All business endeavors share one homogenous challenge: adapting to the emerging conditions of the marketplace. This central tenant has never been more palpable than in the age of COVID-19. The novel viral pathogen shuttered storefronts, dwindled consumer spending behavior, and left supply chains in shambles. Adapting to these changes presents as a stark challenge, experienced by commercial operations across a myriad of different markets. Few industries, however, have been negatively impacted as hard as the higher education sector. Already facing troublesome fiscal constraints resulting from dwindling funding sources and irresponsible budgetary action, the institutions in higher education are not observing the expected return to normalcy previously forecasted. With enrollment rates continuing to decline across the country, institutions in higher education are facing an accelerated path towards financial collapse. Critical analysis of the fiscal constraints experienced by higher education exposes the budgetary imbalances plaguing the industry, while elucidating opportunities to restore profitability and sustainability in the age of COVID-19.

Threats to sustainability plagued the higher education system well before COVID-19 entered the limelight. The impending fiscal collapse is multifaceted. Foremost, higher education has presented as a vulnerable target for state budget cuts for the past several decades. Following the economic downturn in 1990, state funding for higher education fell by 12% per student. After the 2001 recession, funding was slashed an additional fifteen percent from its pre-recession peak. Finally, at the conclusion of the Great Recession of 2008, state funding for higher education was

slashed by an average of 25% across the country (Aborn, 2020). State budgetary cuts impose harsh consequences on higher education operations. On average, state and local government revenue provide 53% of total educational revenue, inherently utilized to support instruction, operations and infrastructure (Olif, et al., 2013). This proves especially problematic when coupled with the poorly managed budgets exemplified across higher education.

Budgetary cuts at the state and local level present as one central detriment to profitability and sustainability in the higher education sector. However, a lack of funding is not the sole barrier to a balanced budget. Higher education is a heavily subsidized industry, even in this state of diminished direct funding. In turn, these institutions have displayed irresponsible and unsubstantiated increases in costs of operations. Since 1985, the average cost of attending college or university in the United States increased 497%. Since 2017, these costs have increased 28% (U.S. Department of Education, 2021). Shockingly, a negligible portion of these cost increases are related to actual instruction. Between 2002 and 2006, spending per student on instruction actually declined (Newfield, 2009). Between the 2007 and 2012 term, instructional staff grew 6% on average, while enrollment grew by 12%, suggesting increases in instructional staffing do not mirror increases in enrollment (Oliff, et al., 2013). The costs of higher education have grown as a direct result of increased administrative expenses, rather than an increase in instructional staff. Contemporary analysis suggests administrative costs account for 24% of total expenditures across higher education institutions (Simon, 2017). In 2008, 23 presidents received more than one million dollars in compensation. Likewise, in the same year, there were more than twice as many administrative staff

than tenured and tenure-tracked faculty across all institutions (Rahman, 2015). Bloating in administrative expenditures has significantly hampered higher education's ability to cultivate balanced budgets and sustained profitability. The effects are palpable. In 2018, prior to the COVID-19 pandemic, pundits suggested that half of the 4,000 colleges and universities across the country would face bankruptcy in the next decade as a result of inappropriate expenditures (Friedman & Friedman, 2018). Institutions in higher education attempted to postpone this reality, delineating fiscal imbalances to the consumer with marked increases in tuition. However, when external factors restrict demand while further elevating the costs of operation, these costs cannot be offset by increases in tuition.

The higher education industry was facing impending collapse prior to the COVID-19 pandemic. In 2012, educational institutions' long-term debt was increasing at an average rate of 12% per year (Rahman, 2015). The adopted model proved unsustainable, as educational institutions across the country were headed towards fiscal collapse. When coupled with novel external factors affecting consumer demand and operational expenses, this trajectory was accelerated. Foremost, the novel COVID-19 pandemic imposed a wide array of consequences on the operation costs of institutions in higher education. Colleges and universities were charged with maintaining the health and safety of their students in the face of a highly transmissible viral pathogen. These institutions were required to provide personal protective equipment, develop infrastructure for access to rapid testing, and cultivate methods to achieve contact tracing. Reports from North Carolina University's Chapel Hill campus stated the institution spent 1.65 million dollars on personal protective equipment for faculty,

students and staff in 2020. Likewise, North Carolina State University reported roughly five million dollars in expenditures related to safe operations on campus. Moreover, East Carolina reported 41,100 dollars spent on testing, 212,000 dollars spent on masks, and 30,000 dollars spent on housing for quarantined students (Whitford, 2020). However, this phenomenon is not restricted to state sponsored school in North Carolina. National estimates project roughly 24 billion dollars have been spent on enhancing public health measures at colleges and universities coast to coast (Friga, 2021). Under dire fiscal constraints, such an increase on global expenditures would prove damning to any commercial endeavor. However, increases in costs of operation was not the only effect purveyed by the COVID-19 pandemic.

