Sports Leagues and Organizations’ Financial Recovery from the COVID-19 Pandemic

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Abstract

The COVID-19 pandemic in 2020 caused a global shutdown that immediately stopped all revenue of hosting sporting events for sports leagues. This resulted in a financial struggle for these leagues and organizations that they had to work to overcome. Using public access to financial statements and records, this report examines the financial impact of the COVID-19 pandemic on sports leagues and organizations and how they were able to recover in the years following the pandemic.

Sports Leagues and Organizations' Financial Recovery from the COVID-19 Pandemic

Financial markets indicated consumers moving their investments from risky assets to less risky assets in the wake of the pandemic (Wójcik & Ioannou, 2020). The stock market-wide losses caused a circuit-breaker on the NYSE on March 9th, 2020. The United States dollar was appreciating after travel restrictions were placed on European travelers to the United States, but it declined and leveled out by the end of March 2020 (Wójcik & Ioannou, 2020). By March 15th, the US Central Bank opened liquidity swaps and cut interest rates. In May, the US government announced their stimulus package for Americans. Every stock market index had a decline upwards of 33% between February and April (Wójcik & Ioannou, 2020). The COVID-19 pandemic resulted in financial distress for people around the world, as reported by Fox and Bartholomae (2020). In their study, some financial planners reported that they felt more like counselors with some of their clients rather than advisors (Fox and Bartholomae, 2020). The first major sports league to suspend play was Serie A in Italy (Hammerschidt et al., 2021). Italy's Prime Minister required for all sports activity to be ceased on March 9th, 2020, causing Serie A to cease football operation (*Annual review of…*, 2020). This was followed within a matter of days by the other "big five" football leagues in Europe, LaLiga, Ligue 1, Premier League, and Bundesliga suspending their operations for approximately 3 months.

On March 11th, 2020, Utah Jazz center Rudy Gobert became the first professional athlete in America to test positive for COVID-19. In the following days, every major North American sports league discontinued their seasons and put everything on hold (*Coronavirus impact on…*, 2020). The National Collegiate Athletics Association suspended all sporting events after many conferences had already backed themselves out of tournaments and other events. Most notably, the Men's Division I college basketball championship tournament was cancelled, and spring sport athletes were extended an extra year of eligibility. As the week of March 15th, 2020, continued, nearly every sporting event in the world had been cancelled, paused, or postponed, including the 2020 Summer Olympic games that were going to be held in Tokyo, Japan. As of April 2020, 26% of people believed that live sports would begin again in August or September of 2020 (Jocelyn & Biagi, 2023). For many fans this was the case as many sports began before or during those months in 2020.

This report is used to analyze the effects of the COVID-19 pandemic on sports leagues around the world and how those leagues were able to recover from their unpredicted financial problems. In Europe, the five major football leagues, Bundesliga, Premier League, LaLiga, Serie A, and Ligue 1. four major North American sports leagues, the National Football League, National Basketball Association, Major League Baseball, and National Hockey League, as well as the National Collegiate Athletics Association. In the rest of the world, the 2020 Tokyo Summer Olympics, the Australian Football League, the National Rugby League (Australia and New Zealand), Formula 1, IndyCar, and NASCAR.

Effects of COVID-19 Around the World

Europe

In Europe, before the onset of the pandemic, broadcasting and commercial revenues made up 86% of total revenues while the other 14% came from matches the five major football leagues (*Annual review of…*, 2020). Once the leagues faced the shutdown, that revenue was no longer available. Without fans in attendance, the atmosphere in the stadiums on matchday was lacking. New football clubs struggled to connect with their fans, and tenured clubs struggled to maintain the same connection with their fans. Deloitte projected a strong loss of revenue in 2019-2020 followed by a strong recovery in 2020-2021. This projection comes from their football finance review of 2020 and shows football in England suffering through revenues 1 billion euros below the year prior in 2020 with major losses in Spain, Italy, France, and Germany (*Annual review of…,* 2020). In total, the total European football market fell by 13% in 2019-2020 while the Premier League had a loss of revenue for the first time in its history (*Annual review of…*, 2021). Daumann et al. (2020), in their study on the economic impact of COVID-19 on professional soccer, highlighted the fact that there were no fans in attendance during the pandemic. There was no stadium atmosphere anymore and the players and coaches were under strict surveillance on the field of play (Daumann et al., 2020). This affects the marketability of games as having large crowds makes a game more interesting to a viewer. Professional soccer clubs have had to be dependent on each other during this crisis, but they have also realized they are dependent on their spectators (Daumann et al., 2020). Daumann et al. (2020) found that players and coaches were forced to adapt their behavior and that home teams did not have an advantage of playing in their home stadium as much anymore due to the lack of fan atmosphere in the stadium. Daumann et al. also brought up the point that fans are as much a part of the production process of soccer matches as they are sources of revenue for ticket sales and such. Many clubs were forced to resort to revenue sharing between them to keep themselves from insolvency. In these European football leagues, clubs spend to maximize winning, with the underlying, yet important goal of avoiding relegation (Hammerschmidt et al., 2021). While facing the potential for financial hardship through heavy spending, clubs spend on improving their player-base to stay in the top leagues. When a team is relegated, this has a large negative influence on a club’s finances (Hammerschmidt et al., 2021). Football clubs enhanced their relationships with external stakeholders during the pandemic to support each other. Many clubs were able to raise support from fans through donations and options for fans to not repay for their already purchased tickets

(Hammerschmidt et al., 2021). A major economic factor for sports organizations is the nature of their sponsorships. If a sponsoring company is cyclical in nature, their support for the organizations may waver throughout the year. Hammerschmidt et al. (2021) discussed the need for an anchored sponsor who could provide support in the hard times of the pandemic. Every team in each league has an interest in keeping each of their competing teams from becoming insolvent as in a situation where teams were forced to discontinue operations, the league's marketability would be affected (Daumann et al., 2020).

