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## The Motivations and Effects of the NBA Salary Cap

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Bard

The Motivations and Effects of the NBA Salary Cap

Senior Project Submitted to  
The Division of Social Studies  
of Bard College  
by  
Jeff Goldrosen

Annandale-On-Hudson, New York

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And finally, my dad, Jack, for being my biggest inspiration and the most selfless and courageous man I have ever met.



## **Abstract**

The National Basketball Association's (NBA) use of a salary cap to restrict player salaries and team payrolls is commonly seen in other professional sports leagues throughout the world, but it is unique in many ways which affect its efficiency in achieving its alleged purposes. Introduced in 1984, the salary cap was supposed to help the league restore competitive balance, as it theoretically would have prevented wealthier teams from overspending and dominating the less wealthy teams. As time has passed, it has become evident that competitive balance was not achieved following the adoption of the salary cap, and it has been widely speculated that the true motivation behind the implementation of the salary cap was the ownership's desire to keep salaries low, so they would receive a larger share of income. When looking at historical salaries, sources of revenue, and negotiations between players and owners over the years, it becomes apparent that the shares of revenue between players and owners was the most important issue. By studying the NBA salary cap, insight could be provided about how salary controls affect workers, not just in professional sports, but in other industries as well.



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## **Introduction**

The National Basketball Association has a long history of success as a business; the league brings in billions of dollars of revenue every year, and all thirty of its teams are valued at over one billion dollars. Naturally, the competing interests of the players and owners cause rifts between the two sides during collective bargaining negotiations. This project focuses on the aspect of collective bargaining which results in the most contentious of all issues: the salary cap. The salary cap, a limit on how much each team is allowed to spend in total on player salaries, was allegedly implemented as a means of ensuring that the league's wealthier teams would not be able to overpower the less wealthy teams by simply offering more valuable contracts. However, despite the league maintaining the position that competitive balance issues were the driving force behind the salary cap, it is often viewed as a means of controlling salaries and concentrating more revenue in the hands of the team owners. This belief is coupled with the notion that league owners act as profit maximizing firms which are willing to prioritize their earnings over the well-being of competition in the league.

Understanding this situation is important, as the negotiations between the NBA players and owners could provide valuable insight into labor negotiations in society as a whole. While there are distinct differences between the negotiations in professional sports and most other industries, there are many similarities which could assist in understanding other labor markets. Additionally, the inequality in salary distribution throughout the NBA is analogous to the inequality seen in the United States on a larger scale, which is a conversation at the forefront of American society today.

The first chapter consists of some background on the history of the salary cap, salaries in the NBA, dynamics of labor negotiations, sources of revenue, and challenges faced by both players and owners in achieving their respective goals. The chapter provides the context necessary to analyze whether or not the NBA salary cap was implemented to fulfill the stated goal of creating parity within the league, or if there were ulterior motives when deciding on the structure of the cap.

In chapter two, a closer look is taken into theoretical arguments surrounding the salary cap. These theories include those pertaining to wage determination, bilateral monopolies, and goals of both the owners and players, as well as an analysis of salary distribution and other trends within the NBA. This chapter provides a deeper insight into the power held by both sides in negotiations and how this power has manifested itself in the determination of the salary cap. The effectiveness of the salary cap is questioned, along with other arguments about its effects.

Chapter three follows with recommendations for how the NBA can solve competitive balance issues while still catering to the players' and owners' interests. The recommendations include a suggestion for how to modify the current salary cap system and an evaluation of the NBA's revenue sharing program and how it can be amended to become as effective as that of other leagues.

By studying the effects of the NBA salary cap and making the necessary changes in order to promote competition, it is likely that the players will benefit in the form of higher, more evenly distributed salaries. Furthermore, NBA fans will benefit from a more balanced league, as the number of different teams competing for a championship each year should increase. The owners, however, would not experience the same benefits, as their shares of revenue may be decreased, albeit for the betterment of the league.



## Chapter 1: Background and History of the NBA Salary Cap

Since the inception of professional sports, specifically the National Basketball Association (NBA), there has been a dramatic increase in player salaries. In the early 1900s, most players were not even earning enough to support their families without taking on another job in the offseason. As time went on, players began earning enough money to avoid working a second job, but it was not until the 1970s that salaries really began to increase dramatically. For the 1957-1958 season, the average player earned \$12,000 (about \$102,500 in 2017 when adjusted for inflation). In 1970, the average salary rose to \$35,000 (\$222,650 in 2017). By the 1980s, players were averaging over \$180,000 per year (\$540,000 in today's dollars) (Coon, Larry). By comparison, the average salary for the 2016-2017 season was over \$6,000,000 (Soshnick, Scott).

Initially, the salary cap was introduced as a means of promoting a competitive balance within the league. The idea behind it was that, if all teams, regardless of their true spending capacity, had the same amount of money to spend on their players, more teams would be in championship contention. More wealthy teams, such as the Los Angeles Lakers or New York Knicks, were previously able to outbid teams in smaller markets, such as the Utah Jazz or Indiana Pacers. Thus, less wealthy teams were pushed out of the race to sign certain free agents due to circumstances largely beyond their control. The luxury tax system was instituted as somewhat of a compromise between large and small market teams. The salary cap, theoretically, invariably benefits the small market teams more than wealthier teams, so this compromise was necessary to maintain the benefits of greater revenue to some extent. Since teams with less money were already unlikely to spend exorbitant amounts on their players, the salary cap had a

less profound negative effect on their activities. The cap primarily curtailed the spending of wealthy teams, which seemed unfair to those owners, leading to the soft cap-style afforded by the luxury tax. The steep penalties for exceeding the tax threshold discourage teams from recklessly spending and hoarding superstar players while still allowing teams to spend based on their desires. The issue of competitive balance is not only meant to promote fairness; it is also a business decision for the NBA. The NBA is essentially a product which is being sold to consumers. In order to continue bringing in a steady stream of revenue, the league must cater to the interests of their fan base. An uncompetitive league would be uninteresting to fans, and league revenues would suffer. Teams who struggle to remain in playoff contention have a difficult enough time selling tickets and drawing television viewership. By trying to maintain a competitive balance throughout the league, it is believed that there would be more appeal to fans. By spreading out the talent amongst a greater pool of teams and markets, there would be higher revenue opportunities around the league. This may not have a profound effect on viewership or merchandise purchases from avid fans, but greater competition and more excitement is necessary to capture the attention of casual fans. Having only a handful of good teams reflects poorly on the league's finances, so it is beneficial for the league to have as many playoff contenders as possible.

The alleged goal of competitive balance was certainly not achieved by the salary cap. Prior to the adoption of the salary cap, eleven different franchises won an NBA championship. Since the salary cap was enacted before the 1984-1985 season, ten different teams have won an NBA championship, showing no major improvement in terms of parity. Of those ten teams, three have won at least five titles, with the Los Angeles Lakers leading the way with eight. Five other teams have won at least two championships. The NBA has had the least amount of teams win

championships in this period out of the four major North American sports leagues, which include the National Football League (15), Major League Baseball (20), and National Hockey League (14). The NBA is the only one out of the four leagues with both a salary cap and a luxury tax system. Both the NFL (Florio, Mike) and NHL (*Collective Bargaining Agreement Between the National Hockey League and the National Hockey League Players' Association*) operate with a hard salary cap, which does not allow for teams to exceed the cap for any reason, and eliminates the need for a luxury tax. The MLB has no salary cap, but uses a luxury tax to penalize teams with massive payrolls. Based on this information, and the fact that the NBA has had the least parity out of the four leagues, it puts into question the effectiveness of the current salary cap system in the NBA.

Maintaining (or creating) parity was not the only intended consequence of the salary cap. Though it was originally publicized mostly as a measure of fostering greater competition, skeptics have believed the chief motivation was to cut the costs of labor. NBA organizations are not simply teams of basketball players attempting to win a championship, but they are basically individual corporations who are looking to maximize profit. Considering the fact that the teams are profit maximizing firms, they (theoretically) do everything within their power to earn as much money as possible. Winning is important in long-run profitability; thus, signing elite level players can lead to a surge in revenue through ticket sales, merchandise sales (replica jerseys and other apparel), and public appearances. Teams earn significantly more from their merchandise sales than they do ticket sales. They may also make money off of other events at their arena and through shared revenue with other teams, although some end up losing money. Though a team can be successful without an abundance of superstar players, they can only bring in so much via ticket sales. In 2016, the New York Knicks were the only team to earn over \$100 million in

ticket sales. They were, however, an outlier, as the average team only earned about \$45 million from ticket sales. However, each team, on average, earned about \$160 million from their brand (Brautigan, Bailey). The highest-selling jerseys typically come from the highest-paid and most popular players (Neuharth-Keusch, AJ), which would present a dilemma for teams if the salary cap did not exist. Teams would have to spend more money in order to earn more, but high payrolls do not always lead to high merchandise sales. For example, Paul Millsap of the Denver Nuggets is the third-highest paid player in the league, (<http://www.spotrac.com/nba/rankings/>) but his jersey sales fall outside of the top twenty overall. The salary cap mitigates the disparity between player salary and merchandise revenue, which is important when certain players do not have high jersey sales. Without a cap, signing expensive players would compromise the potential profit from having a winning team, as the salary increases would offset the new revenue they bring in.

In most cases, corporations can afford to offer lower compensation to employees because of the quantity of labor available in the workforce. If an employee is unsatisfied with their salary and ultimately rejects the offer, the corporation has other candidates they can consider for the position who are just as qualified as the others. This is not true in the NBA given the barrier of entry into the workforce. When there is only a small number of candidates with the necessary skills to succeed in a profession, they can command higher salaries. Due to these circumstances, the owners needed to artificially create a method of salary suppression.

Since player salaries were skyrocketing at tremendous rates, owners around the league claimed to be worried about how the increased salaries would affect the league's competitive balance. The belief amongst league ownership was that the teams in smaller markets, such as the Utah Jazz, would struggle to compete against larger markets, such as the New York Knicks,



because they did not have the capacity to meet the rising salary demands of the players. Thus, for the 1984-1985 season, the league instituted a salary cap ([https://basketball.realgm.com/nba/info/salary\\_cap](https://basketball.realgm.com/nba/info/salary_cap)). This was not the first time a cap had been introduced; in the league's inaugural season in 1946, teams were limited to spending \$55,000 (just under \$700,000 in 2017) on player salaries. This cap, however, lasted just one season before being abolished. The new cap in 1984 allowed teams to spend up to \$3,600,000 (just over \$8.5 million in 2017) on payroll expenses (<https://www.basketball-reference.com/contracts/salary-cap-history.html>). However, teams were able to spend more than the given cap due to their "soft cap," which makes certain exceptions, allowing teams to spend over the cap. Due to the soft cap, most teams' payrolls do exceed the cap. For the 2017-2018 season, twenty-two out of the thirty teams are spending over the cap. As a consequence for overspending, there is a luxury tax, and any team who reaches the luxury tax threshold must pay a certain amount for each dollar they spend once they reach the threshold. For example, any team which exceeds the threshold by less than \$5,000,000 must pay a tax of \$1.50 tax on each dollar they spend over the threshold. For teams that exceed it by \$5,000,000 to \$9,999,999, there is a \$1.75 tax on each dollar over the threshold. If a team exceeds the threshold by \$10,000,000 to \$14.99 million, the luxury tax increases to \$2.50 per dollar spent over the limit. This rises to \$3.25 if a team exceeds the limit by up to \$20,000,000 and, for teams who exceed the tax threshold by more than \$20,000,000, the tax rate becomes \$3.75 for every dollar spent plus an additional 50 cents on the dollar for every \$5,000,000 increase. This tax system is not cumulative, meaning that higher rates of taxes only apply for the amount of money spent above the previous tax bracket. For example, a team spending \$8,000,000 over the threshold would pay a tax of \$1.50 for the first \$4.99 million spent and a tax of \$1.75 for the remaining amount (Coon, Larry).

