

# **MITIGATING RISK AMIDST CATASTROPHIC EVENTS: A FOCUS ON SHAREHOLDER AND OPERATING AGREEMENTS**

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## **ABSTRACT**

*Risk management has traditionally encompassed the systematic identification, analysis, strategy and response to a myriad of factors that impact the sustainability of a business. Effective risk management strategies attempt to foresee and manipulate future outcomes by proactively, rather than reactively, addressing variables that may adversely impact the profitability of an organization. Responses to possible risks necessitate the creation of contingencies that outline the execution of pre-determined action plans that would be triggered if the anticipated risks were, in fact, to arise. This paper provides a discussion of risk reduction techniques which can mitigate catastrophic macro risk events such as the COVID-19 pandemic.*

**JEL:** K10, K12, K15, K19, M20

**KEYWORDS:** Risk Management, COVID-19, Business Liability

## **INTRODUCTION**

**A**t different times in history, society has faced financial, banking and health challenges. Earlier health crises, such as 2016 Ebola, 2002 SARS and the 1918 Spanish influenza, affected markets and forced the introduction of new risk control mechanisms. Financial crises such as the 2008 housing bubble, the European Sovereign Debt Crisis, and the 2015 Chinese Stock Market Crash, forced strategic risk management changes. Risk management during and after the Covid-19 pandemic will change too (Martinez Arroyo et al., 2020).

The Covid-19 pandemic forced industries and firms to confront the reality of impacts related to long-term restrictions and shut-downs of businesses. These events were mostly unforeseeable through any reasonable forecast attempting to predict future risks based on history. These impacts affected most firms and industries regardless of how effective an organization was in identifying potential risk factors that could adversely impact a business.

According to the International Monetary Fund (2020), the global economy will have lost approximately \$9 trillion (IMF 2020) due to Covid-19. Contrary to natural disasters such earthquakes, tsunamis, or hurricanes, where risk is transferred to the insurance industry, or a federally funded organization such FEMA, there exists a limited supply of private insurance to deal with financial impacts of a pandemic (Hartwig, Neihaus and Qiu, 2020). Hartwig, Neihaus and Qiu, (2020) argue the private insurance market has failed to bring alternatives for risk transferring products. Indeed, even measuring the magnitude and evaluating the performance of nations to control Covid-19 risk present challenges. Chang and McAleer (2020) and McAleer (2020) develop a measure to evaluate the performance of nations, finding that rapid response and detection and reporting largely impact the performance of nations in responding to the Covid-19 pandemic.

Unfortunately for firms, and insurance companies, these national responses are not within their control and thereby introduce additional uncertainties.

Small Businesses are not exempt from the impact of global health crises like Covid-19. Sraders and Lambert (2020) estimate that approximately 100,000 small businesses will close because of the current pandemic. Liguori and Pittz (2020) present a number of strategies for small business survival. They underscore the importance of exercising resilience, willingness to change, and an organizational culture open to recognizing opportunity and the need to shift strategy.

One year into the Covid-19 pandemic, we observe entire industries, rather than specific services, being avoided. Noteworthy industries affected include manufacturing, travel and leisure, oil and gas, retail, entertainment and higher education. It would be difficult, if not impossible, to have foreseen the risks of a pandemic. Prior to the pandemic some industry sectors had for decades, and even centuries, been successful and thrived in cultures around the world. However, a number of these industries and sectors experienced devastating business losses associated with the pandemic.

This paper extends the extant literature by providing a primer in risk management with special emphasis on applications to the Covid-19 pandemic. The remainder of the paper is organized as follows: In the next section we discuss the existing literature and commonly used risk control measures. Next, we discuss the role of shareholder agreements to mitigate risk. The paper closes with concluding comments.

## LITERATURE AND BACKGROUND

Responses to business risks utilizing traditional risk management principles include one or more of the following: Avoidance, mitigation, transfer, and acceptance. We structure this section around these four principles. Businesses manage risk formally by acquiring insurance coverage or informally by personally accepting risk. Thus, risk management involves considering safety, potential for profit and/or losses, and corporate reputation. Companies, then, set scenarios or alternatives and constraints, often referred as risk criteria, risk acceptance criteria, and tolerability criteria, to simplify judgements. Risk acceptance has, in recent years, been under scrutiny as some argue risk acceptance is not in the best interest of society and as such it should be regulated (Aven, 2016, Aven, 2011; Aven and Abrahamsen, 2007).