Many sports organizations found alternatives for their stadiums and other resources while they were not being used for sports events. In Europe, the organization Common Goal used football stadiums to create healthcare facilities for those affected by COVID-19 (*Annual review of…,* n.d.). Many stadiums and facilities were used across North America as testing and vaccination centers to fight off the spread of COVID-19 while the stadiums were not in use by the teams themselves. For example, the Maryland National Guard set up testing centers in tailgating parking lots at FedEx Field in Maryland. Similarly, the Miami Dolphins and Hard Rock Stadium held a drive-thru testing center in the parking lot. The United Center, home of the Chicago Blackhawks and Chicago Bulls, was used as a food storage center in response to the pandemic (ESPN, n.d.).

North America

In 2020, it was projected that the North American sports industry would produce $75 billion, but instead it suffered a significant loss due to the suspensions of COVID-19 (Britton, 2021).

National Football League

The National Football League (NFL) was in a bit of a different stage of their season than other North American leagues when the pandemic began in March 2020. The NFL had finished up the 2019-2020 season with the Super Bowl in February 2020 and their annual combine was held in Indianapolis in March 2020 (Wilmer, 2021). In August of 2020, in preparation for the new season, teams were faced with the decisions of whether to allow fans to be in attendance for the games. The Miami Dolphins was the first team to announce that they would allow fans to be in attendance during the 2020-2021 season (Wilner, 2021). The NFL's 2020-2021 season kicked off at its regularly scheduled date in Kansas City where there was a restricted crowd in attendance. Many teams were forced to shift their schedule due to the quarantine protocols in the NFL that affected many games during the season. But, by November 2020, 19 of the 32 NFL teams were playing their home games with fans in the stands (Wilner, 2021).

In the National Football League, Bulle et al. (2022) conducted a study to address the public health implications of allowing fans to be in attendance for their games during the 2020 season (Bulle et al., 2022). During the 2020 season, it was most common that fans in attendance at NFL games were required to wear masks and socially distance themselves with multiple other processes throughout the game, including entry, concessions, and questionnaires. The study found unremarkable results in the discrepancy between counties of stadiums where fans were allowed to attend versus stadiums where fans were not allowed to attend (Bulle et al. 2022).

National Basketball Association

After the postponement of the 2019-2020 season, the National Basketball Association (NBA) devised a plan to create a bubble for the NBA Playoffs to occur (Beer, 2020). The location for the bubble was Walt Disney World in Orlando, Florida which the NBA spent $180 million to operate. According to Beer, author of *NBA's Bubble Prevented $1.5 Billion in Losses*, the $180 million investment in the bubble allowed the NBA to avoid $1.5 billion in lost revenue (Beer, 2020). The NBA was able to salvage much of its lost revenues due to standing television contracts with national and local networks, as well as league sponsorships. The NBA was able to host 172 games in the bubble and they were able to close out the 2019-2020 season. The NBA was able to successfully hold 172 games by capitalizing on the 100% negative test rate for the duration of their time at Walt Disney World (Beer, 2020).

Major League Baseball

On March 12, 2020, Major League Baseball (MLB) announced that all spring training games would be cancelled and that the start of the 2020 regular season would be delayed (Perry, 2020). Later in that same week, the MLB announced that they were hoping to be able to start the 2020 regular season in May and were looking to play a full regular season. The MLB had discussed the potential of hosting a bubble for their players in Arizona where all the teams would participate in the regular season at a site there, but that plan fell through (Perry, 2020). To save money, the MLB decided to limit signing bonuses of non-drafted players for 2020 as they prepared for a season starting in July. The season did not start in July and the Toronto Blue Jays were unable to play in their home stadium due to the Canadian COVID-19 policies in place, thus resulting in the Blue Jays playing the 2020 season in Buffalo, NY. In 2020, the MLB played a shortened 60-game season, down from the normal 162-game schedule (Perry, 2020). The season started on July 23, 2020, with plans for an expanded pool of teams for the 2020 playoffs.

The Atlanta Braves of Major League Baseball are owned by Liberty Media Corporation, a public company that reports to the SEC. In Liberty Media's 2020 10-k, they discuss much of the uncertainty that was surrounding their ability to bring fans back into their stadium and how government regulation would affect how they proceeded (*Form 10-k*, 2021). Braves Holdings, the indirect owner of the Atlanta Braves had $151 million of cash on hand. Major League Baseball was reduced to a 60-game season versus their usual 162-game season.

National Hockey League

The National Hockey League was nearing the end of the 2019-2020 season when they were forced to shut down due to the COVID-19 pandemic. The NHL implemented a multiple-phase return-to-play plan that resulted in the 2019-2020 playoffs beginning on August 1st, 2020 (NHLPR, 2021). The National Hockey League resumed the 2019-2020 season in two different cities for the 2020 playoffs: Edmonton, AB, and Toronto, ON (Schram, 2020). The players, coaches, and staff were all categorized and were limited in the contact that they could have with those in different categories. In general, the NHL implemented policies to make sure that workers from outside the bubble had minimal contact with players and coaches (Schram, 2020). Players and coaches were forced to follow strict restrictions and were unable to see their families for their time in their respective bubbles. The NHL hosted 130 games with over 33,000 COVID tests coming back negative (Birnbaum, 2020). The NHL used and expanded playoff and a flat salary cap for 2020-2021 to help fight the losses that they were facing due to the postponement of the 2019-2020 season. The league was facing projected losses of up to $1 billion had the bubble not taken place, and because of the success experienced in the bubble, the NHL Playoffs netted some of their losses back.

