The NBA Collective Bargaining Agreement: Structure, Strategy, and Looking Ahead

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Introduction

The National Basketball Association was founded June 6, 1946 and has grown to be one of the premier sporting associations in the world. When it started, player movement was limited to territories, because basketball was a regional sport and players did not make enough money to support themselves through just playing professional basketball. Sports in the United States were much less industrialized then, but as time went on it became more important to set rules to regulate overall league labor practices. The first collective bargaining agreement was solely between the players and owners in 1970 but has evolved to govern the entire NBA. Since that time, there have been 12 CBAs ratified by the league and the players (Coon, 2022), with the 2017 version that has an early opt-out in 2023, currently in effect.

Each NBA league fiscal year starts on July 1, when free agency opens. Teams have the right to sign players, either veteran players, or first year (rookie) players, that teams either acquired through the draft, or through undrafted free agency. Once teams sign their players, training camp and preseason start around September where players return for the new season and teams can make their final roster cuts. After this date, the NBA season is played. When the season ends, the league holds an annual rookie draft, where teams are allowed to select young players coming from college, internationally, semi-professional programs, etc. as long as they are one year removed from high school. Theoretically, the worst teams get the highest draft selections, and the best teams get the lowest draft selections, which helps maintain competitive balance within the NBA. However, these selections are allowed to be traded at any point within the season before the trade deadline. The pick order is determined by a lottery, which discourages intentional losing to get the best player available in the NBA draft in each season. Once the draft is complete, teams can sign players with expired contracts and execute trades and the new league season starts again.

Soft Salary Cap

The NBA has a soft salary cap structure, which means that teams can exceed the salary cap. Historically, it has acted as a spending limit to keep teams competitive. At the beginning of each NBA fiscal year, the soft NBA salary cap is set each season by multiplying Basketball Related Income, or BRI, by 44.74% minus projected player benefits, and divided by the number of teams. The goal of this calculation is to give the players a 50-50 split of all generated Basketball-Related Income, which this calculation ends up doing when accounting for the teams over the soft salary cap. This revenue split between the players has been the cause of multiple labor disagreements in the NBA's history.

The NBA also has a salary floor set at 90% of the soft salary cap. Although teams can operate below the salary floor, it is disadvantageous for teams to do so because at the end of the seasons, teams must pay the difference between the salary floor and their current payroll and split that total among their players. Thus, this system keeps the owners from cutting costs by limiting player salary and encourages an active free agency market for all teams.

Additionally, teams retain contracts at the end of the league fiscal year in the form of cap holds, which vary in dollar amount by contract type. This acts as a placeholder for teams and does not count towards a team payroll. In turn, a team that was above the salary cap threshold the year prior remains over this threshold as it enters free agency, even if they have expiring contracts. Under the same breath, teams over the salary cap can also receive a cap hold, in the form of a non-simultaneous trade exception, if they trade a player to another team and don't get the same value in contracts in return. This idea will be expanded upon later. To get under the salary cap, a team can renounce these cap holds at any time, but all renounced players become unrestricted free agents, meaning they can sign anywhere, and this process cannot be reversed.

Cap Hold Amounts By Contract Type	
Contract Type	**Cap Hold Amount**
1st Round Pick off Rookie Contract	300% of previous salary*
Bird player	190% of previous salary**
Early Bird player	130% of previous salary
Non-Bird player	120% of previous salary
Minimum-salary player	Two-year veteran's minimum salary***
Two-way player	One-year veteran's minimum salary

*250% if the previous salary if it is above league average

**150% of the previous salary if it is above league average

***Unless the free agent only has one year of experience (one-year veteran minimum if so)

Figure 1: Cap hold amounts based on player contracts (Data Source: HoopsRumors, 2022)

Even in its introduction in the 1983-84 season, the NBA, unlike other leagues, has indirectly incentivized teams to spend over the soft salary cap. To follow the addition of the soft salary cap, the NBA also introduced Larry Bird Rights, or Bird Rights for short, named after star player Larry Bird. This allowed teams to re-sign players that had more than three years of service on their team, even if they exceeded the soft salary cap. Bird Rights can be traded, if the player is on a continuous contract between each team and are protected by cap holds. If a player is released, or a cap hold is released, the team loses the player's Bird Rights. Furthermore, if a player signs with a new team in the offseason, Bird Rights are reset back to zero. When implemented, this policy was seen as a win-win because teams could keep their players and players could earn a more lucrative contract if a team spends over the salary cap. However, in the seasons that carried forward, some teams would take advantage of this rule to drastically spend over the salary cap limit to keep their star players.

The most egregious example of this behavior came in 1997-98. At the time, the soft salary cap was set at $26.9 million. The reigning two-time NBA champion Chicago Bulls faced with star player Michael Jordan's impending free agency for the third time in three years. The team were faced a similar dilemma: give into star player Michael Jordan's heavy contract demands or watch him retire. With no maximum salary restraints or punishments for exceeding the NBA salary cap, the Bulls used Michael Jordan's Bird Rights to exceed the soft salary cap and give him a whopping $33,140,000 contract. This left Jordan making an unprecedented 123% of the salary cap and contributed to over half of the Bulls' league-leading $61,330,670 payroll en route to a third straight NBA title. Jordan's contract and other moves like this caused strife among small-market teams that could not afford to sign deals of this magnitude to their star players. 15 of the then-29 NBA teams reported losses and players received 57% of Basketball-Related Income that season, contrary to the agreed-on 48% figure in the previous CBA. These factors led to the 1999 NBA lockout, where, among other provisions, maximum contract amounts, rookie-scale contracts, and a luxury tax were implemented into the NBA's newest CBA that season. These changes, along with the continuance of Bird Rights as a provision in newer CBAs, have shaped the landscape of the modern NBA.

