcome, Wisconsin Restaurants. (n.d.). Retrieved June 22, 2020, from <https://www.wirerestaurant.org/>