Risk avoidance occurs where a business seeks to eliminate the possibility of a risk altogether through the discontinuation of activities associated with the specific risk identified. A business chooses to eliminate a hazard or activity that, if they are adversely impacted by that activity, would lead to a decline in profit or increased exposure to liability. This often occurs when an organization decides to discontinue offering a service that produces especially high liability exposure thereby making the firm vulnerable to loss. For example, a construction contractor may opt to exclude asbestos removal as part of their proposal for a renovation due to potential liability from employees and clients. Instead, they specifically state that it is not part of the services included in their bid.

To avoid the risk associated with Covid-19, companies of all sizes have changed work schedules, locations, and technology. Some businesses require employees to work from home thereby avoiding the risk of Covid-19 exposure in the workplace. Businesses rely heavily on IT and broadband services to continue providing customer services, sales, tech support, etc. (Weil and Murugesan, 2020). The educational system has been transformed in a very short period of time from in-person to virtual or online education (Madani, 2020). Event organizers moved events from in-person events to hybrid or virtual (Murphy, 2020)

Risk mitigation, also known as optimizing risk, occurs when an organization seeks to reduce potential losses due to an activity they are engaged in and wish to remain in. In risk mitigation, businesses seek to limit the impact of a risk such that, if a problem occurs, it will be managed to reduce the impact. Waterer et al.

(2020) offers some insights to business on how to mitigate risk during the Covid-19 pandemic. They indicate that businesses must review their potential exposures, policy coverage, supply chain implications, and create a revised plan of action.

Many examples of risk mitigation around the Covid-19 pandemic exist. Mask wearing, social distancing, avoiding crowded, avoiding poorly ventilated areas, and washing your hands are all considered cornerstone to Covid-19 risk mitigation (CDC, 2020). However, more drastic measures have been necessitated in some industries. Restaurant owners, for example, explored various alternatives to traditional sales channels amidst the Covid-19 crisis including the expansion of outdoor dining, concentrating on food delivery, curbside pick-up, and selling food packaged as groceries, rather than closing their operations altogether. Retailers who closed their brick-and-mortar stores amidst the Covid-19 crisis re-designed and upgraded their websites to expand e-commerce sales, turned social media platforms into sales channels, sold goods on Amazon, Etsy and other e-retail sites, and added delivery options to mitigate risk. Professionals such as attorneys, accountants, and mental health professionals utilized video conferencing platforms like Zoom to stay engaged with clients. Other businesses deemed ‘essential’ developed risk mitigating plans including taking temperatures of employees and customers, changing the layouts of businesses to enable social distancing, and limiting foot traffic.

Risk transfer constitutes the underlying tenet of insurance coverage. Risk is offset and shifted from the insured to the insurer, as a voluntary arrangement between two parties and a mechanism to reduce or limit the potential liability of the insured. The insured safeguards itself from the implications of financial risk and future contingencies. The insurance company accepts strictly defined financial risks from the insured. If a worker is injured, the insurance company accepts the risk. If a building is destroyed due to fire, flood, or other natural disaster, the insurance company funds the replacement.

Business Interruption coverage has been available to firms for many years. This insurance covers the loss of income a business suffers after a disaster. The income loss covered may be due to the disaster-related closing of the business facility, and / or due to the rebuilding process after a disaster or the loss of income directly resulting from the disaster. Richter & Thomas (2020) examine risk management for insurers and the potential for business insurability due to Covid-19. Specifically, they posit that prospects for substantial loss accumulation and external moral hazard due to public policy decisions complicate business Covid-19 insurability. They argue that business interruption due to Covid-19 may not be an insurable risk. They later offer solutions to mitigate the future impact of pandemics.