The Luxury Tax Threshold and Luxury Tax Apron

A large portion of the Collective Bargaining Agreement today centers around the luxury tax. The NBA luxury tax operates as a threshold where, if the total player salary of a team at the end of the season breaks the threshold, there are tax penalties. If a team's yearly cumulative salary is over the luxury tax threshold in four or more of the last five seasons, they are subject to the repeat offender tax, or "repeater tax," which costs even more. Like the US government tax system, the NBA luxury tax is a progressive tax structure. This means that teams are taxed in increments for money they have at each level. For example, if a team is a standard tax offender and $6,000,000 over the tax threshold, $4,999,999 gets taxed at $1.50 per excess dollar, and $1,000,001 is taxed at $1.75 per excess dollar. Below is a figure of each tax bracket as of the 2017 CBA.

NBA Luxury Tax Penalties Under 2017 Collective Bargaining Agreement		
Amount over tax threshold	**Standard Tax (per excess $)**	**Repeat Offender Tax (per excess $)**
$4,999,999 or less	$1.50	$2.50
$5,000,000 to $9,999,999	$1.75	$2.75
$10,000,000 to $14,999,999	$2.50	$3.50
$15,000,000 to $19,999,999	$3.25	$4.25
Over $20 million	$3.75 + $0.50 per $5 million	$4.75 + $0.50 per $5 million

Figure 2: NBA luxury tax penalties at each level over the NBA salary cap (Data Source: CBAFAQ, 2022)

The repeater tax was implemented in the 2011 CBA and sought to give harsher punishments to perennial taxpayers. When the luxury tax was first implemented in 1999, the league taxed salaries over the threshold 1 to 1, with no repeater tax, meaning that teams faced fewer penalties for going over the tax. Ultimately, this policy has shifted because the NBA continues to disincentivize being over the luxury tax threshold and wants to maintain competitive balance.

The luxury tax apron sits just above the luxury tax threshold and acts as a triggered "hard" salary cap for some teams that make certain roster moves, meaning that they are not allowed to exceed the apron at any point in time. This practice is strictly enforced, and a trade will get vetoed by the league office if a move is made that brings a restricted team over the apron. This apron's purpose is to penalize teams who sign players to contracts for higher than the minimum salary, despite not holding Bird Rights and being over the soft salary cap. The measure expires at the end of the league's fiscal year, signifying the end of a season. However, this "hard" cap is unique in that it is an optional restriction.

There are three ways to trigger this "luxury tax threshold" that hard caps. The first is by signing a player to a contract using the non-taxpayer mid-level exception. Under this mid-level category, there are three exceptions designed to allow teams to have more spending flexibility at three different spending levels. The cap room, or "room" exception is the smallest of these exceptions, reserved for teams that are under the NBA salary cap to sign a player if they exceed the salary cap within free agency. The taxpayer mid-level exception is the second largest, reserved for a team who is over the luxury tax apron. A non-taxpaying team can sign a player to a contract worth the dollar amount of either of these exceptions without penalty. However, as soon as the team exceeds the contract value of the taxpayer mid-level exception for a non-Bird free agent, the team is effectively using a portion of the taxpayer mid-level exception and agreeing to "hard cap" themselves at the luxury tax apron. This restriction exists to maintain competitive balance between teams because another team can sign a player to a higher salary in free agency that it typically would not be able to.

The second way is under the same umbrella, using the bi-annual exception. The bi-annual exception isn't as commonly used, with only 2 teams using it in 2021-22. This exception can be used at the same time as other mid-level exceptions but cannot be combined with that contract amount. This exception can only be activated once every other year and has historically been worth approximately 3.32% of the salary cap. By signing a player to this exception, you are also bound to these luxury tax apron restraints. A chart outlining the dollar amounts of these exceptions is shown below.

Salary Cap Exceptions, Rules, and Amounts				
	Hard Capped at Luxury Tax Apron		Can Exceed Luxury Tax Apron	
	Bi-Annual Exception	Non-Taxpayer Mid-Level Exception	Taxpayer Mid-Level Exception	Salary Cap "Room" Exception
2022-23 Start Year Value	$4,105,000	$10,490,000	$6,479,000	$5,401,000
Percentage of Soft Cap	Approximately 3.32%	Approximately 8.48%	Approximately 5.24%	Approximately 4.37%
Maximum Contract Length	2 seasons	4 seasons	3 seasons	2 seasons
Annual Raises	5%	5%	5%	5%
Usability	Once every 2 seasons	Over the salary cap, but not the luxury tax threshold	Over the luxury tax threshold	Under the salary cap
Notes	Can be used at same time as other MLEs	Triggered if an over the cap team is any amount over T-MLE	Can also be used by non-taxpaying teams over the salary cap without hard-capping them	Worth the least amount of money out of all the mid-level exceptions

Figure 3: Salary Cap Exceptions (Data Source: HoopsRumors, 2022)

These exception amounts are scaled up with the salary cap in each season. For example, the salary cap increased by 10% from the 2021-22 season to the 2022-23 season. Therefore, these exceptions also increased by the same amount.