There is a higher tax rate for repeat offenders (teams that have paid the tax in recent years), which amounts to an extra dollar for every dollar spent over the limit. This poses a problem for teams with less money, as exceeding the cap may be too costly, but does not affect the wealthier teams as much because they can afford to spend an extra few million dollars to secure better players. For instance, if a team exceeds the tax threshold on a first time offense by \$10,000,000, they would be forced to pay \$16.25 million in luxury taxes, which could be severely problematic for many teams. This system tends to benefit the wealthier franchises because many teams cannot afford to pay luxury taxes which can amount to the equivalent of a star player's salary.

A measure of team valuation can be helpful in understanding trends in player salaries. Since the inception of the NBA, the values of teams have experienced massive increases. The increase in team value and viewership can be traced back to the 1950s, the same decade in which television ownership began to skyrocket. In 1948, there were less than two hundred television sets in use in the United States but, by the 1950s, that number soared to over ten million. This cultural change had profound effects on NBA revenues. By 1970, the NBA was being paid two million dollars by television networks for the rights to broadcasting games. As basketball became more heavily covered on television, NBA profits from these deals elevated to unprecedented levels. By the mid-1980s, the NBA was earning \$45 million from the networks (Baran, Stanley J.). It should be noted that the salary cap was instituted around this time. At a time in which the NBA was earning more money than they could have imagined just a decade before, it would make sense for the players to demand higher wages to coincide with the higher revenue. The timing of this could shed some light on the true motivations behind the cap. Prior to the \$45 million television deals, there was still an inequality in revenue between small and large market

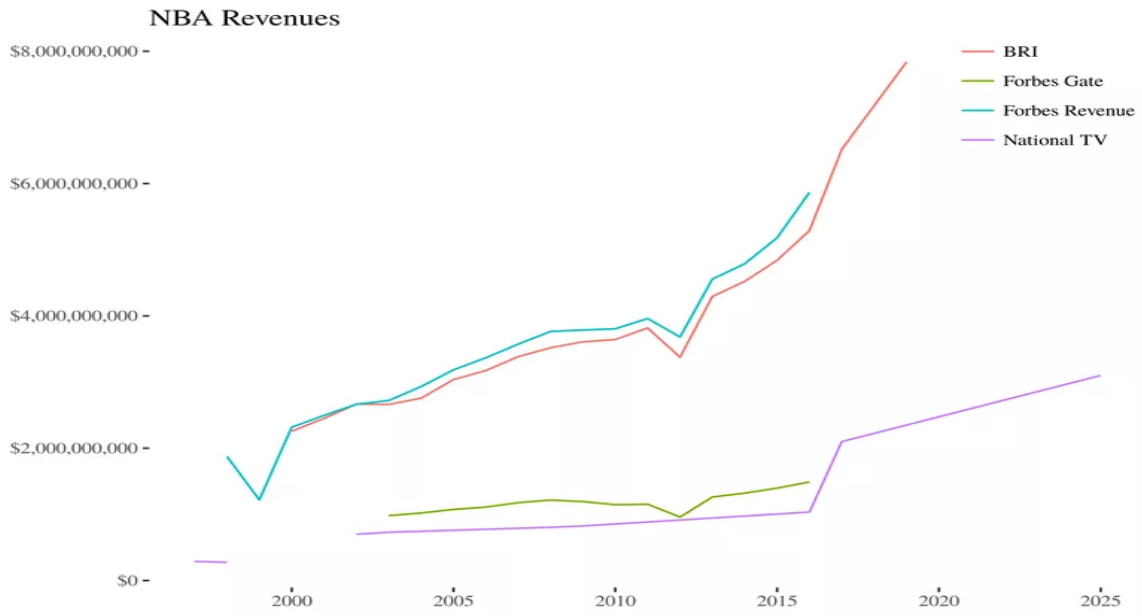
teams. Waiting to place restrictions until the players gained a reason to demand better pay undermines the notion that competitive balance was the key factor behind the institution of the salary cap.

In addition to the increase in television revenue, teams experienced a significant increase in apparel sales in the 1970s. Until the middle of the decade, most fans at sporting events would wear more formal attire, similar to what they would wear when they would be at work. This began to change, and fans were more likely to be seen sporting a replica jersey of their favorite teams and players. The earliest known photograph of a fan wearing a replica jersey at a sporting event can be traced to the celebration of the 1973 Stanley Cup Championship by the National Hockey League's Montreal Canadiens. As the decade progressed, it became more common to see a significant number of replica jerseys at any given professional sporting event, although NBA jerseys were not being sold in as much abundance due to the tank top style of the uniforms. Despite the increasing popularity and demand for replica jerseys, teams and leagues were not earning much profit from their sales. There were no licensing agreements between leagues and clothing manufacturers, so the majority of the jerseys were being purchased from other outlets. Though NBA Properties, Inc. was founded in 1967 in an effort to profit off of merchandise, they only maintained a deal with one distributor, a Wisconsin-based company called "Sand Knit." It was not until the 1980s that the NBA started to gain widespread control over the licensing and production of products bearing the logos and styles of the league. Still, it was difficult to find a NBA fan wearing a jersey at a game. When looking at photos from NBA playoff games, it is apparent that fans did not regularly wear jerseys until the latter stages of the 1990s (Layden, Tim).

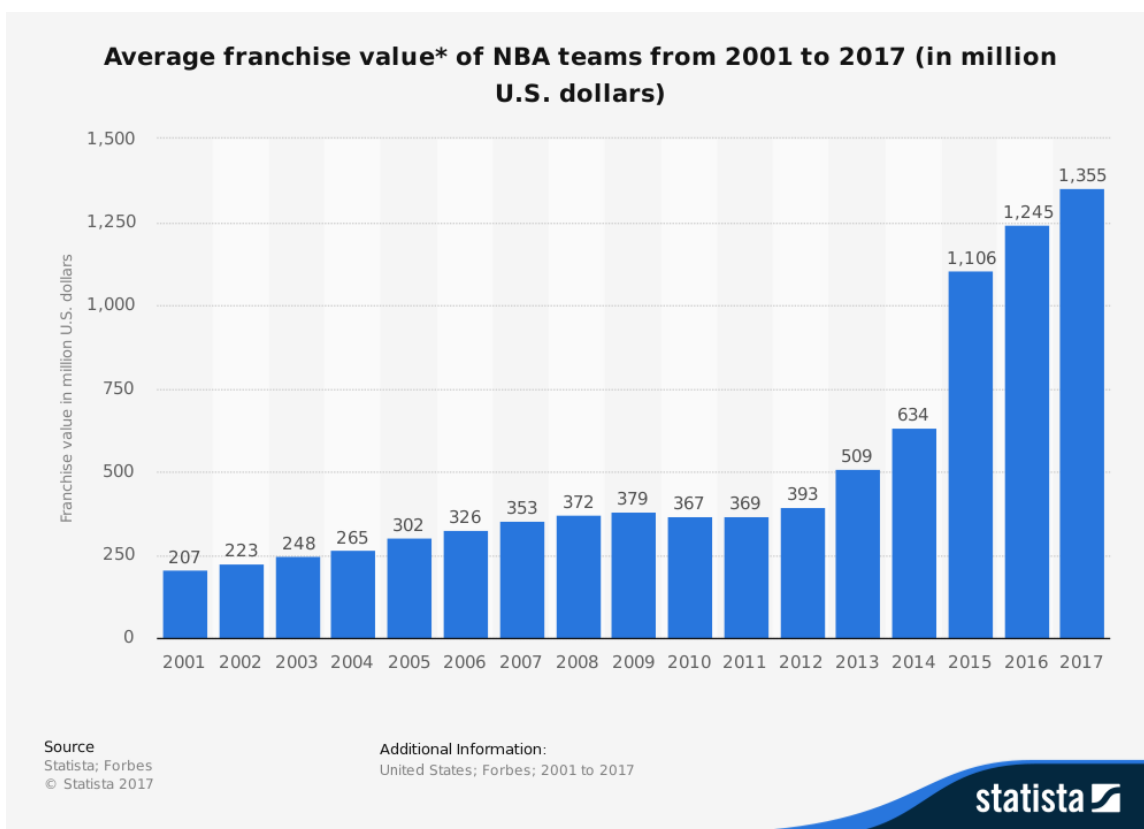
The surge in popularity for NBA jerseys in the late 1990s corresponds with the increase in the average player salary. In 1990, the average player earned \$1.6 million (in 2017 dollars). By 2000, the average salary soared to about \$4.3 million, an increase of about 169 percent (Hamm, Jon). With the advent of the jersey, the individuality of the players was more visible when compared to previous years. Star players existed in the past and were more popular than other players, but most of them did not gain the widespread popularity that current players have. When individual players become more recognizable to the casual fan, there is more incentive for teams to sign them beyond the goal of winning. Not only do teams earn profits from jersey sales, but it is likely that the increase in visibility and recognition could lead to more profits from other avenues such as ticket sales.

Since the turn of the century, NBA revenues have soared. In 2000, league-wide revenues did not even total \$2 billion. In 2017, NBA revenues have risen to almost \$6 billion (<https://www.peachtreehoops.com/2017/4/10/15230168/using-data-to-evaluate-the-number-of-nba-regular-season-games>). With such a sharp increase in revenue, it would only make sense that the salary cap would increase at roughly the same rate, in turn providing the athletes with higher personal salaries. However, this has not been the case. These facts raise questions about the owners' beliefs about salary control. This is just one of many measures which illustrate how the players have not been earning their fair share as the NBA has become more profitable. By examining the increase in profits and the smaller shares that they players have been earning, it is abundantly clear that there is a high level of greed on the part of the owners which has led to

such salary controls.