The Covid-19 pandemic offers a case study in application of business interruption insurance. Does coverage extend to the Covid-19 pandemic? Most business interruption policies contain five conditions that a claim must meet to be successful: “physical damage, to insured property, caused by a covered peril, resulting in quantifiable business interruption loss, during the period of time it takes to restore the damaged property.” Nevins and Lewins (2020). How these five conditions are interpreted directly impacts how recoverable a business interruption claim is. Nevins and Lewins (2020) find claim payouts depend on the language use in the insurance policy terms and conditions and it is uncommon for insurers to honor business disruption claims due to human infection illnesses.

Indeed, due to government ordered shutdowns amidst Covid-19, judges dismissed more than four times as many business-interruption lawsuits as they have allowed to proceed in the first half of 2020, though the trend began to shift towards the end of 2020. Some insured have successfully been compensated by their insurers due to Covid-19 shutdowns. Lloyd’s of London predicted that the insurance industry could face at least \$100 billion in total underwriting losses from the pandemic (Feeley and Chiglinsky, 2020). Williams Walsh (2020) investigated if business interruption coverage covers businesses temporary closures or disruption due the current pandemic. Walsh finds that insurers are refusing to payout claims due to the pandemic. This has forced thousands of business owners to sue insurance companies. Business owners have

business interruption coverage that commonly covers closures due to “viruses, bacterium, illness or diseases.”

Alternative risk transfer falls under the risk transfer category but occurs when traditional insurance coverage is waived or unavailable. In these instances, the risk of liability is accepted by the client. Examples include a construction contract in a 3<sup>rd</sup> world country where there is political unrest. In such a scenario, the materials necessary for the project may be difficult to transport and face a significant likelihood of delays in arriving to the work site resulting in difficulty predicting completion dates for contractors. The cost for transport of such materials, along with the acceptance of loosely defined deadlines for project completion, will often need to be accepted by the client. Contractors should hesitate to accept such highly likely pitfalls that would adversely impact their profitability. Currently, the same issues can be applied to other manufacturing and retailer contracts since a pandemic is now clearly foreseeable.

Risk acceptance, also known as risk retention, occurs when a business recognizes and identifies a potential risk, but acknowledges that exposure and assumes the risk. This commonly occurs when a company believes that, should an adverse event occur, it would not be detrimental to the company. Moreover, the potential loss is not significant enough to justify taking action to eliminate the risk or investing the resources necessary to avoid it. In other instances, businesses may identify the risk as being so unlikely or so small that it should not be prioritized in planning or budgeting. In these instances, businesses simply opt to accept the risk rather than taking steps to hedge, indemnify or avoid it.

Businesses seek to strike a balance between potential costs of remediating a risk if it were to arise versus the expense of preventative measures to avoid it altogether in relation to the statistical likelihood of it even occurring. Examples of such risks might include, but are not limited to, potential legal liabilities, natural disasters, work stoppages, increased competition, economic downturns, credit risk and pandemics. Maintaining smaller inventories, agreeing to shorter lease terms of real property, clarifying whether pandemics and government shutdowns are covered by insurance, investing in IT to expand on work-from-home protocols, expanding customer access options to goods and services, diversifying supply chains, and leasing rather than buying equipment are just some of the considerations that may become more prevalent and be more attractive to a business that accepts such risk.

Due to the unprecedented stress on business survival across the globe, the Covid-19 pandemic has caused businesses to react to a previously unforeseen variable that has crippled profitability for many organizations. Firms have been challenged by multiple factors including restrictions on the number of patrons permitted to enter their establishment, limitations on hours of operation, and even government mandated lockdowns where little or no business can be transacted. Other limitations range from general contractor’s limitations on the number of crew members permitted to work on a job site, to restaurants being limited to as little as 0% indoor capacity or outdoor-only seating, to appointment-only entry into retailers with extreme limitations on the number of entrants permitted at any one time. Profitability is often no longer the goal. Instead, the goal becomes outlasting the pandemic by operating in a cost-effective manner and approaching break-even.

## **SHAREHOLDER AGREEMENTS**

In the last four decades, the number of pass-through businesses tripled. This expansion can be attributed at least in part to the advent of limited liability companies. Over 50 percent of the labor force works for pass-through companies. In addition, sole proprietorships, S-corporations, LLC’s and closely held businesses make over 60 percent of net business income in the U.S. Investorships represent approximately 8 percent of all pass-through-taxation companies (Pomerleau, 2015).