The final way to trigger this "hard" cap is via a sign-and-trade. A sign-and-trade is an agreement between three parties, the player, the player's original team, and the player's new team, to sign a player and immediately trade him to his new team, using the previous team's Bird Rights. If a team signs a player using a sign-and-trade, the team is hard capped. Thus, the team cannot exceed the hard cap within the signing upon making the transaction. However, if a team participates in a sign-and-trade without receiving money back, they are not hard-capped. This restriction allows for teams to facilitate sign-and-trades with other teams who do not have a player's Bird Rights, but only take on a player to a salary using a sign-and-trade once per offseason. Sign-and-trades are harder to execute, but still give a team an advantage of signing a player in free agency that they otherwise would not be able to due to salary cap restrictions.

The NBA luxury tax was historically implemented as a penalty for teams that exceeded the salary cap by too much money. Now, for some teams, it operates as a self-imposed hard cap, where teams only go over it in times of desperate need, or to truly compete for a title. Theoretically, this means that the luxury tax is doing its job: discouraging teams from going over it. However, in practice, it turns the NBA into an exception-laden economy. For teams without this "hard" cap restriction, the luxury tax is more commonly acting as a "glass ceiling" for teams that is only broken in times of absolute need. Multiple owners each year try to avoid the harsh tax penalties set by the NBA.

The Three Zones of Operation

There are currently three distinct "zones" an NBA team can operate within. These are an under the cap team, a non-taxpaying over the cap team, and a tax-paying over the cap team. Within each zone, teams have various restrictions and access to different types of exceptions. There are advantages and disadvantages to each

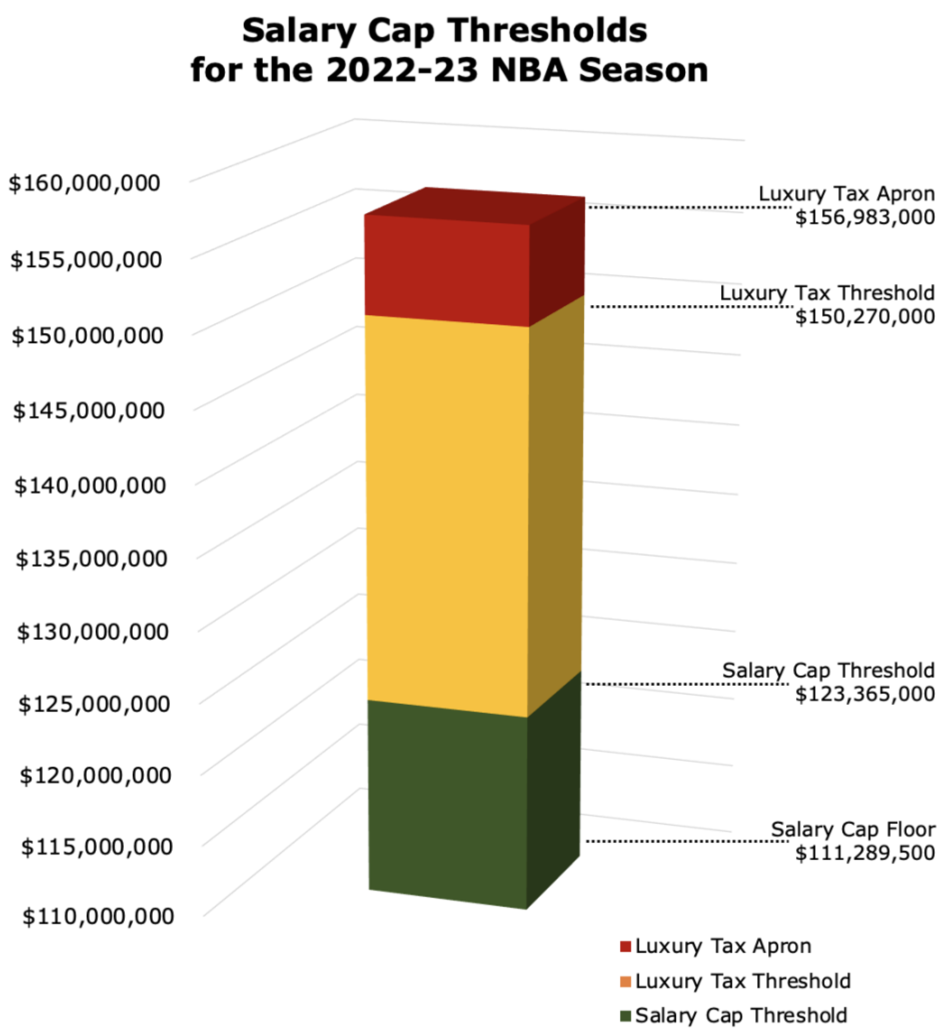

Figure 4: This chart describes the NBA salary cap amounts for the 2022-23 NBA season. Anything in the green is under the soft salary cap, in the red is above the luxury tax threshold, and the yellow is in between the soft cap and luxury tax threshold. (Data Source: Spotrac)

If a team is anywhere within the green, the team is an under the cap team. If they are anywhere within the yellow, they are classified as a non-taxpaying, over the cap team. If they are in the red, they are classified as a taxpaying, over the cap team. There are advantages and disadvantages to all three zones of operation; teams can justify operating in any zone, given the makeup of their roster.