National Collegiate Athletic Association

Stanford University made statements that as part of running their 36 varsity-level sports teams, they could not keep up financially. Stanford's economic deficit was exacerbated by the deficits from the pandemic (Kim & Close, 2020). The financial strain of the pandemic led to the elimination of 20 support staff positions as well as 11 sports programs being cut (University, 2020). Stanford attempted to acquire funding through alternatives such as ticket sales, philanthropic funding, and budget reductions, but it was deemed that the financial strain was too much. The decision came as a sacrifice of the 11 sports that were cut to allow the other 25 sports to continue to compete at a high level of collegiate sport. Across the country, many universities were forced to make sports program cuts. The University of Cincinnati announced on April 14, 2020, that their men's soccer program would not be continued (University of Cincinnati Athletics, 2020). Another example of this is Old Dominion University, who on April 2, 2020, announced that they would be discontinuing their wrestling program (Old Dominion University, 2020).

World

2020 Tokyo Summer Olympics

One of the major sporting events effected by the COVID-19 outbreak was the 2020 Summer Olympics that were going to be held in Tokyo, Japan. The games were delayed until the summer of 2021 due to the uncertainty cause by the pandemic outbreak in March of 2020. With athletes, staff, media, and more workers being forced to quarantine and take extra measures to keep the spread of the virus to a minimum, the 2020 Olympic games were like no other (Majumdar, 2021). The atmosphere of the Olympic games was drastically different as broadcasters attempted to capture the moments in the games without any fans being in attendance. Media interactions with athletes were much different as to keep the athletes who were competing from getting sick.

Australian Football League and National Rugby League

The Australian Football League (AFL) and the National Rugby League (NRL) both were paused in March of 2020 and started back up in May of the same year (Pederson et al., 2020). Both leagues suffered from vast revenue loss while there was no revenue from spectators at the matches. The AFL was forced to make major financial changes to help them stay afloat during the pandemic. Many employees of the AFL stayed on their workforce but were not able to complete any work to be paid (Pederson et al., 2020). Along with other employees, the players and other staff felt the effects as well. Players were forced to lessen their pay and some workers were let go. One team in the NRL, the Brisbane Broncos, capitalized on the postponement of the season through creating a strong social media presence for their fans. The Broncos were able to use old footage of games from their beginnings as a team to engage the fans into interacting with their social media posts (Pederson et al., 2020). An AFL team, the Brisbane Lions, created a social media series showcasing their players lives at home during the lockdowns. These were great strategies to keep the fans interested and engaged with the team throughout a time where the fans had no interaction with the team at their matches (Pederson, et al., 2020). Both the AFL and NRL worked heavily on their marketing to keep fans engaged for when they started the sport back up and fans would be able to attend games again.

Racing

eSports has had significant growth before and throughout the pandemic (Mz, 2020). The gaming industry was reportedly valued at $160 billion in 2020 and the eSport market valued over $1 billion. This rise in eSport interest around the world lead to the idea for racing leagues to move to virtual events. Thus, NASCAR, IndyCar, and Formula 1 all began hosting their own simulation racing events to replace the real-life events that had to be postponed or cancelled (Tudor, 2020, Mz, 2020).

For many racing organizations around the world, the racing season was within days of beginning before the pandemic halted their efforts (Tudor, 2020). Formula 1, the Australian Grand Prix, and IndyCar all were forced to cancel or postpone their first races of the season following the outbreak of COVID-19. Both Formula 1 and IndyCar innovated to produce the Virtual Grand Prix for viewers to experience racing on the virtual stage, rather than the drivers physically being on the track (Tudor, 2020). This Grand Prix not only included the professional Formula 1 drivers, but celebrities and eSport professionals also participated (Leporati, 2020). In the wake of the COVID-19 pandemic, NASCAR also began virtual racing. iRacing, a simulation racing platform, was used for NASCAR's virtual races resulting in major growth of the racing platform. The use of virtual races allowed for NASCAR viewership to achieve a near-full recovery while the lockdowns were still present (Mz, 2020). NASCAR's first pro invitational had the largest viewership of any eSport event prior to it with an audience on Fox Sports of over 900,000 viewers (Mz, 2020). On May 27, 2020, the Federation Internationale de l'Automobile announced a budget cap that would be implemented amongst the Formula 1 teams for the next 4 years of racing (ESPN Internet ventures, 2020). In 2022, the budget cap moved from $145 million for each team down to $140 million, and the following years leading up to 2025 will be drawn back to $135 million. The Federation Internationale de l'Automobile had claimed that the sport of Formula 1 racing was financially unsustainable and that the budget moves were in efforts to ensure proper competition in the sport and to please fans who would ultimately bring in more revenues.