Though concrete team valuation data dating back before 2001 is scarce, the available information from 2001 to 2017 is useful in understanding the rapidly increasing wealth of franchises. In 2001, the average team was only valued at \$207 million. The aforementioned increase in revenue is reflected in the increase in team valuation. This figure experienced steady growth, reaching \$393 million in 2012. After 2012, team values began to skyrocket. There was a 29.5% increase in average team value in 2013 and, from 2014 to 2015, there was an increase of almost 75%. In 2017, the average team is valued at \$1.355 billion, which is about a 555%



increase in just sixteen years.

Over this time period, the salary cap has only risen by 72%, from \$57.684 million to \$99.093 million (<https://www.basketball-reference.com/contracts/salary-cap-history.html>), when adjusted for inflation. The average values of teams have increased eight times more quickly than the total

salary cap, indicating that players are not being fairly compensated for the surge in revenue and team values.

Through collective bargaining, there have been obstacles to the success of the salary cap and its effects. The Collective Bargaining Agreement (CBA) in the NBA has placed restrictions on both the owners and the players association in terms of contracts, revenue, salary caps, and other significant financial and professional issues. Since financial gain is obviously extremely important to both the owners and players, disputes between the two sides when approaching the expiration of a CBA lead to major problems, such as work stoppages which threaten to shorten or completely cancel a season. While there have not been any seasons fully cancelled due to these quarrels, which are usually fueled by issues regarding compensation, there have been temporary lockouts. The fourth and most recent lockout occurred in 2011, and resulted in the shortening of the season from eighty-two games to sixty-six games. The lockout was initiated by ownership, as they were seeking to reduce the players' collective shares of revenue. The owners initially proposed that the players should earn 47% of basketball related income as opposed to the 57% they were currently earning. The players attempted to find a middle ground, but the owners refused to compromise. This led to the league's cancellation of training camps in September and put a moratorium on any basketball related contact between players and their teams (Bucher, Rick). After a long battle between the two sides, they finally came to an agreement to end the lockout and begin the regular season on December 25th (Mahoney, Brian).

As a result of collective bargaining, there is also a salary floor, prohibiting teams from spending too little money when constructing their roster. The goal of the floor is to ensure that players are receiving their fair share of the team's revenue. This is also framed as a competitive balance issue; if teams refuse to pay for high level players, talent will become concentrated

within the teams who are willing to spend more freely. Teams are required to spend at least 90% of the salary cap in each season. For the 2016-2017 season, the floor was set at \$84,730,000 (<http://www.nba.com/2016/news/07/02/nba-salary-cap-set/>).

There are a number of other regulations pertaining to the NBA salary cap which set a minimum and maximum contract value for players. The minimum contract value is based on a player's experience in the league. For a first-year player in the 2017-2018 season, the minimum salary is \$815,615. The minimum increases for each year the player is in the league, with a five-year veteran commanding at least \$1,709,538, and a player with ten or more years of experience earning no less than \$2,328,652. Though the minimum salary for ten-year veterans is over \$2.3 million, teams are not on the hook for the entirety of the salary. Interestingly, the NBA tries to encourage veteran signings by pledging to reimburse teams the difference between a two-year player's minimum and the veteran minimum. In this case, a team would only have to pay a ten-year, minimum salary player \$1,471,382 (<http://www.basketballinsiders.com/nba-salaries/nba-minimum-salary/>).

The maximum contract, which limits player salaries, is unique to the NBA. Introduced in 1999 as a response to Kevin Garnett's massive six year, \$126 million deal with the Minnesota Timberwolves, the rule prevents the league's best players from earning too large of a share of the overall salary cap (Harper, Zach). Currently, a player who has been in the league for at least ten seasons is eligible to earn up to 35% of the team's payroll. There are several rules and exceptions regarding the maximum contract which depend on a player's success or decision to remain with their current team. The "5th year 30% Max Criteria" rule (also known as the Derrick Rose rule), allows for players on their initial rookie contract to sign for five years at 30% of the salary cap if they were named Most Valuable Player, earned a starting spot in the All-Star Game twice, or



were named to an All-NBA team at the end of the season (Coon, Larry). The 2017 Collective Bargaining Agreement (CBA) included the “Kevin Durant” rule, allowing teams to offer their current players entering their eighth or ninth seasons more money than they would be able to earn if they chose to sign with another team. This rule was implemented as a response to an increase in high-level players signing with new teams, culminating with former Oklahoma City Thunder MVP Kevin Durant signing with the Golden State Warriors after the 2015-2016 season. This enhances the “Larry Bird” exception, which let teams exceed the salary cap to sign their current players. Additionally, teams may exceed the cap to sign rookies who have not yet signed an NBA contract (Windhorst, Brian). Teams which remain below the luxury tax threshold can offer any restricted free agent a contract worth up to \$8.4 million in the first year, while teams who exceed the threshold are only allowed to offer up to about \$5.2 million in the first year. This rule is known as the Mid-Level Exception. Another exception is the Room Mid-Level Exception.” This rule allows for teams who are significantly below the cap limit and do not qualify for other Mid-Level Exceptions to sign players to a starting salary of up to \$4.3 million. Once the Room Mid-Level Exception is used, a team cannot use the Bi-Annual Exception, which means that a team can sign a free agent for up to \$3.3 million, but can only do this once every two years. Teams must remain below the cap limit for the remainder of the season for this exception to be applicable. The Rookie Exception, which is applicable to all teams, allows teams to sign rookies even if it pushes them over the cap limit for the season. The last major rule, the Disabled Player Exception, allows for teams who are over the cap limit to sign a free agent to replace an injured player who will be on the disabled list for the rest of the season. These players can be signed for the lesser of two values: half of the disabled player’s salary, or the equivalent of the Mid-Level Exception. The final provision of the exception is that teams may only acquire

players in the last year of their current contract.

**Summary of Salary Cap Exceptions**

	Larry Bird	Early Bird	Non-Bird	Non-Taxpayer Mid-Level	Taxpayer Mid-Level	Room Mid-Level	Bi-Annual	Rookie	Minimum	Disabled Player	Reinstatement
<b>Who Qualifies</b>	Own free agent, 3 seasons without changing teams as a free agent	Own free agent, 2 seasons without changing teams as a free agent	Own free agent, if not Larry Bird or Early Bird	Any	Any	Any	Any	Team's first round draft pick(s)	Any	Any	Reinstated players re-signing with their prior team
<b>Minimum Years</b>	1	2	1	1	1	1	1	2 plus two team options	1	1	1
<b>Maximum Years</b>	5	4	4	4	3	2	2	2 plus two team options	2	1	4
<b>Maximum Salary</b>	Maximum salary (see note in text)	Greater of 175% of previous salary or estimated average salary <sup>3</sup>	Greater of 120% of previous salary or 120% of minimum salary	Set amount (see text)	Set amount (see text)	Set amount (see text)	Set amount (see text)	120% of scale amount	Minimum salary	Lesser of 50% of injured player's salary or estimated average salary	Player's prior salary
<b>Maximum Raises</b>	8%	8%	5%	5%	5%	5%	5%	Defined in rookie salary scale	Defined in minimum salary scale	N/A	5%
<b>Can be split?</b>	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No
<b>Other</b>							Cannot be used in consecutive seasons	Restricted free agency following option years		Approval from the league required. Can be used for a limited time only.	

(Coon, Larry). To sum it up, teams can use some form of an exception on almost any player, but there are limits to the amount of times each exception can be used each season.

One of the less frequently used exceptions is the amnesty clause. If a team believes that a player with a high salary is failing to perform at a level which is consistent with their contract, they may release the player without their salary counting toward the cap or luxury taxes even though the team is still contractually obligated to pay them. Teams may only utilize the amnesty clause for one player and the action must be completed prior to the beginning of the regular season. Typically, a player who is amnestied is toward the end of their career when their performance has declined compared with previous seasons (Aldridge, David).

Even though some principles of perfect competition and its effects could be applied to the NBA, it is crucial recognize that the NBA, along with other professional sports leagues, is unlike most industries in nature. To start, there is a much greater supply of labor in most other industries. Companies are less likely to cater to the employees when there is an abundance of labor. If an employee rejects a contract offer or is unhappy with their current status in the company and chooses to seek other employment, they can be more easily replaced by someone

with similar skills. In the NBA, there is a much more limited supply of adequate players, and the value of each player is more tangible than in most industries. Essentially, due to the scarcity of labor, NBA players have more bargaining power than the average worker.

Teams can collectively be viewed as operating under a monopsony, as they represent a single buyer for talent, while players operate under a monopoly due to their capability to control the supply of labor (Berri, Dave). These conditions foster an environment which requires collective bargaining for progress. In this case, the NBA Players Association (NBPA) acts like a regular union interacting with their bosses. The difference with the NBPA is that, if the owners do not meet their demands, a strike could ensue which would be more detrimental than a strike in a different industry. For example, if a carpenter's union went on strike, it is plausible for non-unionized carpenters with similar skills to replace the union members. The pool of talent for basketball players is so small that it would be impossible to find enough players with similar skills that would attract enough viewership to continue earning profits. In short, NBA owners have more to lose from a strike when compared with other industries. When the owners, under a monopsony, believe the players are earning too large of a share of revenue, they lose some of their power. The decrease in relative earnings forces them to seek revenue from another source. They eventually start requesting larger sums of money from their media contracts (Vrooman, John).

To fully comprehend the determination of wages and its relation to the salary cap, it is necessary to analyze several different factors which may have a role in wage determination. In many other industries, there is an obvious income gap between racial groups, and this was true in the NBA in the 1980s. This racial income inequality started to disappear in the 1990s, coinciding with a shift in fan preferences. Prior to the 1990s, white players tended to be more popular than

black players. During the 1990s and 2000s, there was significantly less evidence that white players were favored by the fans (Kahn, Lawrence). After the popularity of black players increased, they gained the ability to sign larger contracts because of the revenue their brand could bring in, giving players the credit they deserve for on-court production. Not only do black players earn as much as white players, but they also enjoy a similar level of hiring and retention. The same increase in equality can be seen amongst coaches as well, which exhibits the diversity of the NBA despite the overwhelming amount of white team owners and executives. Considering this, it is not apparent that race is a major factor in wage determination in the NBA (although it remains a problem throughout other professional leagues and most of the United States).

Based on empirical studies conducted regarding the 2005 NHL Collective Bargaining Agreement, it has been concluded that collective bargaining is not only ineffective in terms of competitive balance, but it perpetuates salary inequality and shifts wealth significantly from the players to the owners. In a 2017 study published by Craig A. Depkin II and Jeff Lureman entitled “Wage Disparity, Team Performance, and the 2005 NHL Collective Bargaining Agreement,” it was reported that, overall, collective bargaining tends to have negative effects on players. The agreement lowered average player salaries, but it did nothing to close the gap in salary between the more highly paid players and the rest of the league. Additionally, it was found that higher salary disparity decreased overall performance throughout the league, indicating that tackling the salary disparity issue is more important in maintaining a high level of competition than keeping player salaries low or trying to standardize payrolls. Furthermore, the study showed that the owners were definitely the beneficiaries of the new deal, which was clearly the case in the NBA agreements as well, evidenced by the increase in their share of basketball related income.