The simplest conceptually is as an under the cap team. The team will have access to cap space, meaning they can take on players via a free agent signing or a trade with a salary less than or equal to their cap room (plus $100,000 of wiggle room). Additionally, these teams are not subject to any restrictions, such as in salary aggregation of multiple players, or having to salary match in trades. However, they will not create any non-simultaneous trade exceptions. Not only do they not have any restrictions, but they also benefit from distribution of luxury tax payments.

Another zone is as a team operating over the luxury tax threshold. Teams operating over the tax threshold have the most restrictions imposed by the NBA because they are spending the most money. Even with the greater restrictions, historically, teams justify being over this threshold to acquire the necessary players to contend for a championship.

The most common zone seen in the NBA today is as a non-taxpaying, over the salary cap team. This has been the sweet spot for most teams to operate, as they are free to spend more money than the salary cap amount without having to pay any luxury tax. These teams, like ones under the cap, also benefit from the distribution of luxury tax payments.

Teams above the salary cap threshold do not have access to cap space, but they do have two exceptions at their disposal in the form of simultaneous and non-simultaneous trade exceptions. A simultaneous transaction is a trade between two teams where each team receives salary back. Most NBA trades where both teams receive salary back use simultaneous trade exceptions because often the salaries on each side that are being traded aren't completely identical. The exception allows to take back slightly more salary than they send out, if both players are being sent out at the same time, even if the team is over the soft salary cap.

When making a trade over the salary cap threshold, a team must match the salary of the player(s) they are acquiring with the player(s) they are sending out to a certain degree. To match salary amounts, multiple player contracts can be combined, or aggregated, if trading for a player with a higher salary. If the sum of salaries in both sides of a trade don't match, a simultaneous trade exception allows a team to take back slightly more salary than they are sending out. For a non-taxpaying team, this amount varies for contract level if the total team salary doesn't exceed the luxury tax threshold before or after the trade. Specifically, a team can receive up to 175% plus $100,000 of outgoing salary for any amount up to $6,533,333, and 125% plus $100,000 for any amount over $19,600,000. For any value between $6,533,333 and $19,600,000, a team can receive the total outgoing salary plus $5,000,000 (CBA Breakdown, 2019).

Simultaneous Trade Exceptions and Their Restrictions		
Contract Value	**Non-Taxpaying Team**	**Taxpaying Team**
Under $6,533,333	175% of pre-trade salary + $100,000	125% of pre-trade salary + $100,000
Between $6,533,333 and $19,600,000	Pre-trade salary + $5,000,000 + $100,000	
Over $19,600,000	125% of pre-trade salary + $100,000	

Figure 5: This chart describes simultaneous trade exception restrictions for teams under and over the luxury tax threshold. Simultaneous trade exceptions are not used by a team under the salary cap. (Data Source: Coon, 2022)

For a team over the salary cap threshold that receives lesser contract value back in a trade, the team creates a non-simultaneous trade exception. This exception is equal to the difference between contract value being sent out minus the contract value being received if the team stays over the salary cap threshold. As mentioned previously, a non-simultaneous trade exception is a type of cap hold only created through a player transaction. Unlike cap holds for players following the end of their contracts, non-simultaneous trade exceptions are not attached to a player or his Bird Rights and can be traded throughout the season. These exceptions cannot be combined with any other player salary or additional non-simultaneous trade exception. A player, or collection of players, of aggregated equal contract value (plus $100,000 of wiggle room) can be acquired using this exception. Although, once created, it expires after a full calendar year. For over the cap teams, non-simultaneous trade exceptions have allowed teams to take on contracts without having any cap space.

For teams between the salary cap threshold and luxury tax threshold, these are the only constraints for using these exceptions. On the other hand, for teams over the luxury tax threshold, they are subject to multiple penalties. The first penalty is through their salary matching in non-simultaneous trade exceptions. Taxpaying teams are limited to acquiring just 125% + $100,000 back in a simultaneous transaction no matter how much salary they are sending out (CBA Breakdown, 2019). Additionally, taxpaying teams may have other restrictions with trade aggregation, depending on when traded players were acquired or signed by the team.

While rarely reported after a trade, these exceptions have shaped the fabric of how NBA trades are conducted. Without it, teams would have to identically match contracts. Additionally, teams have the flexibility to trade players to get under a certain salary threshold or accumulate players with higher salaries.

Below is an example of a theoretical team payroll entering the 2022-23 NBA season. This team is currently over the salary cap threshold, but under the luxury tax threshold. However, they are only over the salary cap threshold due to their cap holds. If they renounce any of these cap holds, the team will create cap space, but the player will lose their Bird Rights. Additionally, if a player is coming off their initial contract as a restricted free agent and their cap hold is renounced, the player will become an unrestricted free agent.