Financial Recovery from Pandemic Losses

Europe

As Deloitte had projected in their *Annual Review of Football Finance 2020*, each of the "big five" football leagues in Europe had a decline of total revenues with their loss being about %11 (*Annual review of…*, 2021). The Premier League's revenue fell from 5.2 billion euros to 4.5 billion, while the Bundesliga had the least financial effect from the pandemic during 2019/2020. The Bundesliga's seemingly successful response to the pandemic as compared to the other leagues is due to revenue recognition timing of broadcasting revenues, which lead to the Bundesliga becoming the second highest revenue generating league behind the Premier League. Two of the "big five" leagues had some of their losses offset by commercial agreements that were put in place before the pandemic started. Overall, Deloitte projected in their annual review of 2021 that 2022 would have a major rebound for the football clubs in Europe (*Annual review of…*, 2021). Increasing wage costs had a significant impact on football clubs at the highest level of European football. Despite the football clubs' comfortability prior to the pandemic, they have found themselves needing to sell player's contracts to acquire new players. One of the prime examples of this was with FC Barcelona of LaLiga not being able to acquire new players due to the constrictive wage caps in LaLiga. As a result, FC Barcelona was unable to pay their best player, and arguably the best player in the world, Lionel Messi as he would later sign to Paris Saint-German in Ligue 1, France's top league. To gain a major advantage over each league in Europe, the richest clubs in each country attempted to break-off into a European Super League, which failed after only a few days. In an analysis of the impact of the pandemic on football clubs in five European championships, Catana et al. (2020) discussed the problem of acquiring new players in European football. The financial problem that was most evident that clubs had run into was that they were less willing to invest more money into acquiring new players (Catana et al., 2020). This can impact other areas of the club's finance as well. If clubs are not willing to acquire the newest or best players due to financing troubles, then the demand for their play will drop. Also, fans will have less reason to be interested in seeing new players (Catana et al., 2020). Traditional management styles became much less effective due to the unique effects of COVID-19, which forces managers to adapt and become much more flexible.

There were some positive effects from the pandemic, which did not outweigh the negative effects, but were a light in a dark time. European leagues had high levels of interest from investors because of the financial positions of each league (*Annual review of…*, 2021). Many of these investment proposals, namely to the Bundesliga and LaLiga, were for stake of commercial rights in each league from private equity firms. Another positive for the "big five" football leagues was their quick response and adjustment to allow football to continue. The first league to resume play was the Bundesliga on May 16, 2020, only 2 months after the initial shutdown. A study done in Spain found that risk-taking and innovation had increased substantially among sports organizations following the COVID-19 outbreak (Escamilla-Fajardo et al., 2020). With much uncertainty surrounding the pandemic and how it may affect football matches across Europe, the leagues took the risk of starting play again in the 3 to 5 months following the initial suspension, which lead to all-time high broadcast audiences (*A review of…*, 2021). In 2021, Deloitte projected that entering the 2021-2022 season, there would be better financial stability among the clubs affected and that the wage issue would be under control.

Deloitte produced their *Annual Review of Football Finance 2022* under the title of "A new dawn" signifying the breakthrough post-COVID-19 for European football (*Annual review of…*, 2022). This report indicated that during the 2020-2021 season, clubs had to face very low matchday revenues due to fans not being allowed in the stadiums, and portions of broadcast revenues for some of the "big five" leagues was recognized during this season. Unfortunately, European football leagues still have not recovered as 4 out of the 5 major European leagues had operating losses for the season. European football market size has yet to recover to where it was pre-COVID-19 and is still 1.3 billion euros behind 2018-2019 (*Annual review of…*, 2022). The pandemic has resulted in a new dynamic within European football that has not been seen before: the Premier League is far more successful than the competition more than it has been before. The Premier League's operating profits increased by 430 million euros from the 2021 season to the 2022 season. The outlook is positive as the "big five" leagues move forward. Deloitte projects that the recovery from the pandemic in the upcoming season will result in a record-level of aggregate revenue with the Premier League still reigning over the other European leagues (*Annual review of…*, 2022). In similar fashion to the Premier League, LaLiga is expected to experience an increase in revenues. Bundesliga projects that their revenue levels of 2021-2022 will remain at a similar level to 2020-2021, while Serie A and Ligue 1 are expected to struggle while still having revenues below their pre-pandemic levels (*Annual review of…*, 2022).

North America

National Football League

The NFL's average franchise value had a major increase of almost $1 billion between 2021 and 2022 (Jocelyn et al., 2023). The average franchise value continued its positive trend throughout the pandemic. Total revenue of all NFL teams saw a dip in 2020 but recovered to a point above what had been earned in 2019 pre-pandemic. The NFL's total attendance has also recovered to numbers better than before the pandemic in 2021 (Jocelyn et al. 2023). Average viewership of the NFL's mainstay programs, Sunday Night Football on NBC and Monday Night Football on ESPN, had increased viewership in 2021 as opposed to 2020. Both occurrences contributed to the gain in revenues that the NFL experienced following the COVID-impaired season.

With the decline in attendance in the NFL during the 2020 NFL season, revenue was significantly lower than 2019 (Jocelyn et al., 2023). The correlation is clear between attendance and revenues and the affect that lowered attendance can have on the league's revenue. Operating income and revenues have been on a steady positive trend of growth until the season was affected by the COVID-19 pandemic. Interestingly, the payout to NFL teams from media rights did not waver throughout the pandemic as it continued its upward trend (Jocelyn et al., 2023). In the same way, league and team sponsorship revenue did not waver despite the restrictions placed on fan attendance.