Another 2017 study, by Philippe Cyrenne, examined the 2005 NHL Collective Bargaining Agreement, titled “Salary Inequality, Team Success, League Policies, and the Superstar Effect.” This work examined the effects of salary distribution and maximum player salaries on team success. By modeling the salary distribution of NHL teams after 2005, Cyrenne concluded that lower salary inequality correlates with higher winning percentages. Along with the previously stated conclusion, it was found that teams with higher payrolls tend to experience more success. With this in mind, it appears that the NBA luxury tax system is flawed. Given that luxury taxes discourage the less wealthy teams from spending money, the teams which are willing to pay the taxes gain an evident advantage. Moreover, teams with higher maximum player contracts win more often. If the tax system is abolished, more teams would be able to increase their payrolls and supply more maximum contracts, and subsequently increase their chances of succeeding.

While these studies focused exclusively on the NHL, they seem to be just as relevant to the NBA. Salary disparity is a well documented problem in the NBA, and these studies prove that it is an obstacle to success for many teams. Due to the restrictions imposed on teams by the salary cap, they are forced to choose between giving one or two players extremely lucrative contracts and lowering the value of the contracts of the rest of the team, or paying players more equally while avoiding paying a couple players exorbitant amounts of money. With a less restrictive salary cap (or the total abolition of it), the door would be opened for more teams to provide larger contracts while still maintaining a favorable salary distribution, thus potentially increasing the competitive balance of the league.

In 2016, Jason Huang conducted a study assessing the salaries of NBA players relative to their contributions to the team. Titled, “Salary in the National Basketball Association,” the study

found that the majority of players were being underpaid when considering their on-court production. Huang discusses the Kevin Garnett contract, which ultimately led to the initiation of a lockout prior to the 1998-1999 season by team owners. Kevin Garnett was only in his second year in the league, yet he secured a contract which would make him the fourth highest paid player in basketball. This was alarming to owners; if such an inexperienced player was able to command such a high salary, the salaries of other players would begin to increase rapidly. The owners believed players were being overpaid, so they negotiated for measures to be put in place to curb their salaries. According to Huang, putting a cap on the maximum player contract skewed the distribution of salary in relation to their production on the court. The players who were hurt the most by this were the superstars who were of a higher value to their teams. Rookies also experienced underpayment, as many of them produce at a high rate while their salaries remain low. Since teams were saving money on their rookies and star players, they were able to offer more to the mid-level players, which has often led to overpayment.

Huang's study also found that offensive production leads to higher salaries for players, while defensive aptitude has a much less profound effect. For many years, advanced defensive statistics were not available, making it difficult to quantify a player's defensive ability. On the other hand, offensive statistics such as points and assists have been found to be major determinants of salary, with a positive correlation between the variables. Many players who do not score many points or produce assists are undervalued, even when their defensive skills prevent their opponents from putting up points. Though, historically, defense has not played a major factor in wage determination, recent developments surrounding the introduction of newer, more advanced defensive statistics could aid teams in assessing players more efficiently and paying them based on their whole body of work rather than just their offensive numbers.

While the NBA's television contracts have consistently become more lucrative over the last forty years, players, until 2016, did not see any significant increases in their salaries as a result of these contracts. Troy Kelly, in his work, "Effects of TV Contracts on NBA Salaries," came to this conclusion along with the realization that the income inequality of the NBA was rising. With these conclusions, we once again find evidence of greed on the part of ownership. The players are the ones who garner the interest to make lucrative television deals a reality, yet they were not enjoying the fruits of their labor for a few decades. On-court production is not the only measure of the productivity of players; the amount of money they bring to their teams and the league should be considered in the wage determination process. Though many players did see salary increases following the 2016 television contracts, this was only the case for players being paid above the median salary. Players who were previously earning below the median salary either saw no effects or a decrease in their salaries. All of this information leads to the conclusion that, overall, players are not being paid fairly based on the money they are bringing into the league.

After considering all of the instances in which player salaries have been suppressed or artificially stifled, and the lack of a subsequent increase in competitive balance, it is apparent that team owners have been prioritizing lower player salaries above all else. The introduction of the salary cap and luxury tax system have had no real impact on the actual on-court product, and has had noticeable effects on salaries. Given the relative success of the other three major North American sports leagues in terms of parity (quantified as number of different teams with championships since the 1984-1985 season), it seems that the NBA's system is inefficient. Both the NFL and NHL have effectively used a hard salary cap to promote competitive balance, although they suffer from higher levels of salary inequality and suppressed wages. The MLB's

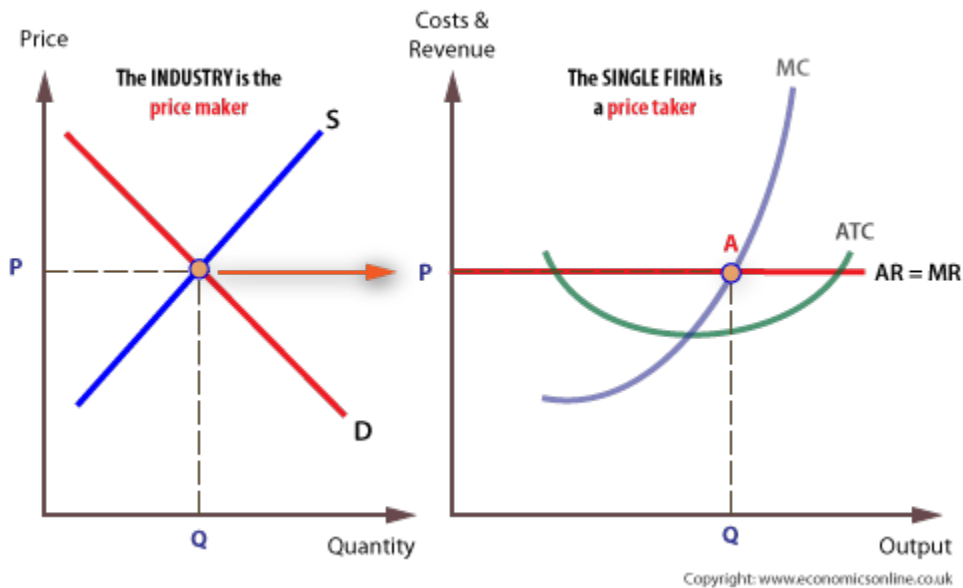
use of luxury taxes without a salary cap has fostered an environment more conducive to parity, and baseball players tend to accrue the largest sums of money throughout their careers. The NBA can learn from the other three leagues, and potentially construct a new approach which will achieve more parity and better compensation for the players.



## Chapter 2: Theoretical Arguments Surrounding the Salary Cap

Given what we now know about the NBA salary cap history, it is important to look at theories behind the salary cap, wage determination, and the maintenance of competitive balance. John Vroomin, in his work titled *Theory of the Perfect Game: Competitive Balance in Monopoly Sports Leagues*, explores these theories, mainly as a means of analyzing competitive balance. When considering the facts presented by Vroomin, it becomes fairly obvious that a salary cap is not necessarily the most effective way to foster competitive balance.

The first assumption that Vroomin utilizes is the belief that the main goals of the owners are to maximize their profits. In this case, many owners attempt to construct the most inexpensive team they can, even if it comes at the expense of becoming championship contenders. The owners who are more concerned with profit maximization will set their payrolls at a level which will cause the marginal revenue product of talent to be equal to the marginal cost of talent. The marginal revenue product is the market value of one additional unit of output so, essentially, owners try to sign players who will bring in more money than they cost. However, while it is true that most owners are primarily concerned with their profits, it is also true that, for many owners, the secondary goal is to build a team with championship potential. Thus, owners try to balance win maximization with profit maximization, and they often will pursue money more than they will pursue wins.



A model of a perfectly competitive market ([www.economicsonline.co.uk](http://www.economicsonline.co.uk)) is often used to explain labor markets, which provides insight into wages and the relationship between buyers and sellers. Professional sports leagues, however, do not operate with perfectly competitive markets. A perfectly competitive market is defined as a situation in which each of the following criteria are fulfilled: firms sell identical products (in sports, the sellers are the athletes and the product is their talent), buyers (teams) have access to complete information about the products, firms may freely enter and exit the market, and all firms act as price takers. The first assumption that firms must be selling identical products is certainly not achieved. Each player has different levels of talent and different skill sets which influence their perceived value to a team. Teams look to hire players with various skill sets in order to have a more well-rounded lineup which puts them in a position for success. Even though the product is similar in the sense that they are all athletes who participate in the same sport, they all have such distinct differences which prevent buyers from viewing them as equals.

The second assumption that buyers have complete information about the product (in the past, present, and future) is only partially applicable in sports. Teams do have access to scouting reports, statistics, and many other measures by which they may evaluate players. Teams also have partial access to a player's medical history and can perform examinations and tests to determine a player's fitness to perform in the future, but future performance, injuries, and various obstacles to competition cannot be accurately predicted. Additionally, teams can choose to pay players based on the contract values of other similarly talented players, which contributes to the partial applicability of the assumption.

The third assumption is definitely not applicable to the case of professional sports. While players are free to retire at any time, thus exiting the market, the barrier of entry into the league is not conducive to perfect competition. Since there are so few athletes with the physical capabilities and experience to be successful at the professional level, it is nearly impossible for most people to freely enter the labor market. Consequently, there is a very limited supply of sellers in the market to go along with the fixed amount of buyers (in the NBA, there are only thirty teams), which is an obstacle to another prerequisite of perfect competition.

The assumption that all sellers act as price takers with no market power to influence prices is not entirely applicable to the NBA. As provided by the plethora of rules relating to player salaries in the NBA, there are maximum and minimum salaries for players due to their skill levels, accolades, and experience in the league, so players and teams have set ranges of salaries between which they can negotiate. This freedom to negotiate contracts gives some power to the players in setting the prices at which they are willing to work.

Next, Vroomin discusses the monopsony power that leagues hold over the players. A monopsony is a market system in which there is only one buyer, which is the case with North

American sports leagues. The NBA is the only major basketball league in the country, and it is considered the premier league of the world. Due to the NBA's standing as the best basketball league with no equals, the league has the power to purchase the talent of whichever players it chooses. This situation, however, did not always exist, and the league held less power over its players. In the 1970s, there was a so-called "rival league war" between the NBA and its counterpart, the ABA (American Basketball Association). The two leagues competed separately, but at a relatively similar skill level. Since each league was capable of losing their players to the other league, they were forced to cater to the players' desires in order to retain their talents. During this time, NBA player salaries increased to seventy percent of league-wide revenues (Vroomin, 19). The NBA was losing money, and was considering its options to cut costs, including disbanding several teams. The rival league war ended in 1976 with the merger of the two leagues and the absorption of four ABA teams by the NBA. This paved the way for the 1983 collective bargaining negotiations in which the salary cap was agreed upon. Without the existence of the ABA, the NBA earned more power over the players, as they could no longer threaten to exit the league in favor of their rivals. As the league's power increased, the players' share of revenue decreased. In the seven years following the merger, the players' share decreased by seventeen percent, as the salary cap was limited to fifty-three percent of revenues, and has continued to drop by another few percentage points since then. By 1998, the players were earning fifty-seven percent of revenues, but has since dropped to below fifty percent due to the successful collective bargaining attempts by the owners.