Companies often use investors to bring in new capabilities, access new markets, access new intellectual property, expand infrastructure, and to reduce risk. However, investor shareholders also bring management challenges, including investors' differences on what the main objectives for their relationship are, poor communication, weak governance, and the inability to identify and change when faced with rapid market or economics changes (De Backer and Rinaudo, 2019).

As the pandemic continued from its beginnings in 2020, and persists into 2021, many business owners seek to mitigate their risk of survival by offsetting the potential losses involved with business failure. They sometimes do this by offering shareholder interest to key employees and investors. Owners see the possibility for a lifeline and injection of capital, along with a way to transfer a portion of their risk if their business does not survive the pandemic.

A Shareholder Agreement is the legal tool that outlines the terms under which two or more parties agree to work together for their mutual interest and the prosperity of an organization. Such agreements designate the rights and responsibilities of each investor or entity involved, and how various anticipated risk factors will be addressed if they were to arise. If structured thoughtfully, they outline various scenarios and how these scenarios will be handled in a manner that effectuates outcomes with as little disruption or discord to the business or shareholder relationship as is possible. In essence, they encompass several areas of Risk Management. They seek to anticipate issues so that investors and a business can avoid, mitigate, transfer or accept potential foreseeable risks.

This contract that binds investors or shareholders should identify the potential risks within the particular industry of the organization and address these risks within the document, as well as clearly delineated buy-in and sale of interests ("Buy-Sell Agreement"). Regardless of industry, certain factors should be evaluated and addressed in a Buy-Sell Agreement. Tables 1 and 2 show twenty-five factors that should be negotiated, clarified, and integrated by potential investors or shareholders prior to executing such an important legal document for closely held organizations. Table 1 shows factors related to firm formation and finance. Table 2 shows operational and end-of-arrangement factors.

A business relationship is much like a personal relationship. The parties involved need to have clearly communicated understandings. In business, those understandings should be in writing and integrate the factors outlined here as well as industry specific issues. Risk managers should assess these agreements annually as business circumstances change. It should be noted that agreements do not need to be uniform across all investors. Different investors or shareholders can have varying terms incorporated into their agreements.

'What happens if' scenarios should be spelled out. Agreements should specify what happens if something happens to an investor or shareholder, if there is a dispute between them, and if there is a change in the dynamic of their relationship. Each person that is part of the agreement needs to have clearly outlined "what happens if" scenarios and solutions. These agreements help reduce animosity, clarify understanding, and avoid disputes. These contractual agreements are an effective way to assure the business relationship, as well as the personal relationship between the parties, survive and thrive.

Table 1: Formation and Financial Factors of Shareholder Agreements

<b>Formation Factors</b>
1. Incorporation status of the organization <ul style="list-style-type: none"> <li>i. to limit personal liability of shareholders.</li> </ul>
2. Value of good will of business prior to adding members <ul style="list-style-type: none"> <li>i. if bringing in a shareholder, how will original owners' efforts be valued?</li> </ul>
3. Capital contribution and percentage of ownership <ul style="list-style-type: none"> <li>i. how much equity will each investor or shareholder contribute?</li> <li>ii. what will the percentages of ownership and voting rights be?</li> </ul>
4. Copyright, trademark of intellectual property <ul style="list-style-type: none"> <li>i. ownership of business name? Logo? Systems? Client lists?</li> </ul>
<b>Finance Factors</b>
5. Personal guarantees <ul style="list-style-type: none"> <li>i. will individual investors be personally liable?</li> </ul>
6. Additional capital if necessary; dividend reinvestment <ul style="list-style-type: none"> <li>i. if additional equity is needed, where will it be drawn from?</li> <li>ii. when and how will profits be distributed?</li> </ul>
7. Asset allocation and property contributions <ul style="list-style-type: none"> <li>i. how will ownership of assets be allocated?</li> <li>ii. what if investors contribute or use their own assets to further the business?</li> </ul>
8- Debt <ul style="list-style-type: none"> <li>i. how will debt of the business prior to adding investors be handled?</li> <li>ii. how will new debt be accounted for? Based on percentages of ownership?</li> <li>iii. limits on credit / credit cards (per investor)?</li> </ul>
9. Bank account access <ul style="list-style-type: none"> <li>i. will individual investors be permitted to withdraw from accounts?</li> </ul>
10. Profit and loss; salaries; distributions; reinvestment <ul style="list-style-type: none"> <li>i. the more specific and clearer the handling and allocation of finances, the less likelihood of disputes.</li> </ul>
11. Financing; loans; capital investment <ul style="list-style-type: none"> <li>i. will unanimous consent be required?</li> </ul>
12. Accounting and audit of books <ul style="list-style-type: none"> <li>i. independent audits permitted by investors or shareholders?</li> </ul>
13. Valuation of business for estate tax purposes <ul style="list-style-type: none"> <li>i. the agreement can fix the value of a decedent's business interest.</li> </ul>