National Basketball Association

The average value of a National Basketball Association franchise has risen tremendously since the pandemic paused the 2019-2020 season (Gough, 2023). In 2020, the average franchise value was $2.123 billion and in 2022 the average value was $2.863 billion. The NBA experienced total league revenue decrease consistently between 2018-2019 to 2020-2021 and then league revenue increased to be more than what it was in 2018-2019. Average operating income of NBA franchises followed the same pattern with a significant jump from $24.61 million in 2020-2021 up to $90.8 million in 2021-2022 (Gough, 2023). Average viewership of NBA games has remained constant over the past three years, only experiencing a mild decrease in 2020-2021. Total attendance for the NBA returned to normal attendance numbers in 2021-2022 based on the previous decade of attendance data. The NBA was able to continue increasing the salary cap throughout the pandemic, except for a salary cap freeze between 2019-2020 and 2020-2021 (Gough, 2023).

There is an observable correlation between the total attendance in the 2019-2020 and 2020-2021 season and the total league revenue (Gough, 2023). Sponsorship revenue in the NBA did not waver throughout the pandemic, demonstrating how attendance at NBA games has such a large effect on total revenues. Without fans in attendance, revenue from ticket sales and in-stadium purchases from fans were non-existent while fans were not allowed to attend games. As fans were allowed to return to games, revenue recovered back to its growth from the year prior to the pandemic (Gough, 2023). Throughout the 2019-2020 season, the NBA's average franchise value surpassed the average of Major League Baseball franchises, moving the NBA into the second highest average behind the National Football League in North America (Gough, 2023).

Major League Baseball

Major League Baseball has been experiencing a slow negative trend in their total attendance since 2012 and their attendance did not recover in 2022 to achieve the same level of attendance as they had experienced in 2019 (Jocelyn et al., 2023). League revenue suffered tremendously in 2020 dropping from $10.37 billion in 2019 to $3.66 billion in 2020 while only recovering to $9.56 billion in 2021. Following in a similar trend, average operating income in the league was at -$60.07 million in 2020 and only reached back to 40% of 2019 operating income in 2020 (Jocelyn et al., 2023). The average franchise value in Major League Baseball has been on a positive trend since 2002 and it continued that way throughout the COVID-19 shutdowns.

The Atlanta Braves are owned by Liberty Media Corporation who reports to the SEC, so their financial records are publicly available in Liberty Media's 8-k. In the second quarter of 2019, the Atlanta Braves had a total revenue of $208 million, whereas a year later in 2020, their total revenue was $11 million (*Form 8-k*, 2020). The Braves Group's net profit margin for the second quarter of 2019 and 2020 was 17.31% and -272.73%. In 2020, both revenues and expenses were heavily below what the Braves Group had in 2019, but they still had a negative profit margin for 2020 (*Form 8-k*, 2020). In 2019, the Braves Group held 41 home games during their second quarter which allowed them to accumulate their normal level of revenues, as opposed to 2020 where no games were held in the same amount of time. The Braves Group operating results in the second quarter of 2021 are very similar to those of 2019, indicating a strong recovery from their financial position from 1 year prior (*Form 8-k*, 2022). The Braves Group had net profit margins of 14.81% and 14.23% in the second quarters of 2021 and 2022 respectively. Once again, this indicates that they were able to recover to normal levels of revenue and profit margins following the pandemic. The main reason for this was that in each second quarter other than 2020, there was more than 40 home games held (*Form 8-k*, 2020, *Form 8-k*, 2020). In the second quarter of 2020, their baseball revenue was only 2.45% of the baseball revenue in the same quarter of 2021. The lack of games played when the 2020 regular season was originally scheduled had a major financial effect on the Braves Group's ability to generate revenues, but they were able to recover to their normal trends once the pandemic had settled down (*Form 8-k*, 2020, *Form 8-k*, 2020).

National Hockey League

The NHL attempted to offset some of their losses from the paused season by partnering with many companies to maintain a high-level of sponsorship for their games and broadcasts. On August 19th, 2020, the NHL partnered with Fastenal and on September 25th, 2020, the NHL began a partnership with Verizon followed by many more partnerships, including ones with Amazon Web Services, PointsBet, and Bally's Corporation leading into the 2021 season. Following their 2019-2020 season, the NHL commissioner, Gary Bettman, announced that the

NHL was recovering in a strong manner and that it was likely that the salary cap would increase by $1 million the following season (Rosen, 2021).

The NHL projected revenues to reach $5.2 billion in the 2021-2022 season following the pause in 2020 (Rosen, 2021). The NHL credited some of this success to the National Hockey League Players' Association who created revenue opportunities through helmet advertisements, and new partnerships. The league expects to increase the salary cap annually until the end of the 2023-2024 season due to escrow debt that the league owes its players due to their salary withholdings. The average NHL franchise value has steadily risen from $148 million in 2000 to $667 million in 2019. In 2020, the average value of an NHL franchise dropped to $653 million and then the average value jumped to $865 million which was the biggest jump since 2013 (Jocelyn et al., 2023). Despite the rise in average value, every NHL team had operating losses on the 2020-2021 season. The NHL experienced lower total attendance than in 2018-2019, but not by a significant margin which signifies that they have recovered well in terms of their total attendance.

The NHL is not inexperienced to shutdowns or postponed seasons. While COVID-19 had many different variables, the NHL had played a shortened season in 2012-2013 which resulted in a drop in revenue from the previous years (Jocelyn et al., 2023). Following the lockout in 2012-2013, revenue recovered back to the same point of growth as seen before the lockout. In the same way as the 2012-2013 lockout, revenue during the 2019-2020 and 2020-2021 seasons were below their normal amount. The NHL has expected that their revenue would continue to grow as they exited out of the pandemic and its effects. For the average NHL franchise having a negative operating income in 2020-2021, it would be crucial for them to have a strong recovery in the following years to regain what was lost in those COVID-effected seasons (Jocelyn et al., 2023).