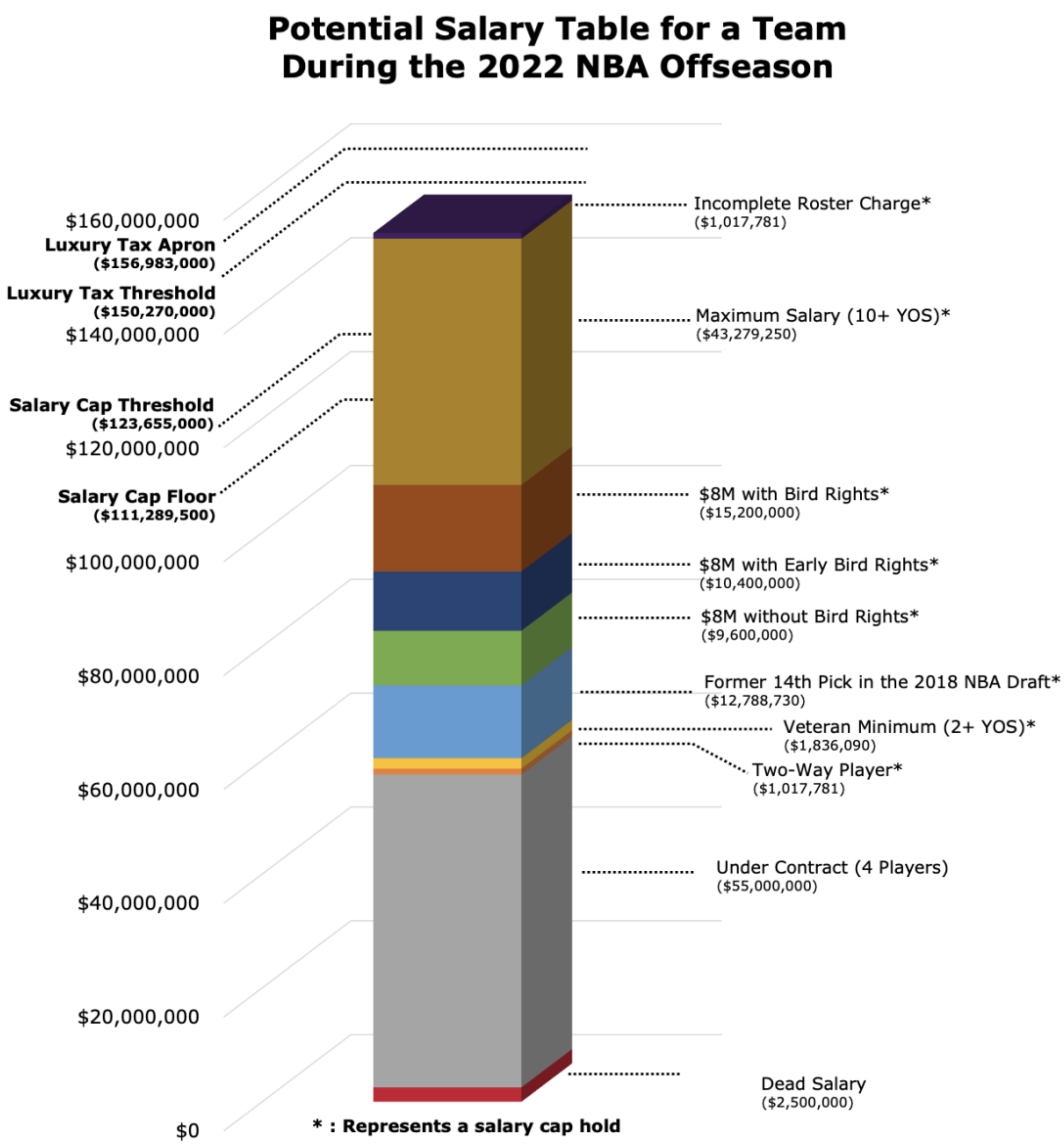

Figure 6: This chart details the potential salary table for a team during the 2022 NBA offseason. Everything representing a cap hold is marked with " * ". This team has $57,500,000 in salary and $95,139,632 in cap holds.

Since dead cap, or waived players, count towards a team's salary total, this team is paying $57,500,000 in total contracts. This means that they could create cap space by renouncing all their free agents. The maximum amount of cap space they can create is $56,994,971 because $9,160,029 is allocated as an incomplete roster charge. If this team were to go under the $123,655,000 salary cap threshold at any time through trades or renouncing holds, they would lose access to their non-taxpayer mid-level and bi-annual exceptions.

Through cap holds and traded player exceptions, teams can operate as an over the cap team without physically having the salary on their books to be over the cap. This can be used to acquire trade exceptions and activate the taxpayer mid-level exception. Additionally, teams with cap holds and trade exceptions that push them over the cap can renounce their trade exceptions and holds to go under the salary cap, if need be. This process can be used to sign a free agent. However, in the past few seasons it is distinctively clear that teams find it advantageous to operate as a team over the salary cap, rather than under. Below is a graph detailing which "mode" teams have fallen under since the 2011-12 season.