*This table shows factors that should be considered related to organization and financial issues related to shareholder agreements. (Ghinger III, 1975), (Crush, 2016)*

Table 2: Operational and End of Arrangement Factors of Shareholder Agreements

<b>Operations Factors</b>
14. Workload, job descriptions and duties of operational investors <ul style="list-style-type: none"> <li>i. the more specific and clearer the expectations, the less likelihood of disputes;</li> <li>ii. how will performance expectations be evaluated?</li> </ul>
15. Decision making <ul style="list-style-type: none"> <li>i. who decides on personnel, improvements, maintenance, business strategy, etc.;</li> <li>ii. is unanimous consent required or will each be allocated to a particular investor?</li> <li>iii. can agreements be updated or revised?</li> </ul>
16. Discounts for family and friends <ul style="list-style-type: none"> <li>i. outline in advance to avoid resentment and abuse.</li> </ul>
17. Non-competition provision <ul style="list-style-type: none"> <li>i. can a investor or shareholder start another business? Have another job? Invest in a similar business?</li> <li>ii. such provisions must be reasonable in duration and distance, and usually require legal consideration to be enforceable.</li> </ul>
18. Admission of new investors / termination of operational investors <ul style="list-style-type: none"> <li>i. will unanimous consent be required?</li> </ul>
19. Vacation, scheduling of operational investors <ul style="list-style-type: none"> <li>i. how will these be decided?</li> <li>ii. even rotation?</li> </ul>
<b>End of Investor / Shareholder Agreement Factors</b>
20. Conduct <ul style="list-style-type: none"> <li>i. actions of an investor or shareholder that may cause the immediate termination of the relationship (ex. Ethics / Morals clause in an agreement to address if a investor brings the business into public scorn due to their own actions, social media comments, or other personal decisions that reflect poorly on the business).</li> </ul>
21. Dissolution and continuity of business <ul style="list-style-type: none"> <li>i. at-will relationship of minority operational investor?</li> <li>ii. how will business move forward if shareholder wishes to redeem their stock?</li> </ul>
22. Transition of business interest <ul style="list-style-type: none"> <li>i. identifying triggering events that specify to whom or to what a business interest shall be sold (ex. death, disability, sale to 3<sup>rd</sup> party, divorce, bankruptcy, retirement, termination for cause);</li> <li>ii. outline a mechanism to determine the purchase price of that interest;</li> <li>iii. right of first refusal by other investors or shareholders or by the entity itself is important to retain;</li> <li>iv. may the majority investors or shareholders force minority investors or shareholders to sell their stock if a 3<sup>rd</sup> party offers to buy the business (“Drag along clause”)?</li> </ul>
23. Business valuation <ul style="list-style-type: none"> <li>i. should be done annually for tax purposes;</li> <li>ii. if a investor or shareholder leaves, how will shares be valued for a buyout?</li> <li>iii. how will goodwill be measured?</li> <li>iv. a formula can be decided upon in advance and included in the agreement.</li> </ul>
24. Retirement, death, disability <ul style="list-style-type: none"> <li>i. anticipating and planning for these avoids many pitfalls and disputes;</li> <li>ii. consider the purchase of life insurance on the owner’s life.</li> </ul>
25. Arbitration; mediation; governing law <ul style="list-style-type: none"> <li>i. select now to minimize costs related to dispute resolution in the future;</li> <li>ii. mediation and arbitration clauses help expedite resolutions to disputes and also tend to reduce costs for all parties involved in disputes.</li> </ul>

*This table shows issues that should be considered related to operational and end-of-agreement issues in shareholder agreements. (Harris, 1992), (Farber, n.d.)*

We encourage businesses to examine their firm and business environment for predictable and non-predictable risks. They should identify optimal strategies to mitigate risks or consciously choose to accept the risk. When appropriate carefully drafted shareholder agreements offer another mechanism in the arsenal of risk management tools.