National Collegiate Athletics Association

The NCAA consistently has revenues that exceed their total expenses (Jocelyn & Biagi, 2023). The only exceptions to this phenomenon would be in 2016 and 2020. In 2020, the NCAA's loss of revenue insurance composed half of the NCAA's revenues, which had not been used in the past 10 years before. Loss of revenue insurance made up a small portion of the 2021 revenue. All sources of revenue for the NCAA were well below normal values as 2019 had total revenue around $1.1 billion and 2020 had revenue around $550 million (Jocelyn & Biagi, 2023). Television and marketing rights revenue is the main source of revenue for the NCAA and in 2020, television and marketing rights fees was approximately 20% of normal values. Another major loss of revenue was the lack of championship tournaments in 2020, namely the NCAA Men's Division 1 Basketball Tournament. The effect of COVID-19 on championship tournaments continued into 2021 as that source of revenue did not fully recover (Jocelyn & Biagi, 2023).

As for expenses in 2020, the NCAA experienced far less expenses than in the years previous, due to the lack of sports in the 2020 seasons. For 2018 and 2019, the NCAA's expenses hovered around $1 billion and in 2020 their expenses dropped to below $600 billion (Jocelyn & Biagi, 2023). The only expenses that were significantly lower than the years prior were the distribution to Division 1 members and Division 1 championships, programs, and NIT tournaments. In 2019 and 2021, distribution to Division 1 members expense was approximately $600 million, while in 2020, that same expense was only around $250 million (Jocelyn & Biagi, 2023). In 2021, each segment of the NCAA's expenses returned to normal and were almost identical to the expenses from 2018 and 2019. Loss of revenue from the cancellation of the men's basketball championship tournament for television and marketing rights was expected to be $867 million and for media rights, ticket sales, and sponsorships was expected to be a loss of $933 million (Jocelyn & Biagi, 2023).

The cancellations of NCAA events resulted in lost revenue for hosts of their events as well as the NCAA (Jocelyn & Biagi, 2023). In Atlanta, where the Final Four of the NCAA Men's Division 1 Basketball Championship tournament was supposed to take place in 2020, the city lost nearly $100 million in revenue. In Detroit, the host of the Frozen Four of the Men's Division 1 Ice Hockey Championship tournament, the city lost nearly $10 million because of the tournament's cancellation (Jocelyn & Biagi, 2023).

World

2020 Tokyo Summer Olympics

Majumdar (2021) discussed how the social distancing rules at the 2020 Olympic games were not consistent regarding contact between athletes and sometimes lead to unsafe environments for everyone involved (Majumdar, 2021). The 2020 Olympic games cost Japan $0.3 billion in COVID-19 countermeasures and around $13 billion in other expenses (IOC, 2022). The primary sources of revenue of the games added up to around $4.4 billion. In the case of the 2020 Olympics, holding the games allowed for some of the costs to be regained back in revenues, which is usually how the Olympics tend to economically turn out. Between the Olympic Games and World Cups held between 1964 and 2018, the average return-on-investment was in the negative (Müller et al., 2022). As observed from the 2020 Olympics, expenses were upwards of $14 billion, while revenues ended up being closer to $4.4 billion (IOC, 2022). It is no surprise that the 2020 Tokyo Summer Olympics were not profitable. The International Olympic Committee tends to break-even on the Olympic games, leaving the host cities to undertake the economic fallout of the games (Müller et al., 2022). This begs the question of how the Olympic games can continue as they are constantly in a deficit. The International Olympic Committee receives subsidies from the host cities and does not take on much of the direct cost of putting on the games (Müller et al., 2022). The Olympic games suffer from a systematic deficit which unfortunately was merely heightened by COVID-19 and delayed revenues through the games being delayed.

Australian Football League and National Rugby League

In 2019, the Australian Football League had revenues nearing 800 million Australian dollars, while in 2020, revenues dropped to 674 million (*Australia: Revneue of…*, 2022, *AFL Annual Report*, 2021). From 2020 to 2021, revenue was up 9% while expenses were down 6%. The AFL had net profits in the 3 to 18 million Australian dollar range in the years of 2012 to 2015. Then in 2016, the AFL experienced a net loss of 15 million dollars followed by a booming year in 2017 resulting in a 60-million-dollar net profit (*AFL Annual Report*, 2021). Over the next three seasons in 2017, 2018, and 2019, the AFL stowed 20,000 dollars into their capital reserves. In 2020, the AFL experienced a net loss of 8 million, and then used their capital reserves to move 51 million dollars into their retained earnings. In 2021, their net loss was 29 million dollars due to their payments to clubs' expense reverting to the higher values experienced before the pandemic and revenues still being significantly lower than they were in the couple of years prior to the pandemic (*AFL Annual Report*, 2021). For the 2021 movement in retained earnings, the AFL did not use any capital reserve and had their net loss of 29 million dollars go straight through to their retained earnings.

In 2020, the AFL's current ratio was 1.94, whereas in 2021 it was 1.38 (*AFL Annual Report*, 2021). This difference is mainly due to large increases in the liability accounts of their payables and deferred income. After being able to cover their expenses in 2019 with a net profit margin of 6.08%, 2020 and 2021 had negative net profit margins at -2.92% and -7.69% respectively (*AFL Annual Report*, 2021). The AFL's debt-to-equity ratio for 2020 was 1.72 and it increased to 2.28 in 2021. The riskier debt position in 2021 can be attributed to their nearly 50,000 dollar increase in payables over that year (*AFL Annual Report*, 2021).