The rival league wars experienced by the NFL led to similar results as the one regarding the NBA. In 1970, the NFL merged with the AFL (American Football League) at a time in which player salaries were skyrocketing. The merger, just like the NBA-ABA merger, led to a decrease

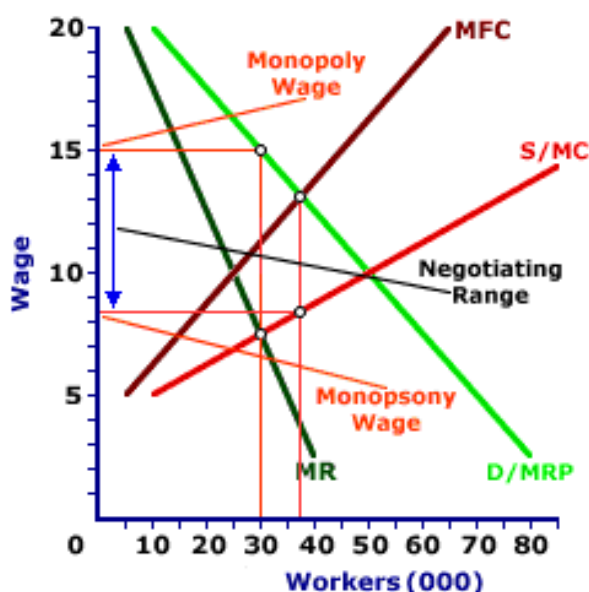
in revenue shares for the players. The NFL faced another war in the 1980s, this time with the USFL (United States Football League). Once again, NFL salaries were increasing, this time by almost one hundred percent. When the NFL successfully helped disband the USFL in 1985, player salaries continued to increase rapidly, until the salary cap was introduced for the 1994 season (Vroomin).

In each of the three rival league wars (NBA-ABA, NFL-AFL, NFL-USFL), leagues lost their monopsony power and struggled to keep salaries low. When the league wars ended, there was a concerted effort by ownership to curb the rising salaries. This paved the way for league-wide salary caps aimed at curtailing rising player salaries, which was effective in keeping more revenue in the owners' pockets (Vroomin). When considering the fact that salary increases led to salary caps, it becomes more clear that the main motivation behind the salary cap was to suppress rising salaries.

While the leagues hold monopsony power over the players, the players wield monopoly power over the leagues. Since there is a very small amount of athletes with the skill level to compete in the NBA, the players who have the ability to play at a high level are the only sellers of NBA level talent. Given that the players are unionized in the National Basketball Players Association (NBPA), they collectively hold the power to negotiate for higher wages, although this power is decreased by the salary cap and the many rules and exceptions that come with it. This leads to another hypothesis for why the salary cap was introduced. If there are more rules and exceptions in place which restrict the power that the players have to negotiate their salaries, the monopoly power owned by the players is reduced dramatically. With this decrease in monopoly power, the monopsony power of the league and its owners is strengthened, even though the NBA traditionally has a low level of monopsony power to begin with. As a result of

this low monopsony power held by the league, they continue to exercise their monopoly power over fans and the media. Since the NBA is the only major seller of professional basketball entertainment in the United States, media outlets must pay exorbitant amounts of money to be able to cover their games. Additionally, the teams exploit the fans and taxpayers by demanding public subsidies for venue construction and maintenance.

Under normal monopolistic conditions, the monopolists (the players) would be able to set their selling prices or salaries to reflect their goals of an increased income, which would ultimately result in extremely high average salaries for the players. Since this is not a normal monopoly, as there are monopsonists competing to keep salaries as low as possible, there is a



struggle between the players and owners to fight for what they believe to be fair wages.

The monopoly wage is much higher than the monopsony wage, thus creating a negotiating range between the two (in this graph, the range lies between \$8.50 and \$15). During this negotiation, the monopolists are trying to keep their wages as close to the fifteen dollar ceiling as possible, while the monopsonists try to suppress wages and keep them close to the \$8.50 floor

(amosweb.com). The players base their proposed wages on the marginal cost (MC) and marginal revenue (MR) curves. The point at which these curves intersect provides the players with their optimal level of employment, and utilize the corresponding point on the demand or marginal revenue product (D/MRP) curve to determine wages. The NBA Collective Bargaining Agreement stipulates that teams must have a minimum of thirteen players on their rosters, and the league-wide average must reach fourteen players per team. Considering the facts that marginal revenue product is negatively-sloped and that roster sizes are small compared to other leagues, the marginal revenue product for additional hires in the NBA is high. Teams are limited to a maximum of fifteen players on their active rosters, which then limits possible negative marginal revenue products. Based on the law of diminishing returns, the small roster sizes should, in theory, lead to higher wages for the players, as teams do not have the ability to retain a larger amount of players at lower costs (which would lead to diminished returns for each player hired over a certain number).

The owners (or monopsonists) would rather pay players based on the marginal revenue product curve (MRP) and the marginal factor cost curve (MFC). The marginal factor cost curve, which is positively-sloped due to the monopsonistic power and price making abilities of the firms, represents the costs for the owners when an additional player is signed to the roster, and the marginal revenue product curve represents the market value of one additional unit of output. The owners seek to set employment levels at the point at which the marginal factor cost and the marginal revenue product intersect in order to find the profit maximizing quantity of labor. This quantity of labor usually exceeds the optimal quantity of labor for the players, with the wages being significantly lower than the optimal level for the players (amosweb.com).

This disparity between the desired salaries and employment levels for the players and owners is what necessitates the collective bargaining which is conducted by both sides. This situation is what is referred to as a bilateral monopoly. In the case of a bilateral monopoly, there is no one profit maximizing point which will satisfy both sides (amosweb.com). The profit maximizing wages for the players is much higher than the profit maximizing wages for the owners due to the copious costs involved in running a professional basketball organization. While there is no way to calculate specific wages which can be seen as a perfect medium between the two sides, there are certainly specific conditions which dictate how some sort of compromise will be made. Most importantly, the wages will not be set lower than the price offered by the monopsonists, and it will not be set higher than the desired wages by the monopolists.

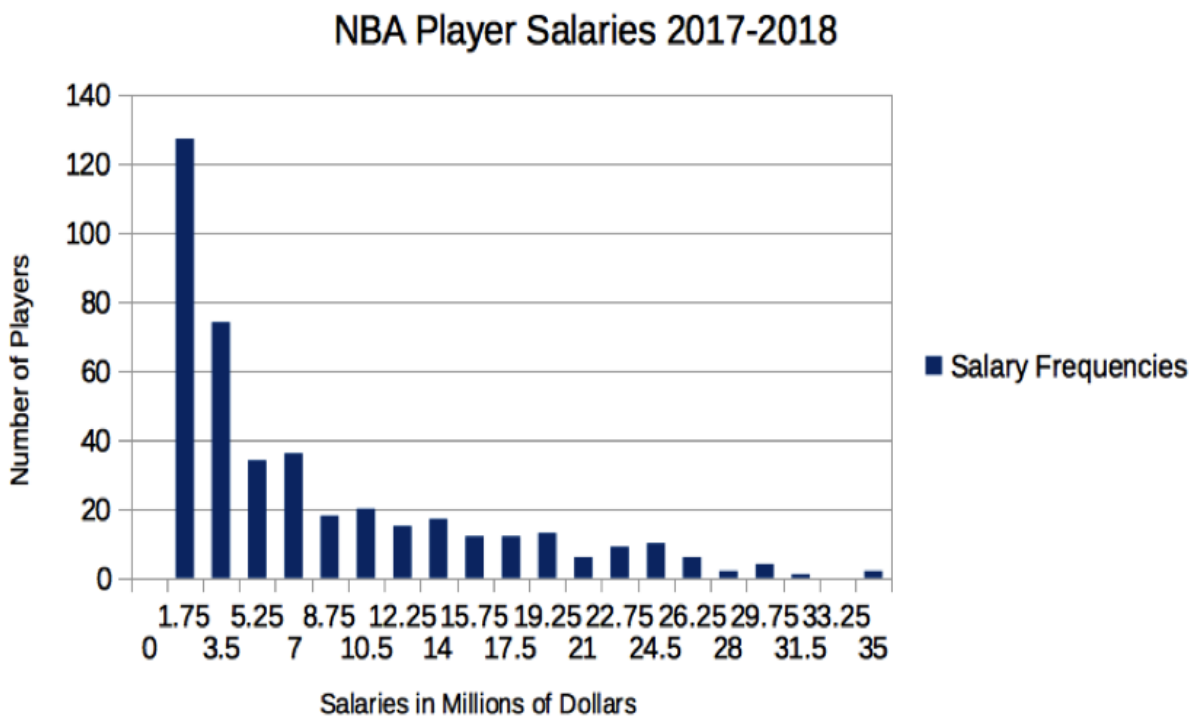
The power held by each side is also very important in determining the compromised wage levels. If the monopolists hold more power, the wages will be closer to their desired level but, if the monopsonists hold more power, the wages will be much lower. Based on how the collective bargaining agreements have unfolded in the NBA, it becomes clear that the owners wield more power than the players. When the owners have been dissatisfied by the power held by the players, they have forced four work stoppages in order to get what they wanted. In each of these lockouts (occurring in 1995, 1996, 1998-1999, and 2011), the owners ended up earning more of what they desired than the players did. The lockouts mainly revolved around player salaries and the split of revenue between the players and owners, with the owners successfully reducing the players' share of basketball-related income (*Sports Illustrated*).

Despite the flaws and the power struggles presented by the bilateral monopoly exhibited in the NBA, it allows for wages to be set closer to perfectly competitive levels than would be



possible without power from both sides. The industrial revolution in the United States in the 1800s and 1900s provides an example of how labor negotiations in the NBA might work without the monopoly power held by players. Prior to the formation of labor unions, large companies and factories would hire their workers at exceptionally low wages because they were able to completely control the labor markets. The labor needed for the factories was mostly low-skilled, so laborers were not able to hold out for higher wages, as other workers would be willing to be employed at low wages and take the available jobs. Even though there is the barrier of entry in the NBA based on skill level, many lower-skilled players would gain the opportunity to be employed if they were willing to earn lower wages than the more skilled players.