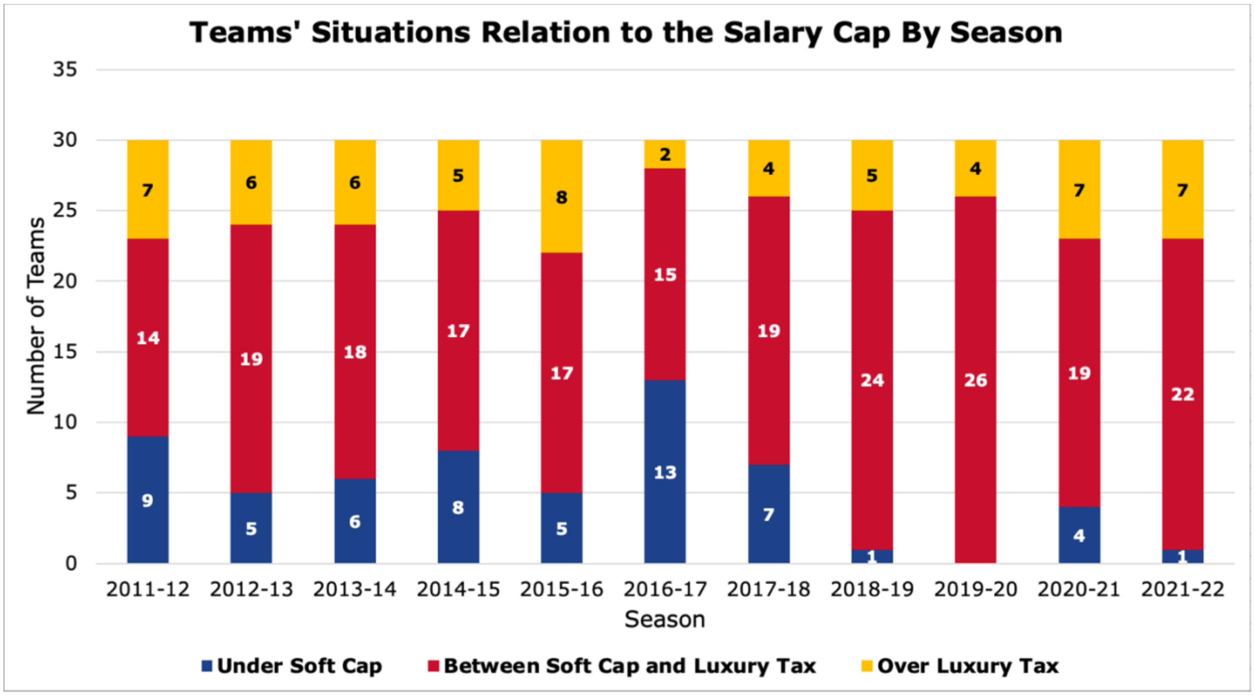

Figure 7: Graph showing each team's spending since the 2011-12 season. In recent seasons, less teams have spent below the soft salary cap.

While the highest percentage of teams still fell between the soft salary cap and the luxury tax, the number of luxury tax paying teams was the same, or extremely similar, to the number of teams below the soft salary cap, in any given season. However, since the 2017 CBA, more teams have operated within this middle ground between the salary cap and the luxury tax threshold, with very few teams falling below the soft salary cap. Historically, the teams that fell below the salary cap were rebuilding and didn't spend over the salary cap limit to save money.

However, in 2016, this changed. Before the 2016-17 NBA season, the league renegotiated their annual rights deal with their broadcast partners. The old deal had just expired, and the league was doing well. The 2016 NBA Finals series that went to seven games saw record viewership numbers and Steve Ballmer had just bought the Los Angeles Clippers for an unprecedented $2 billion, inflating the value of each franchise. The NFL had also secured a deal worth $5 billion annually in 2014. The NBA followed up their success by signing a 9 year/$24 billion contract with Turner and ESPN, worth around $2.67 billion annually. This not only gave the NBA the second highest annual right fees payment, surpassing the MLB, but almost tripled their revenue from the last contract, worth around $930 million annually (SportsMediaWatch).

This sudden increase in Basketball-Related Income led to the salary cap increasing exponentially prior to the new league year in 2016-17 from $70,000,000 to $94,143,000, a 34.5% increase. Thus, in 2016, free agency spending reached an all-time high, as the new salary cap floor for

2016-17 was $14,728,700 higher than the salary cap last season in 2015-16. Every team had new access to salary cap space, if they chose to create it, as a result. Even with the new space, not all teams spent over the salary cap that offseason, leading to thirteen teams being under the salary cap that season, the highest figure in league history.

Multiple long contracts signed during that 2016 free agency period didn't age as well as expected, so teams looked to offload these contracts to other teams. The ability to take on large, unwanted contracts became an asset to acquire draft picks. Rebuilding teams that historically fell under the salary cap threshold decided to take on these contracts, reducing their cap space. As the average salary went up because of increasing minimum and maximum contracts, teams began spending within the luxury tax again to keep their core of players together. Suddenly, there was an imbalance between luxury tax paying teams and teams with salary cap space.