In 2019, the National Rugby League had revenues of nearly 553 million Australian dollars but faced a significant drop in 2020 to 417 million dollars in 2020 (*National Rugby League…*, 2021). In 2021, their revenue recovered to 570 million dollars. The NRL has experienced two occurrences of rapid growth in the past decade. From 2012 to 2013, their revenues increased by 77% and from 2017 to 2018, their revenues increased by 38%. From 2015 to 2017, the NRL operated in a net loss, but was able to operate in a surplus in 2018 and 2019 before the pandemic interrupted their growth (*National Rugby League…*, 2021). In 2020, their expenses before fund distribution were well below years prior because of the pandemic, as some of those expenses were cut in half for the year. The expenses for fund distribution to clubs and players, which makes up 82% of those expenses in 2020, were not impaired by COVID-19, which lead to their 25-million-dollar deficit for 2020 (*National Rugby League…*, 2021). In 2021, the NRL still had lower than normal expenses, but their revenues were more than they had earned in 2018 and 2019. Because of this effect, in 2021, the NRL had a surplus of 42 million dollars (*National Rugby League…*, 2021).

The NRL's current ratio for 2020 and 2021 were 1.45 and 2.25 respectively, signifying a proper level of liquidity within the business. As mentioned in the previous discussion, the NRL was not profitable in 2020 due to the pandemic, in which there were extra expenses on top normal expenses. The 2019 net profit margin for the NRL was 5.22% followed by a net profit margin of -6.03% in 2020 and 7.51% in 2021 (*National Rugby League…*, 2021). The NRL was able to recover well in the year following the pandemic as they worked back to covering all their expenses to turn a profit. The NRL's debt-to-equity ratio for 2020 was 1.53 and in 2021 it was 0.90. This indicates that the NRL was not forced into taking on large amounts of debt due to the pandemic. Their debt situation is in a safe position for both 2020 and 2021 as they were working to recover from the effects of the pandemic (*National Rugby League…*, 2021).

Racing

In Formula 1, revenues are mainly made up of three different areas: race promotion, media rights, and sponsorship fees (*Form 8-k*, 2022). In 2022, Liberty Media, the ownership group of Formula 1, reported to the Securities and Exchange Commission that capacity limitations were not a concern to the sport as they were in 2021. In fact, Formula 1 experienced record-breaking fan attendance during 2022 as fans were allowed to attend their events again (*Form 8-k*, 2022). Liberty Media's revenue from Formula 1 racing was on a growth trend following the pandemic as they explained their growth being attributed to all three of their primary revenue sources. With the growth experienced from the past few years prior to the pandemic, their F1 TV subscription grew and so forth their media rights were increased in 2022 (*Form 8-k*, 2022). In the second quarter of 2019, Formula 1's revenue $531 million and had a steep decline into the same quarter of 2020 where their revenue was only $12 million (*Form 8-k*, 2020). Formula 1's net profit margin for the second quarter of 2019 was 4.90% and plummeted a year later to -1017%. There terrible misfortune in net profit is because in the second quarter of 2020, there were no Formula 1 races held. In the second quarter of 2021, Formula 1 had a total revenue of $501 million compared to the 49% increase to the second quarter of 2022 where the total revenue was $744 million. Formula 1's net profit margin in the second quarter of 2021 was

-7.19% while a year later their net profit margin was 8.74%. Both quarters had the same number of races held which was 7 (*Form 8-k*, 2022).

Conclusion

From the findings of the financial positions of each of these sports leagues and organizations before, during, and after the pandemic, there were a few major conclusions. First, fans are very important to the success of live sport. Fans are integral to revenue in live sports, but also in creating the atmosphere and enhancing the marketability of sports (Daumann et al., 2020). In each of these leagues, in the past few years following the pandemic, revenues and profits have mostly leveled out to be in line with what they were experiencing before the pandemic, and in many cases the leagues were performing better than they were doing in 2019 before the pandemic began. As experienced in the Premeir League, Australian Football League, and National Rugby League (See Appendix Table A1, A2, and A3). Each of these league's revenues show positive trends, but show a dip in 2020 followed by a recovery in the year following. In Appendix Table A1, it is evident that the Premeir League's revenues recovered beyond the levels pre-pandemic. Even at the beginning of 2022, there was still uncertainty as to what the future may look like for many sports leagues and organizations as they were entering into a new year and potentially their first season that would not be affected by the COVID-19 pandemic. Second, it was in sports organizations best interest to avoid making any drastic changes as a reaction to the pandemic. While their financial positions would struggle through the bulk of the pandemic, coming out of the other side of it would result in normalcy. Crespo et al. (2022) emphasized that successful national tennis federations found the most success through embracing a culture of adaptation and progress. In that study, Crespo et al. concluded that the pandemic resulted in constrained efforts to innovate and fulfill the objectives of tennis federations worldwide (2022). With constrained efforts to innovate, and financials proving that the problems of the pandemic would level out, it was best for organizations to minimize major reactionary decisions. Finally, the pandemic offered new opportunities to innovate in certain sports. For example, eSports grew and became a major part of the sport of racing during the pandemic, which had not been experienced before. Also, innovation was important in deciding how to play live sports with no fans in attendance or with limited fan attendance. The COVID-19 pandemic provided a one-of-a-kind problem that all sports leagues and organizations were forced to face together, and through their perseverance, they have made it through to normalcy again.