When looking at the 2017-2018 player salaries throughout the NBA, the most notable



detail is the lack of a normal distribution (*The Harlem Times*). As expected, the number of

players making more than \$20 million is very low. What is unexpected is that almost a majority of players are earning salaries below \$5 million. If player salaries followed a normal (or close to normal) distribution, the number of players earning low salaries would almost match the number of players who earn extremely high salaries. For the 2017-2018 season, the average player salary is just over \$5.75 million. Only 184 players (31.6 percent of the league) are guaranteed to earn at least the average salary during the season, and an astounding 398 (68.4 percent of the league) players are earning less than the league average (basketball-reference.com). The distribution of player salaries is skewed heavily to the right, indicating that far too many players earn far too little money. This massively skewed distribution can be seen as a product of the salary cap.

When firms have the goals of both profit maximization and win maximization, they are forced to reconcile the differences between the two to find a happy medium of sorts. When a spending limit is present, as is the case in the NBA, firms tend to offer exorbitant salaries to the top talents, as they are the most important pieces in constructing a championship team. This is where the monopoly power of the players is the most prevalent. The best players have the most power because there is a scarcity of players with their immense capabilities, so they are able to command higher salaries and earn maximum contracts. This, in turn, increases the monopsony power of teams when signing middle and lower level talents. Roster spots are limited and, because of the large chunk of the salary cap dedicated to each team's best players, there is less money for the rest of the players to earn. Outside of the NBA, there are few leagues around the world which can guarantee million dollar salaries for the majority of the players, so these players lack the ability to threaten to take their talents overseas to negotiate for better salaries.

The players who are perhaps the most negatively affected by the rules of the salary cap are rookies and other young players. Young players, especially in today's NBA with the earlier

development of talent, are often some of the most important contributors to their teams. In the 2017-2018 season, Joel Embiid and Ben Simmons of the Philadelphia 76ers carried their team to the third-best record in the Eastern Conference and a berth in the playoffs. Despite their unmatched contributions to the team, Simmons and Embiid respectively only have the seventh and eighth highest salaries on the team. Their relatively low salaries have little to do with their talent or productivity, but rather with their experience in the league. Embiid is in just his second season in the league and Simmons is still only a rookie, so they are both still playing on their initial rookie contracts. Players chosen in the first round of the NBA draft are subject to rigid salary restrictions. The first pick in the 2017 NBA draft, Markelle Fultz of the 76ers, was only able to sign for a maximum salary of \$7,026,240 in his first season. These rules stipulated by the Collective Bargaining Agreement basically take all power away from rookies in contract negotiations. It is true that the owners are restricted in some capacity as well, as the number one pick in the draft could not have been signed for a salary below \$4,684,160 (basketball-reference.com). Even still, this is not necessarily an even balance of power. The market value for a player of that caliber is much higher than the maximum salary which they are allowed. The owners lack the monopsony power they typically have during contract negotiations, but the monopsony power they exercised during collective bargaining negotiations give them the upper hand on rookies.

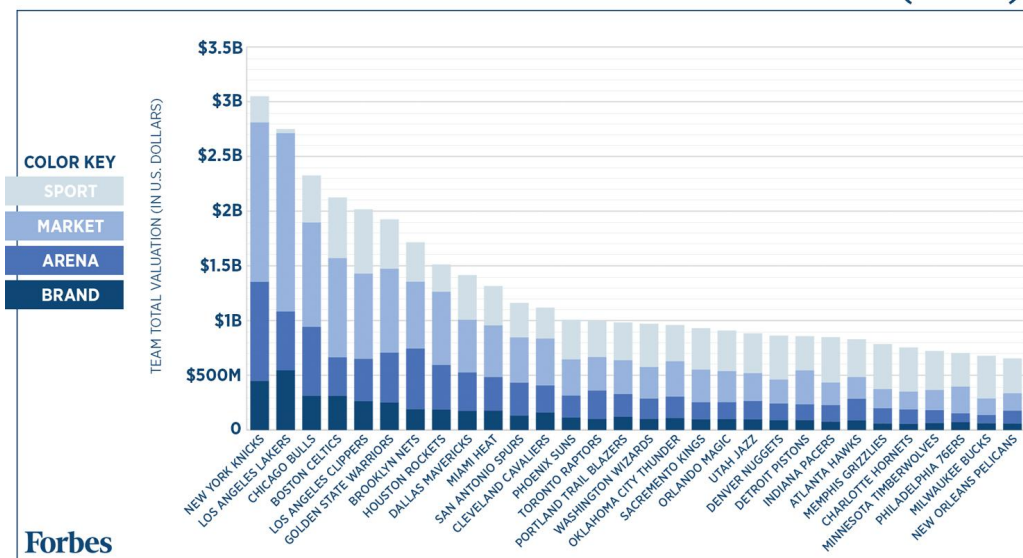
Now that the dynamic between the players and owners has been discussed, and the concept of media contracts has been introduced, it is important to understand the relevance of television and media contracts to competitive balance. Professional sports leagues make the majority of their money through lucrative television deals and other contracts which provide media rights to the games. Though this does benefit every team in a given league, the benefits

are not equally distributed amongst all teams. Teams in larger markets, such as New York or Los Angeles, have more opportunities to earn their own private, regional contracts. Teams in smaller markets, such as Charlotte or Memphis, do have some opportunities to earn money from regional contracts, but they have much less to gain than teams in larger markets.

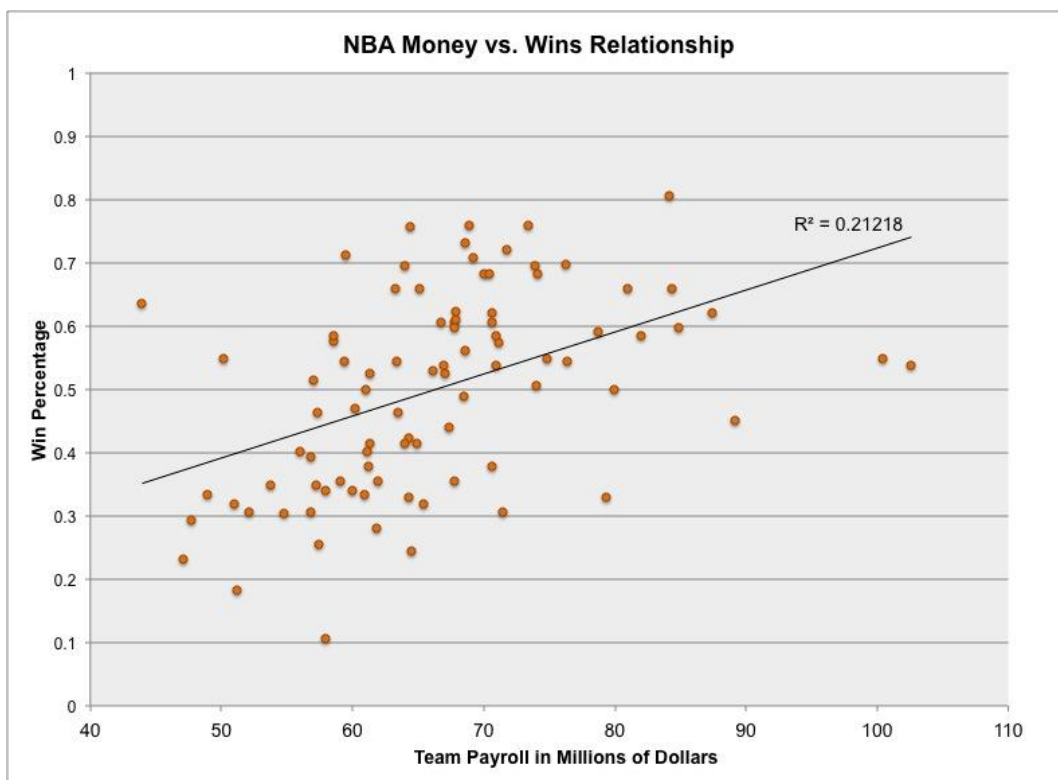
When looking at the salary cap as a percentage of a team's total value, it becomes clear that the salary cap can do little to prevent large market teams from overpowering others in terms of spending ability. A large chunk of the most wealthy teams' values come from the market they reside in, giving almost no opportunity for the smaller market teams to match their wealth. Additionally, teams such as the New York Knicks and Los Angeles Lakers play in arenas that attract other events, such as large concerts, bringing in even more revenue for the organization.

The salary cap for the 2017-2018 season is set at just over \$99 million (nba.com). For the New Orleans Pelicans, the least valuable team in the league, the cap is just under ten percent of their total team value, so exceeding the cap and being subject to hefty luxury taxes is not a financially responsible decision for them. A team like the Knicks, the most valuable team in the league, can afford to overspend and face significant luxury tax penalties, given that the cap represents less than three percent of the Knicks' total value (*Forbes*). As a result of this inequality in spending power, the soft salary cap system actually may be furthering the gap between the wealthier teams and the teams in smaller markets.

## BREAKDOWN OF NBA TEAM VALUATIONS (2016)



While examining the different salary cap systems that are available for implementation by the NBA, it is necessary to understand how a team's payroll can affect its success. A study conducted by Grant Shorin in 2017 evaluated the effects of payroll on winning percentage and overall team profit. The conclusions of the study suggested that, from 2002 to 2010, payroll increases did not directly have a significant impact on profits. Payroll increases were found to have a strong correlation with increases in winning percentage, which is to be expected given the reality that the best talent typically comes with a higher price tag. This conclusion was reflected in the results of the 2017-2018 NBA regular season. Out of the sixteen teams that reached the playoffs at the end of the regular season, only three of them (Philadelphia 76ers, Indiana Pacers, and Utah Jazz) were not in the top sixteen in terms of payroll (basketball-reference.com). Additionally, nine of the teams who ranked in the top ten for payroll reached the playoffs (the Detroit Pistons were the only team to miss the playoffs, with the seventh highest payroll in the league).



(Priceonomics.com)

Though there was no obvious correlation between payroll and profit, it can be surmised that the increase in winning percentage (as a result of payroll increases) leads to more interest among fans, allowing more opportunities for revenue. When a team experiences more success, they are more likely to be broadcast on national television, attract more fans to attend games, and sell more team-licensed merchandise. Given the data to suggest that spending more money leads to more winning, which leads to increased profits, it is difficult for small-market teams to compete without financially straining themselves (Priceonomics).