Getting Under the Luxury Tax Threshold

In recent seasons, NBA teams have gotten smarter when operating their franchises. While most teams were over the salary cap limit, they figured out how to effectively create and acquire unwanted contract amounts through non-simultaneous trade exceptions, without needing to create cap space. This is seen through an increase in non-simultaneous and simultaneous trade exceptions. when it comes to "dodging" the luxury tax at the trade deadline. In recent seasons, the league has seen some teams try to "dodge" the luxury tax at the trade deadline.

The reason teams try to get under the luxury tax is because if a team goes over, they miss out on the distribution benefit from teams that paid the luxury tax. Thus, there are multiple teams each year that make a concerted effort to "dodge" the luxury tax each season. Over the last few seasons, teams have done this more frequently because of the greater benefit it has with more money being paid out in taxes. Teams are spending more than ever in luxury tax payments, so the monetary disparity between a tax-paying team and a non-taxpaying team has never been higher. Therefore, the margin of error on these transactions has never been higher.

The most recent example of this effort was the Boston Celtics, who made a series of trades around the 2022 NBA Trade Deadline to get under the luxury tax threshold. Before the February 10, 2022, trade deadline, the Celtics sat $6,319,171 above the luxury tax threshold and were set to pay $9,808,551 in luxury tax. In this situation, the Celtics were faced with the option of moving further into the luxury tax because they were not hard capped, armed with trade exceptions worth $17,142,847 and $9,720,000, and could make trade with teams trying to get under the luxury tax to get multiple impact players. However, the Celtics went the opposite direction. On January 19, 2022, the Celtics traded Juancho Hernangomez, earning $6,803,190, in a three-team trade and got back two minimum contracts worth a combined $4,072,012. While this move did not bring them below the tax threshold, it got them $2,731,178 closer and signaled their direction to other franchises.

Just days before the deadline, the Celtics sat $3,587,993 above the tax threshold. To get under the tax threshold, they traded both minimum contracts they acquired in the previous Hernangomez trade to the Orlando Magic and received no salary back. As added insurance, in a savvy move, they traded Dennis Schroder and two minimum contracts for Daniel Theis, saving an extra $1,061,448. When it was all said and done, the Celtics went from $6,319,171 over the luxury tax threshold to $1,545,467 under the luxury tax threshold. This collection of transactions saved the team $17,673,189 when accounting for luxury tax fees and lost salary. Additionally, the Celtics were able to receive an extra $10,456,986 in luxury tax distribution, a swing of $28,130,175.

After these trades, the situation got a little tricky because the Celtics sat at only ten players, two under the minimum of twelve. Even though the league minimum that season was $925,258, the Celtics were still able to avoid the tax because contracts are prorated throughout the season. Thus, the Celtics were successfully able to fill out their roster with players towards the end of the season and avoid the luxury tax. While the 2022 Celtics are just one example, multiple teams have employed this strategy in recent seasons.

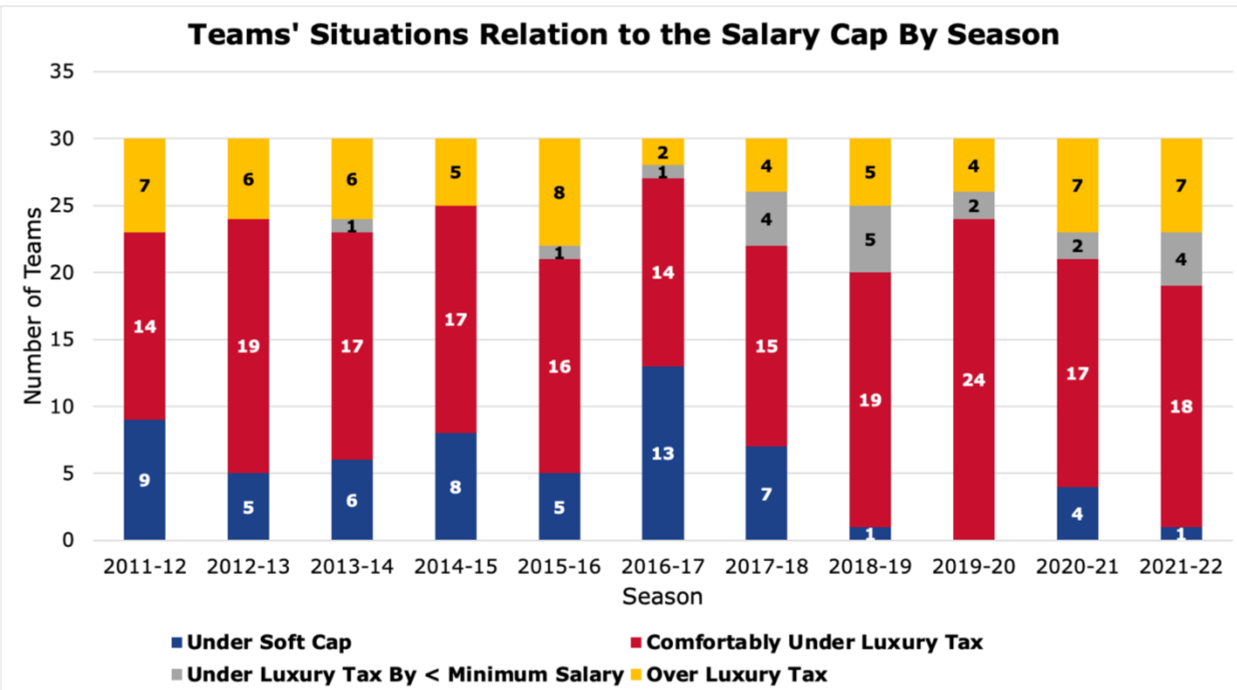

Figure 8: Similar graph to Figure 7 showing each team's spending since the 2011-12 season, but this time including teams that are barely under the luxury tax threshold. In recent seasons, more teams have barely dodged the tax by the minimum salary amount.