The COVID-19 pandemic cultivated significant fear within the average consumer, requiring institutions to erect protective measures for their students. However, despite costly investments, a significant portion of potential consumers have refrained from enrollment in higher education. In the fall of 2020, college enrollment declined by 2.5%, resulting in a loss of roughly 400,000 students across the country (Amour, 2020). Current estimates suggest this decrease in enrollment cost educational institutions roughly 85 billion dollars in revenue, significantly impairing profitability and sustainability (Friga, 2021). These institutions forecasted enrollment would return to normalcy after the novelty of the pandemic subsided and instruction returned to the classroom setting. However, this did not prove to be the case. In the fall of 2021, enrollment dropped an additional 2.6%, resulting in continued losses across the industry (National Student Clearing House Research Center, 2021). Public polling suggests comprehensive reform is necessary to revive a faltering industry.

The higher education industry, previously burdened with excessive expenditures, now faces demand insufficiencies. Public polling revealed roughly 25% of students postponed college enrollment fall term of 2021, with a significant portion of respondents suggesting this postponement was indefinite or permanent. Concerningly for the higher education industry, these students report high costs as a stronger deterrent than the pandemic itself (Dickler, 2021). Decades of irresponsible budgetary practices cultivated a cost point that finally purveyed an influence on demand. With fiscal collapse impending for a significant portion of institutions, comprehensive executive level strategic modifications are necessary to revive the industry and foster sustainability. Critical analysis of purposed practices elucidates opportunities to avoid fiscal collapse, while enhancing educational outcomes for the consumer.

Executive level decisions, altering strategic goals and planning, are the only recourse for higher education. Significant rectification to the current model is necessary. This begins with restoring aspects of previous models to profitability. At the emergence of higher education, costs were heavily subsidized by state and local governments. This was beneficial to all parties involved, as graduates are significantly more likely to gain employment in proximity to their alma mater, purveying tax revenue to the state and local governments. Moreover, an increase in state funding from the 25<sup>th</sup> to the 75<sup>th</sup> percentile results in a 3% increase in enrollment (Deming & Walters, 2018). In turn, higher educations must lobby for increased funding from state and local governments, as it directly benefits all parties involved. However, returning to a reliance on public funding cultivates the vulnerabilities readily observable in contemporary models. In turn, additional executive level interventions are necessary.

Elevated lobbying efforts are a justified, but insufficient measure to enhance sustainability. In turn, privatization, commercialization and industry partnerships are a necessary intervention to enhance revenue. Privatization is centered upon selfsustainability. For example, the University of Virginia's Law and Business School achieved self-sustainability in 2004, utilizing student tuition and student work partnerships to cover all related expenses of the program. However, this approach is not sufficient alone, as it requires student's tuition to cover the majority of associated expenses. As aforementioned, tuition rates are a significant detriment. In turn, these work partnerships must me coupled with industry collaboration. In 1990, 79% of all universities with engineering programs received private funding from related industries to investigate areas of interest. However, by 2000, industry funding only increased by 4%. In turn, more aggressive attempts are necessary to enhance funding stemming from private interests. Nonetheless, this methodology cultivates shortcomings as well. Industry sponsorships investigate narrow areas of interest, hindering the flow of information and skewing research agendas towards corporate interests. In turn, commercialization must also be entertained. In 1980, the Bayh-Dole Act was passed, allowing colleges and universities to claim ownership to patent inventions, even when formed with the use of federal research funding. However, between 1993 and 2002, the number of patents issued to academic institution increased but just two and half times, with 66% of these patents doled to just thirteen universities (Zusman, 2005). The higher education industry must engage in research with purpose, developing novel technologies that purvey direct value for the institution itself. If the institutions educational outcomes are not profitable, they are not beneficial to the institution, and

the education is not beneficial to the student. To enhance profitability and sustainability, higher education institutions must engage in a concerted effort to enter private work partnerships, collaborate with leaders in industry, and develop profitable patents for commercial use. Nonetheless, this paradigm shift will prove insufficient in saving the higher education industry alone.