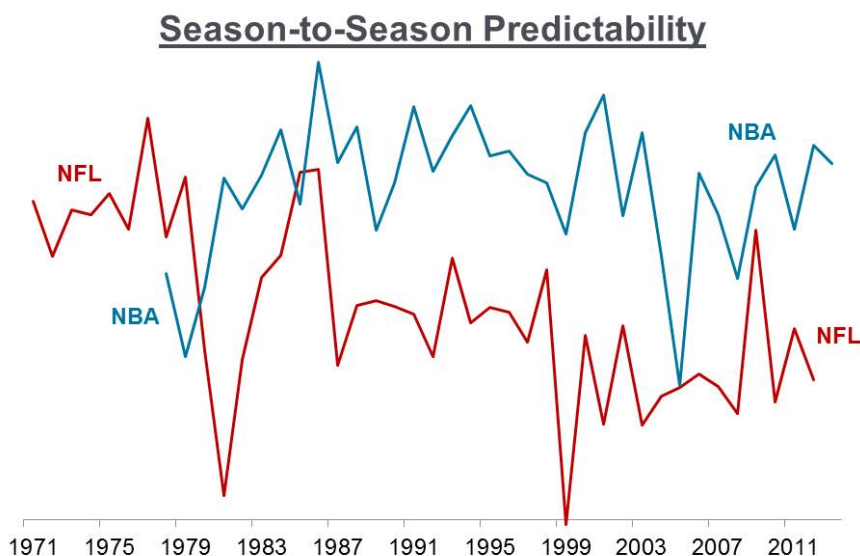
With this in mind, the question of implementing a hard cap in the NBA should be discussed. If all teams are forced to remain under a certain spending cap, without any exceptions or regard to team values, all teams might have a more fair chance at competing for playoff spots and championships. The top talents in the league will not be able to join forces without taking

massive salary cuts, which would afford more teams the opportunities to sign better players. Even though the hard cap, as previously mentioned, is not necessarily the only solution for competitive balance, it can help level the playing field in some ways. Despite the belief that the hard cap might assist in creating parity throughout the league, the National Basketball Players' Association rejects the possibility of the implementation of a hard cap. This may come as a surprise to some, as a more even balance of power might seem to be more favorable for players. While this may be true, it stifles one of the main goals of the players--to continuously earn as much money as possible. Under a hard cap system, many players would almost certainly be forced to take pay cuts in order for teams to remain under the payroll limit. This would significantly detract from the monopoly power held by the players as well as increase the monopsony power of the owners, as there would be much less room for negotiating more valuable contracts. Though the hard cap might interfere with the league's alleged goal of keeping the best players on the best teams, it would definitely satisfy what is arguably the main goal for team owners--to save as much money as they can while still fielding a successful team.

This argument paves the way for a conversation regarding dynasties and the league's affinity for maintaining them. While the definition of a dynasty remains subject to opinion, the general consensus is that a dynasty consists of a team which consistently wins championships over several years with the same core group of players. Examples of NBA dynasties include the Minneapolis/Los Angeles Lakers (1948-1954, 1979-1991, 2000-2004) (Sachare, Alex), the Boston Celtics (1956-1969, 1980-1987) (Brown, Clifton), the Chicago Bulls (1990-1998), and the San Antonio Spurs (1999-2016) (ESPN). While each of these teams experienced roster changes throughout their dynasties, each team was centered around a few superstar players who carried their teams to success. The existence of such dynasties decreases competitive balance,

not only because of their own success, but also due to the building of “super teams” created to rival the dynasties. In an attempt to dethrone the Golden State Warriors as the league’s best team, the Houston Rockets, Cleveland Cavaliers, Oklahoma City Thunder, and Boston Celtics have all attempted to construct superstar-laden rosters, providing them with the talent to compete with the Warriors and dominate the rest of the league.

With the existence of super teams in the NBA that is not usually present in other leagues, the NBA becomes much more predictable on a year-by-year basis (uselessanalysis.com). The same few teams seem to be successful year in and year out, while there is a handful of teams who are typically out of playoff contention almost every year. In the NFL and MLB, there are often new teams every year that build strong enough rosters to contend for championships. Teams in smaller markets experience more success in these leagues than they do in the NBA, which indicates that there are measures the NBA can take to ensure better competitive balance to match their counterparts.





Though trying to concentrate the best talent into one team has not always led to championships for each team, it certainly has led to financial successes for both the league and the attempted super teams. Major television networks such as ABC, ESPN, and TNT have exclusive rights to air certain games on national television, and they typically choose to broadcast games between the best teams in both the regular season and the playoffs (nba.com). The best teams then gain the most nation-wide exposure and attract fans from across the country (and often throughout other regions of the world), leading to greater opportunities for financial gain. When these teams are in more financially prosperous situations, they are capable of spending more money to continue building and refining a team with championship capabilities, perpetuating the cycle of a few teams dominating the league.

When there are a few teams that garner national attention and create a larger demand for their product, the league benefits financially as well. If the league's best players were more dispersed throughout the league's thirty teams, there would be fewer matchups which would gain interest from fans who do not have allegiances to either one of the participating teams. For example, when the Cavaliers play the Warriors, fans from many different fan bases will watch the game even though their favorite teams are not involved. When the league's two worst teams, the Phoenix Suns and the Memphis Grizzlies, are competing, very few viewers outside of the two teams' fan bases will be interested in the game. A game between two well-performing teams may not even earn a large viewership if it does not involve the league's most popular players.

Most salary cap exceptions are designed to keep players with their current teams. If competitive balance was the primary concern for the league, they would not attempt to keep players with their current teams, but rather try to encourage movement around the different teams. In other leagues with no maximum salaries, lower level teams have the opportunities to

offer players more money than other teams are willing to spend, which is why some elite players end up signing with teams that do not experience much success. This phenomenon is not experienced as much in the NBA due to the disparity in spending ability (both by team value and salary exceptions), which is why some teams are able to continue building more talented rosters at the expense of competitive balance.

The full effects of a soft salary cap on competitive balance are unclear, but it is evident based on the history of the NBA that it does not help enough to ensure that more teams are able to be competitive. What is clear, however, is that many players do not earn a fair salary based on their market value. For the 2017-2018 season, Stephen Curry is guaranteed to earn over \$34.6 million, which represents roughly thirty-five percent of the \$99 million salary cap and about twenty-five percent of the Golden State Warriors' total payroll. When combining Curry's salary with the Warriors' next two highest paid players, Kevin Durant (\$25 million) and Klay Thompson (\$17.8 million), they cover over fifty-six percent of the team's payroll. One-fifth of the team is earning more money than eighty percent of the team combined, even though most of the players' performances are crucial to the team's success on the court (basketball-reference.com). Income inequality is a topic which is often discussed when referring to society as a whole, but it is rarely discussed in terms of professional sports considering that most athletes at the highest level of competition make upwards of one million dollars.

Evidently, the power dynamic between the players and the owners presents a series of challenges which impede the fair distribution of salaries throughout the league. The problems caused by the disparity between the desires of both sides are compounded when considering the numerous other obstacles they face. There will always be a sort of imbalance created by the differences between teams in large and small markets but, when reflecting on the ways in which

other leagues have handled the problem, there is hope for the NBA to rectify the situation and foster an environment more conducive to the spirit of competition.

The NBA's current salary cap system is deeply flawed and is mostly reflective of a combination of the owners' primary goal and the league's overall goals. The owners have been successful in suppressing the wages of many of the league's players, while the NBA has seen profits surge while also ensuring the success and longevity of dynasties and super teams. Consequently, many smaller-market organizations have fallen far behind their more wealthy counterparts, a similar trend which is seen in player salaries. The league's top talents earn tremendous salaries, yet the majority of the league makes just a small fraction of those numbers. The systemic inequality seen in the NBA is unlike most other professional leagues, but it can be compared to the more ubiquitous issue of inequality and wage stratification seen in society as a whole. This presents a precarious situation for much of the league, but the problems can be solved with the cooperation of both the players and the owners in finding a compromise.



### **Chapter 3: Policy Recommendations for the NBA**

The topics covered in the previous chapter provide insight into the motivations behind the current salary cap structure in the NBA. For the most part, owners and teams act as profit maximizing firms, but the salary cap was implemented with the stated goal of remedying competitive balance. It has become unequivocally clear that competitive balance has not improved in the decades following the decision to limit each team's spending, yet there have been no significant changes to the salary cap system which was supposed to be the savior of competition. If the main goal was truly to foster a more competitive environment in the NBA, the league would have at least attempted to revise the salary cap system to be more conducive to the stated goals. As time has passed and other leagues have devised more effective solutions to ensure that every team has an increased capability to contend for championships, we are left to wonder how it has remained so difficult for the NBA to match its counterparts in fixing the problem.

NBA profits are at an all-time high (*Forbes*), but the share of revenue which the players are taking home is decreasing with each new collective bargaining agreement. Monetarily, owners have been increasingly benefitting from the salary restrictions, but the product on the court has remained largely the same: a few teams tend to dominate the league, while most other teams have struggled to keep up. At this point, it is necessary to examine the ways in which the competitive balance issue could be resolved. Other leagues have utilized hard salary cap systems and substantial revenue sharing programs with greater success, indicating vital policy changes which the NBA must consider to ensure competitive balance.

A way to alleviate some of the problems with a soft cap could be to implement a hard cap, as utilized in the NFL and NHL (Florio, Mike). In this case, wealthy teams would lose their abilities to spend as much money as they desire, allowing for a more level playing field in terms of purchasing talent. While the soft cap allows for teams to spend more than they would be able to with a hard cap and thus giving certain players the opportunities to earn significantly more lucrative contracts, the salary cap exceptions provided by the league deny many teams from having a fair chance at signing high-caliber players. Aside from the aforementioned fact that some teams still have the resources to spend significantly more than their counterparts, there are also undeniable advantages afforded to more successful teams with superstar players on their rosters. For example, Stephen Curry, a two-time NBA Most Valuable Player award winner, recently signed the NBA's first contracted worth at least \$200 million. The five-year, \$201 million maximum contract he signed with the Golden State Warriors, the team he has spent his entire career with, could not have been matched by any other organization. If Curry had chosen to bring his talents to another city, he would not have been able to sign a contract worth more than around \$135 million. The exception which allowed Curry to earn almost \$70 million more with the Warriors than with any other team is markedly detrimental to competitive balance (Golliver, Ben). The Warriors were already arguably the best team in the NBA (and possibly the best team in NBA history), having appeared in three consecutive NBA Finals, winning two of them, and setting an NBA record by winning seventy-three games in one regular season. If the league was truly concerned with the competitive balance issue which plagues the NBA, the best team should not have any extra advantages in signing one of the league's best players.

Although the hard cap may provide opportunities for a team in a smaller market to remain competitive when signing new players, the issue of parity is not always solved via this

system. While the NFL has the best competitive balance out of all four major North American sports leagues (Lee, Travis), this may not be totally due to the hard cap system that is used in the league. The NHL's use of the hard salary cap does not create a more level playing field for all teams regardless of their value, as the league historically has the lowest levels of parity when compared to other leagues (Kiuru, Jesse). This indicates that, while the the hard cap can be a useful tool to promote the success of small market teams, it is not necessarily the sole remedy for balance. It is just one piece of the puzzle which must be combined with other initiatives to ensure parity is maintained.