## CONCLUSION

This article provides a primer on how effective risk management strategies attempt to foresee and manipulate future outcomes by proactively, rather than reactively, addressing variables that may adversely impact the profitability of an organization. Responses to possible risks necessitate the creation of contingencies that outline the execution of pre-determined action plans that would be triggered if the anticipated risks were, in fact, to arise. The Covid-19 pandemic has greatly impacted traditional risk management strategies in that long-term restrictions and shut-downs were mostly unforeseeable and have forced businesses into an uncharted landscape. Applying traditional risk management principles, which include avoidance, mitigation, transfer, and acceptance, help mitigate risk. In addition, many majority businesses owners have responded to the additional pandemic-related risks by recruiting shareholders and investors to reduce majority ownership percentages (partially transferring risk) and to have capital injected into the business to mitigate risk and help to ensure survival.

Future research and publication on this topic will be necessary to provide more clarity on the impact of adding shareholders and/or diluting ownership interest amidst a crisis. Candidates for future research include assessing business valuation during times of crisis, business preparedness to adjust to government mandated closures, and reductions on operations to offset anticipated losses in revenue. Future changes in insurance coverage might countervail (or further the impact of) such a crisis and return on investment for those that opted in as investors during a pandemic that threatened so many different industries and exposed these investors to significant risk.

## REFERENCES

Aven T., Abrahamsen E.B. (2007) "On the Use of Cost-benefit Analysis in ALARP Processes," *International Journal of Performability Engineering*, 3 (2007), pp. 345-353

Aven T. (2011) "On Different Types of Uncertainties in the Context of the Precautionary Principle," *Risk Analysis*, 31 (10) (2011), pp. 1515-1525

Aven, T. (2016) "Risk Assessment and Risk Management: Review of Recent Advances on their Foundation," *European Journal of Operational Research*, 253(1), pp. 1-13

CDC, 2020. *How to Protect Yourself and Others*. Received from <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

Chang, C-L. and McAleer, M. J. (2020), "Alternative Global Health Security Indexes for Risk Analysis of COVID-19," *International Journal of Environmental Research and Public Health*, Vol. 17(9) p. 1-18

Crush, M. (2016). "Corporate Shareholders' Agreements and LLC Operating Agreements," New York State Bar Association. Retrieved from: <https://nysba.org/NYSBA/Coursebooks/Fall%202016%20Coursebooks/REPRESENTING%20THE%20S TARTUP%20VENTURE%202016/2aCrush.pdf>

De Backer, R. and Rinaudo E. K. (2019, March) "Improving the Management of Complex Business Partnerships. McKinsey & Company." Retrieved from <https://www.mckinsey.com/business->



functions/strategy-and-corporate-finance/our-insights/improving-the-management-of-complex-business-partnerships

Farber, B.M. (date is not available). "Drafting Effective Shareholder and Operating Agreements for the Closely-Held Business and Pitfalls that May Arise for Estates in the Absence of Such Agreements," New York State Bar Association. Retrieved from:

<https://nysba.org/NYSBA/Meetings%20Department/Section%20Meetings/Trusts%20and%20Estates/TRUSFA17Materials/01%20Drafting%20Effective%20Shareholder%20.pdf>

Feeley, J. and K. Chiglinsky, (2020) "Insurers Winning Most, But Not All, COVID-19 Business Interruption Lawsuits," *Insurance Journal*, November 30. Online article. Accessed January 13, 2021 at: <https://www.insurancejournal.com/news/national/2020/11/30/592047.htm>

Ghingher, J. J. III (1975) "Shareholders' Agreements for Closely Held Corporations: Special Tools for Special Circumstances," *University of Baltimore Law Review*: Vol. 4(2), Article 3. Retrieved from: <http://scholarworks.law.ubalt.edu/ublrvol4/iss2/3>

Hartwig, R., Niehaus, G. and Qiu, J. (2020). "Insurance for Economic Losses Caused by Pandemics," *The Geneva Risk Insurance Review*. 47(2), p. 75-79.