Increased sources of revenue are an inherent component of elevated profitability across any commercial sector. However, elevated revenue is insufficient in an industry that has displayed unchecked and unwarranted increases in spending. Reductions in operational expenses are necessary as well, especially considering the increased expenses associated with operations in the era of COVID-19. This certainly must begin with rectification of administrative bloat. In 2008, Domino's Pizza adopted a revolutionary marketing strategy. The take-out pizza giant released a marketing campaign, accepting responsibility for the production of low-quality pizza in an effort to revitalize its saving brand. Corporate executives admitted they valued profitability over quality and experienced a resurgence after rectifying their strategic goals (Berfield, 2017). Administrators in higher education must mirror this paradigm. Administrators have observed an exorbitant increase in salary, despite no observable improvements in institutional profitability, sustainability, or educational services purveyed. Administrators must recognize the errors adopted in greed and appropriate the average salary across the country to past market standards. Furthermore, these cuts must be marketed appropriately, informing consumers that their tuition dollars are now dedicated to areas that directly affect their educational outcomes. Rectification in employee structure,

however, does not end here. Revitalization must continue into the design of the curricula offered.

Department structure has significantly contributed to administrative bloat. Management of several departments within an education institution requires several provosts to oversee operations. Past paradigms suggested expansive departments were attractive to students. However, this attractiveness has been counteracted by the growing expenses required to maintain this diversity. Fewer departments results in fewer departmental offices, fewer provosts, and fewer secretaries. Departments must be consolidated to cultivate a lean operation (Friedman & Friedman, 2018). Simultaneously, these institutions must control ancillary services. In an effort to attract potential students, institutions have begun offering a wide array of ancillary services. Despite current infrastructure existing in the majority of locales inhabited by colleges and universities, these institutions have felt the responsibility to offer health services on campus. Student health centers and psychological support are routinely offered, despite overwhelming access to these services in the local community. As a result, ancillary services accrue roughly three thousand dollars in expenses per student (Georgetown University, 2018). A reduction in ancillary services, department heterogenicity, and administrative salaries will significantly reduce expenditures and promote sustainability within higher education institutions. Paralleling suggestions for ancillary services, further outsourcing will promote fiscal responsibility for the higher education industry.

Outsourcing tasks to specialized providers proves cost effective in most commercial settings. Some colleges and universities have already realized the potential savings and have adopted this methodology. However, this approach proves rare.

Adopting outsourced operations for residential dorms, employment training, and hospitality services, such as janitorial responsibilities, exercise provisions, and food services, would significantly reduce costs. When adopting previously aforementioned recommendations to engage in industry collaboration, these services can utilize shared-use facilities with local enterprises, further reducing costs (Zusman, 2005). Outsourcing is readily accessible across multiple domains within higher education. However, some elements, such as instruction, simply cannot be outsourced, as they are inherent to the institution's competitive advantage and allure. Nonetheless, opportunity for revision remains.

The COVID-19 pandemic ushered in the advent of online instruction. Online classes and virtual meeting ascended as a primary component of educational instruction as the risks of COVID-19 were circumvented. Astonishingly, a novel environment and learning medium proved equally effective for the college and university student. A systematic review of contemporary literature revealed college age students performed equally as effectively on testing measures when instructed in person in comparison to online mediums (Yokoyama, 2019). A transference to online instruction would allow for elevated student to teacher ratios and a reduction in physical classroom requirements, enhancing profitability while reducing associated expenditures. While COVID-19 conveyed an array of difficult challenges, the pandemic elucidated novel teaching methods that improve profitability without hindering learning outcomes. While not appropriate for every domain, such as laboratory instruction, implementations such as these would prove beneficial for the long-term success of educational instructions.

The higher education industry has operated in a state of financial recklessness for decades. Despite continued decreases in state and federal funding, the industry doled out excessive salaries to administrative positions. In the face of dwindling enrollment, higher education institutions expanded their departments and costly ancillary services. This paradigm is unsustainable and requires revision from executive leaders. As a significant component to dysfunction, these leaders must acknowledge their own compensation is a direct contributor to fiscal instability and revise their disproportionate salaries. However, rectification must not cease here. The higher education industry must engage in privatization, commercialization, and industry collaboration. Moreover, these institutions must outsource services whenever appropriate, and adopt online instruction as a profitable and effective means to educate the consumer. With comprehensive executive level strategic planning, the higher education industry can reduce tuition expenses, attract more consumers, and avoid an impending industry-wide collapse.