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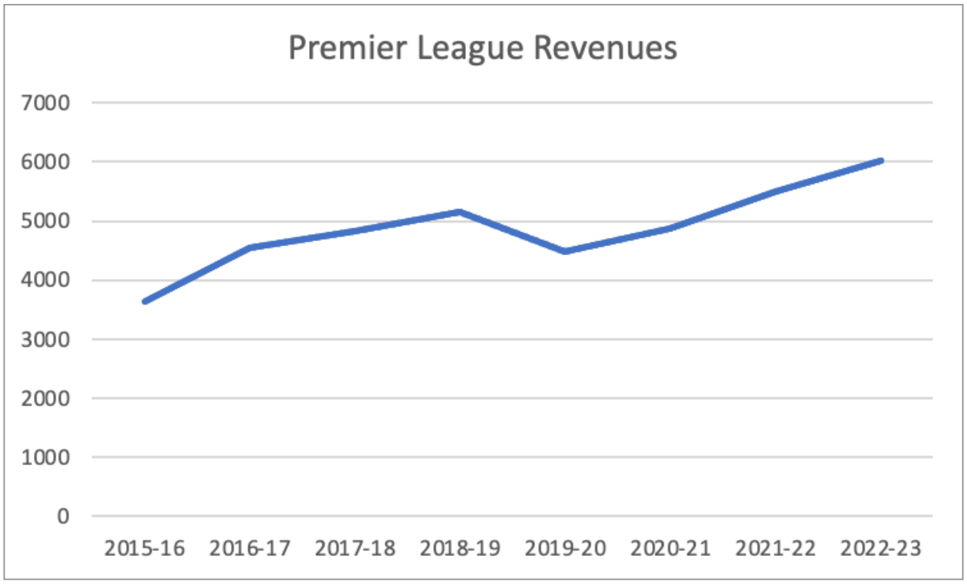
Appendix

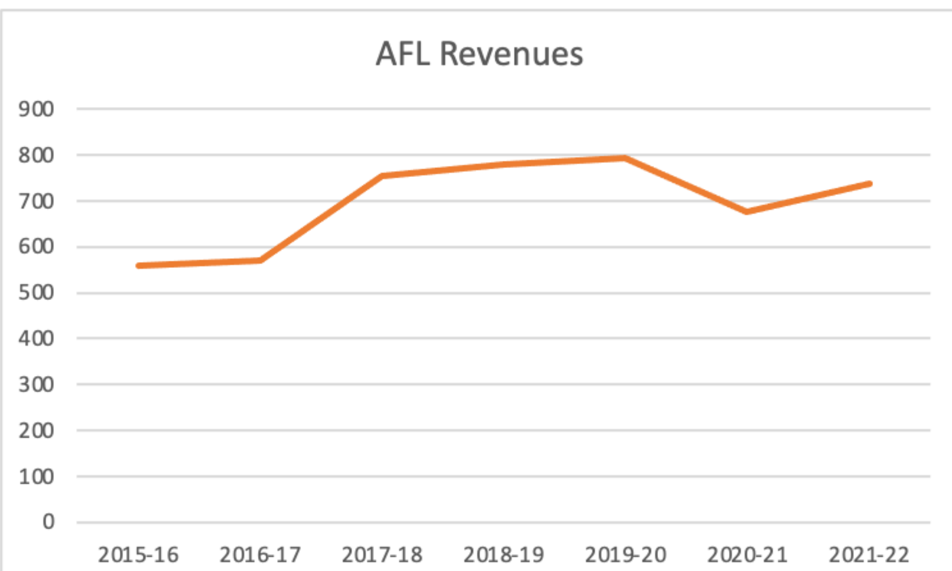
Table A1



Revenues in millions

(Annual review of…, 2021)

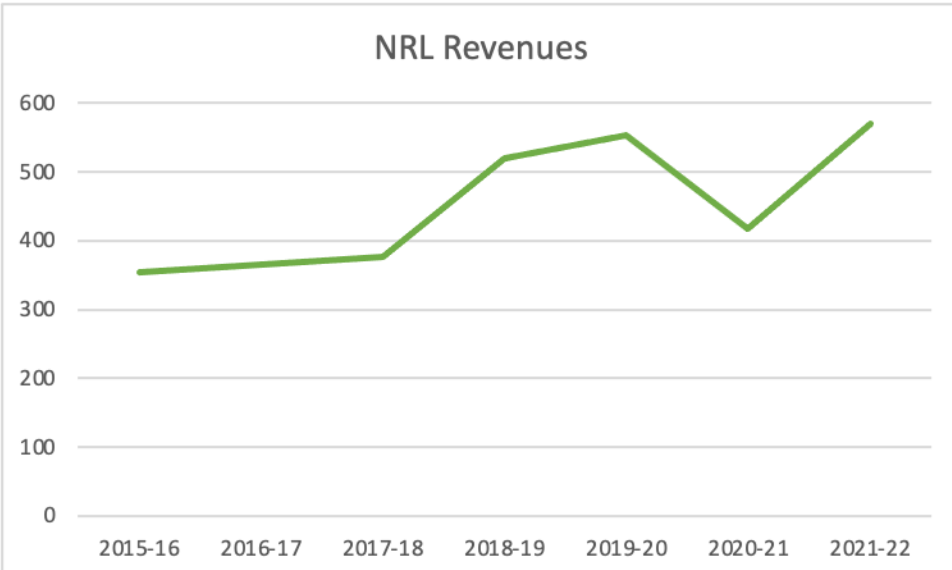
Table A2



Revenues in millions

(*Australia: revenue of…*, 2021)

Table A3



Revenues in millions

(*National rugby league…,* 2021)