After acknowledging the different salary systems and competitive balance in each of the four leagues, it becomes clear that it is not necessarily the salary system alone which leads to an increase in parity. There is, however, another policy utilized by each league that may provide more insight as to how competitive balance may be maintained or restored (Miller, Phillip A.). Revenue sharing, which is the practice of distributing revenue from the more wealthy teams throughout the rest of the league, may have a more profound impact on keeping less wealthy teams in contention. Revenue sharing consists of splitting revenue from ticket sales, television contracts, and other media deals in order to ensure that teams in smaller markets can earn enough money to compete with their rival teams (Szymanski, Stefan and Kesenne, Stefan). For example, the NFL, the league with the most revenue sharing, evenly distributes revenue from their lucrative television contracts throughout all thirty-two teams in the league. In addition, forty percent of ticket sale revenue is given to the visiting team in each game. This is important, as a team with a small fan base may not fill the seats at their home games, so they need to earn additional revenue from their away games to maintain a sufficient level of income. The NFL also

taxes higher income teams, with the taxes being distributed to teams without the capabilities to earn the same amounts of income.

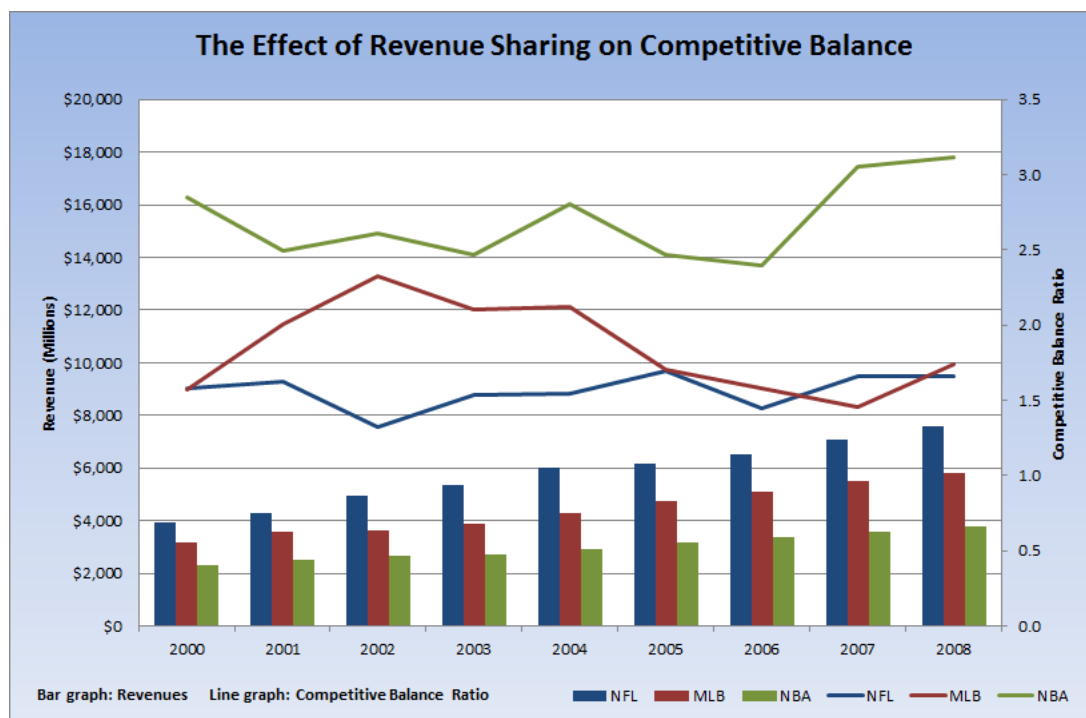
In the NHL, only about fifteen percent of revenue is shared between the teams, even though roughly fifty percent of the league's total revenue is generated by just ten teams. Thus, the teams at the bottom are not equipped with the financial security necessary to compete with the wealthier teams in the league despite having the same spending restrictions (Brinkman, Taylor F.). In the MLB, all of the teams give thirty-one percent of local revenues to be distributed throughout the league. National television contract revenue is mostly distributed among the lower-revenue teams (Fangraphs.com).

The NBA's revenue sharing is the least comprehensive out of the leagues, with the exception of the NHL. The wealthiest teams in the NBA tend to avoid helping out the less fortunate teams, evidenced by the fact that fourteen out of the thirty teams operated at a loss during the 2016-2017 season. Even after revenue sharing payments, nine teams still lost money by the end of the season. Much of these financial troubles are beyond the control of the teams; the Memphis Grizzlies, one of the league's most well-managed organizations which experiences moderate success on the court, still lost \$40 million in the 2016-2017 season (Bontemps, Tim). With a better revenue sharing system, the Grizzlies would have the ability to spend more on their payroll, giving them the potential to finally compete for a championship.

The effectiveness of revenue sharing in establishing and maintaining a reasonable balance is not merely a hypothesis; there is a definite positive correlation between the two. The competitive balance ratio is a metric devised to measure the differences between the amount of wins each team in a given league had in a season. The metric uses the number of teams in the league, the number of games an average team wins, and the number of games played during the



season. Referred to as the Noll-Scully metric, the ideal competitive balance ratio is 1.0. This does not necessarily mean that all teams are equal, but rather that the league is well-balanced between good and bad teams. As the ratio increases further above 1.0, a less ideal level of competitive balance is indicated.



(Martens, Dan)

The figure above depicts two different measurements. The bar graph is used to indicate the revenue brought in by each league for every season between 2000 and 2008. As shown by the graph, the NFL earns the most revenue out of the three leagues, followed by the MLB and NBA. The line graph represents the Noll-Scully metric for each league. While total revenues seemed to have a similar upward trend in each league, the Noll-Scully metrics varied more widely between seasons. The NFL's competitive balance ratio remained near 1.5 for most of the duration of the

period shown, indicating the best level of competitive balance among the three leagues.

Unsurprisingly, the NFL has the largest revenue sharing program in North American sports.

The NFL began its revenue sharing initiatives in the early 1960s when CBS gained television broadcast rights for each team excluding the Cleveland Browns. Shortly after, CBS acquired the rights to broadcast the Browns' games, thus boosting the program even further. In 2016, the NFL shared \$7.8 billion between its thirty-two teams, making up about sixty percent of total NFL revenues. Even though the NFL already has the most comprehensive revenue sharing, it continues to increase sharing, indicating a more profound commitment to maintaining competitive balance (Martens, Dan).

Between the years of 2001 and 2004, the MLB struggled to maintain parity, evidenced by the higher ratios, peaking at over 2.0 in 2002. In the following years, the MLB improved their competitive balance and, in 2007, had even better balance than the NFL. The MLB implemented their revenue sharing program in 1996, with the plan to slowly build it up in the coming years. During the 2002 collective bargaining negotiations, the revenue sharing program was improved. All teams were required to pay thirty-one percent of their local revenues to be split evenly between all of the league's teams. Teams with lower revenues were also guaranteed a larger portion of national broadcast revenues allotted by the MLB's Central Fund. It is no coincidence that the MLB's competitive balance increased at the same time the revenue sharing program was revamped.

The NBA has had historic struggles to prevent competitive imbalance, although it becomes increasingly more clear that this is hardly accidental. In fact, between the years of 2000 and 2008, there has been an increase in the NBA's Noll-Scully metric, with a meteoric spike between 2006 and 2008. By 2008, the Noll-Scully metric rose to over 3.0, indicating a trend of

immense imbalance between teams (Martens, Dan). Keeping in mind that nine teams reported to be operating at a loss following revenue sharing in 2016-2017, this statistic highlights the inefficiency of the NBA's revenue sharing program. Teams which are operating at a loss have significant obstacles to competition which, in turn, deter many players from signing with them. These teams are often forced to field teams comprised of more low salary players than their competitors. Caps are in place to protect certain high-income teams from contributing large percentages of their profits to the revenue sharing pool; this practice protects the teams which need the least amount of financial protection, providing insight into the league's goals of putting the most popular teams in the best position to succeed.

Using evidence to support the belief that the NBA has been ineffective in keeping a competitive balance between its thirty teams, it is necessary for the league to at least consider the options provided by a hard salary cap and a more substantial revenue sharing program. A hard salary cap would prevent wealthier teams from utilizing a greater spending ability when compared to other team. Additionally, the exceptions which allow certain teams to offer larger contracts than other teams are permitted would be abolished. If the current salary cap of about \$99 million remains in place with a hard cap system, the players' salaries would suffer. However, if the revenue sharing program is revamped, more teams would be capable of spending higher amounts on their payroll. Thus, the salary cap could be greatly increased, preventing the players from getting the short end of the stick in this deal. While some owners may experience decreased profits which would work against their ultimate goals of profit maximization, this would create a more balanced league, which, in turn, will create a better on-court product, providing opportunities for even more revenue for the league.



## Conclusion

After an in-depth assessment of the motivations behind the NBA salary and its effects, it is clear that changes must be made in the NBA to not only resolve competitive imbalances, but also to protect players from the owners' efforts to hold as much power as possible and suppress player salaries. The implications of the salary cap all point to its ineffectiveness in creating a sustainable level of competitive balance. Given the fact that this ineffectiveness has continued for over three decades without any signs of a shift in the right direction, it can be concluded that there are other motives for keeping the current system in place.

The owners have undoubtedly been the beneficiaries of this system, with the players feeling the negative effects of it. Though the league's best, most established veterans still may earn up to fifty million dollars per year, the majority of players have been plagued by stagnant wages and severely unequal salary distributions which do not appear to be subject to mitigation in the foreseeable future. The owners have consistently come out on top following most of the collective bargaining negotiations and lockouts, and the players' share of revenue has been slowly decreasing. Team owners have always successfully reduced the power held by the players, and it has become even more severe as a result of the salary cap.

Not only is it important for the players to regain some of their bargaining power, but it is just as important for the players (and fans) to be a part of a more balanced league. The profit maximizing owners will continue to prioritize profits over balance, so the burden is on the players to negotiate for more equitable conditions under the next Collective Bargaining Agreement. This, however, will not fully lead to the competitive balance that is necessary for the league to put out its best product for the consumers. The league must institute a level of revenue

sharing which more closely mirrors those of the NFL and MLB. For far too long, the NBA has prioritized the interests of its most wealthy members in its largest markets, leaving the teams with less resources behind. By giving the less wealthy teams a larger share of revenue, they will be able to close the gap in purchasing power for talent, leading to a greater chance for championship contention.

The improved revenue sharing program along with a hard salary cap will alleviate many of the problems the league has been facing for decades. By ditching a flexible salary cap in favor of a more rigid payroll restriction, there will be no unfair advantages afforded to teams who already employ the league's top talent. Better revenue sharing will directly affect the salary cap, as the league will be able to increase the cap due to the increased revenues by the league's less wealthy teams.

Some concessions will certainly need to be made by both the players and the owners, but the final product of these policy recommendations will ultimately lead to the betterment of the league as a whole. The NFL has been the most balanced league for the better part of the last two decades, and taking a page from their book may be just what the NBA needs to experience the level of prosperity which the NFL has had for so long. If the NBA can overcome their obstacles, it can provide an example for how society can overcome its obstacles and help lead to changes in equality, even if it only occurs on small scales. Fixing the problems which have plagued the NBA will not be easy but, with a commitment from the players and owners, there is hope for a better product from the NBA.



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