## Works Cited

- Aborn, M. (2020). Higher Education Funding takes a hit during recessions. but it doesn't have to. Bipartisan Policy Center. Retrieved December 1, 2021, from https://bipartisanpolicy.org/blog/higher-education-funding-takes-a-hit-during-recessions-but-it-doesnt-have-to/#:~:text=Following%20the%201990%20downturn%2C%20state,aftermath%20 of%20the%20Great%20Recession.
- Amour. (2020). Final fall enrollment numbers show Pandemic's full impact. Final fall enrollment numbers show pandemic's full impact. Retrieved December 1, 2021, from https://www.insidehighered.com/news/2020/12/17/final-fall-enrollment-numbers-show-pandemics-full-impact.
- Berfield. (2017). *Dominos Atoned for Its Crimes*. Bloomberg.com. Retrieved December 1, 2021, from https://www.bloomberg.com/features/2017-dominos-pizza-empire/.
- Deming, D. J., & Walters, C. R. (2018). The impact of state budget cuts on US postsecondary attainment. *Unpublished paper, Harvard University*.
- Dickler, J. (2021, April 16). 25% of students postponed college during Covid, some indefinitely. CNBC. Retrieved December 1, 2021, from https://www.cnbc.com/2021/04/16/college-enrollment-sank-due-to-the-covid-pandemic.html.

- Friedman, H. H. & Friedman, L. W. (2018). Does growing the number of academic departments improve the quality of higher education? Psychosociological Issues in Human Resource Management, 6(1), April, 96-114.
- Friga, P. N. (2021, September 20). *Advice: How much has covid cost colleges? \$183 billion*. The Chronicle of Higher Education. Retrieved December 1, 2021, from https://www.chronicle.com/article/how-to-fight-covids-financial-crush?bc nonce=x3dndsjiwalllhj3g37p&cid=reg wall signup.
- Georgetown University. (2018, November 7). *Unpacking the expense of American Higher Education*. THE FEED. Retrieved December 1, 2021, from https://feed.georgetown.edu/access-affordability/unpacking-the-expense-of-american-higher-education/.
- National Student Clearing House Research Center . (2021, November 18). *Covid-19:*Stay informed. National Student Clearinghouse Research Center. Retrieved

  December 1, 2021, from https://nscresearchcenter.org/stay-informed/.
- Oliff, P., Palacios, V., Johnson, I., & Leachman, M. (2013). Recent deep state higher education cuts may harm students and the economy for years to come. *Center on Budget and Policy Priorities*, 19, 1-21.
- Newfield, C. (2009). Ending the budget wars: Funding the humanities during a crisis in higher education. *Profession*, 270-284.
- Rahman, M. (2015). Approaches to managing costs in American higher education. *Journal of Knowledge Globalization*, 8(1), 1-34.

- Simon, C. (2017, September 5). *Bureaucrats and buildings: The case for why college is so expensive*. Forbes. Retrieved December 1, 2021, from https://www.forbes.com/sites/carolinesimon/2017/09/05/bureaucrats-and-buildings-the-case-for-why-college-is-so-expensive/?sh=745ebcd5456a.
- U.S. Department of Education, National Center for Education Statistics. (2021). *Digest of Education Statistics*, 2019 (NCES 2021-009), Chapter 3.
- Whitford, E. (2020). *Trying to curb covid-19 on campus is expensive, whether colleges'* plans work or not. Trying to curb COVID-19 on campus is expensive, whether colleges' plans work or not. Retrieved December 1, 2021, from https://www.insidehighered.com/news/2020/10/09/trying-curb-covid-19-campus-expensive-whether-colleges-plans-work-or-not.
- Yokoyama, S. (2019). Academic self-efficacy and academic performance in online learning: A mini review. *Frontiers in psychology*, *9*, 2794.
- Zusman, A. (2005). Challenges facing higher education in the twenty-first century. American higher education in the twenty-first century: Social, political, and economic challenges, 2, 115-160.