Harris, Morton A. (1992). "Buy-Sell Agreements for the Family Owned Business: Practical Considerations and Planning Opportunities," William & Mary Tax Conference, College of William & Mary Law School. Retrieved from:

<https://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1337&context=tax>

International Monetary Fund (2020) "The Great Lockdown: Worst Economic Downturn Since the Great Depression," <https://blogs.imf.org/2020/04/14/the-great-lockdown-worst-economic-downturn->

Liguori, E. W. and Pittz, T. P. (2020) "Strategies for Small Business: Surviving and Thriving in the Era of COVID-19," *Journal of the International Council for Small Business*, 1(2), 106-110, DOI: 10.1080/26437015.2020.1779538. <https://doi.org/10.1080/26437015.2020.1779538>

Madani, D. (2020 November) "Schools Increasingly Return to Online Learning as Covid-19 Spikes Across the U.S. *NBC*," Retrieved from <https://www.nbcnews.com/news/us-news/schools-increasingly-return-online-learning-covid-19-spikes-across-u-n1247301>

Martinez Arroyo, J., Chiapolino, M., Freiman, M., Gabruashvili, I., and Pancaldi, L. (2020) "A Fast-track Risk-management Transformation to Counter the COVID-19 Crisis." Retrieved from <https://www.mckinsey.com/business-functions/risk/our-insights/a-fast-track-risk-management-transformation-to-counter-the-covid-19-crisis#>

McAlear (2020) "Prevention Is Better Than the Cure: Risk Management of COVID-19," *Journal of Risk and Financial Management*. 13(3), 46. Retrieved from <https://doi.org/10.3390/jrfm13030046>

Murphy, C (2020, May) "The Future of Conference: Will Events Remain Virtual after Lockdowns?," *USA Today*. Retrieved from <https://www.usatoday.com/story/tech/2020/05/09/conferences-events-remain-virtual-after-covid-19/5172896002/>

Nevins, J. E. and Lewin, R. (2020). "Will Business Interruption Insurance Provide Coverage for Coronavirus Losses?," *The CPA Journal*, Web Exclusive version. Retrieved from

<https://www.cpajournal.com/2020/04/29/will-business-interruption-insurance-provide-coverage-for-coronavirus-losses/>

Pomerleau, K. (2015) “An Overview of Pass-through Businesses in the United States,” *Tax Foundation*, Retrieved from <https://taxfoundation.org/overview-pass-through-businesses-united-states/>

Richter, A., Wilson, T.C. (2020) “Covid-19: Implications for Insurer Risk Management and the Insurability of Pandemic Risk,” *Geneva Risk Insurance Review* 45, 171–199, <https://doi.org/10.1057/s10713-020-00054-z>

Sraders, A. and Lambert, L. (2020, September) “Nearly 100,000 Establishments that Temporarily Shut Down Due to the Pandemic are Now Out of Business,” *Fortune*. Retrieved from <https://fortune.com/2020/09/28/covid-buisnesses-shut-down-closed/>

Waterer, R., Leideritz, D., Foster, G., Dalton, J. and Cusack, R. (2020) “COVID-19 Risk Management: 5 key questions your organization needs to answer,” Retrieved from <file:///C:/Users/MJ/Dropbox/Peter%20Harris%20Paper%20COVID/lit%20rev/Managing-And-Mitigating-Risk-COVID-19.pdf>

Weil T, Murugesan S. (2020), “IT Risk and Resilience-Cybersecurity Response to COVID-19,” *IT Professional*. V22(3), p 12-18.

Williams Walsh, M. (2020, August), “Businesses Thought They Were Covered for the Pandemic. Insurers Say No,” *The New York Times*. Retrieved from <https://www.nytimes.com/2020/08/05/business/business-interruption-insurance-pandemic.html>

## BIOGRAPHY

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