When re-examining the chart of teams' situations in relation to the salary cap, teams are taking advantage of all their resources under the luxury tax to acquire draft picks and players, even if they are rebuilding. Fewer teams are under the salary cap threshold now, even with the large contracts signed in the 2016 offseason now completely off the books. Even the one team in the 2021-22 season that was under the salary cap (the Oklahoma City Thunder), were still operating as an over-the-cap team until the NBA trade deadline. Their dead salary, cap holds, and current player salaries all combined to be $3 million over the salary cap before a $12 million trade exception expired, finally forcing them to renounce their remaining cap holds (Adams, 2022).

However, even with multiple teams actively trying to doge the luxury tax, luxury tax payments are still going up. This is partly due to the distribution benefit teams receive when they are below the NBA's luxury tax. Simultaneously, as some franchises are strategically deciding to duck the tax, the luxury tax paying teams are also strategically deciding to go all-in. Knowing that the tax distribution benefits won't be felt if a team is anywhere inside the tax, the group of luxury tax paying teams are increasingly spending more money in the luxury tax, even when accounting for salary cap inflation.

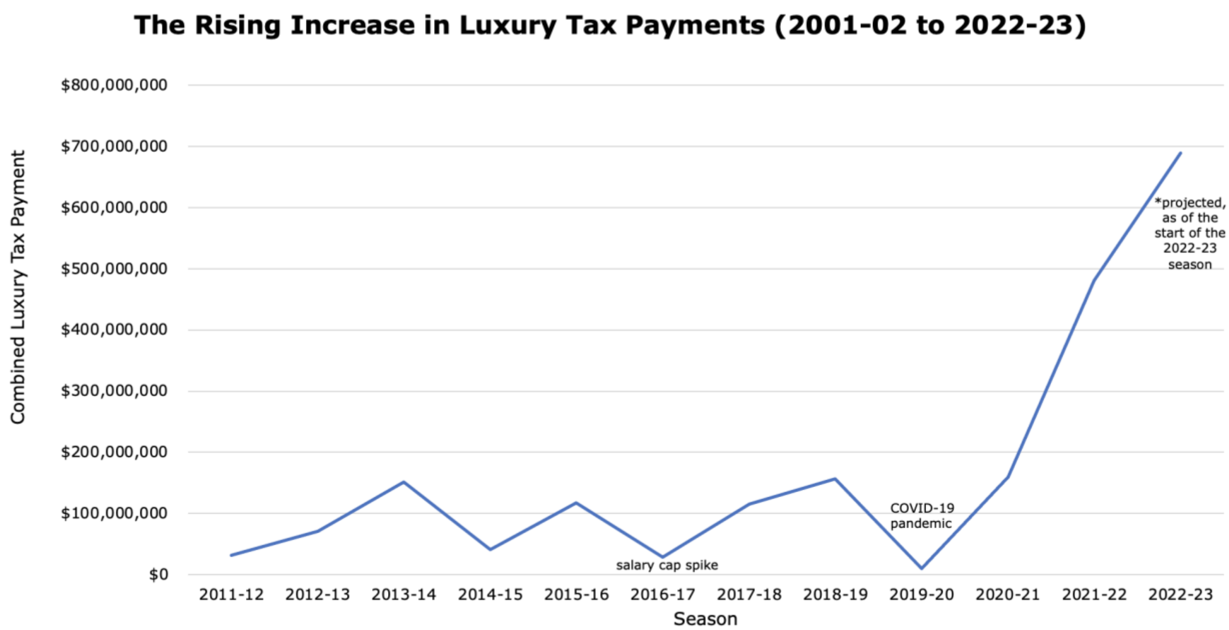

Figure 9: The luxury tax is projected to be at its highest level yet in the 2022-23 season: $689,399,621 for ten franchises. If it stands, twenty franchises would be set to earn $17,234,990.50 at the end of the season. (Data Source: Spotrac, 2022)

At the forefront of this spending is the Golden State Warriors. As of the beginning of the 2022-23 NBA season, they are slated to spend $170 million just in luxury tax, if they don't make any trades. Currently, they have a mind-boggling projected luxury tax bill of $300 million. Their reasoning for the high spending is clear. The Warriors are coming off a championship in 2022, their fourth in less than a decade, and are committing to their core players. One of these players, for example, is Jordan Poole, who quickly turned into a valuable sixth man on their championship team three years into his cheap rookie contract. After trading for him, Andrew Wiggins blossomed into an All-Star. Instead of choosing between both players, the Warriors gave them both extensions using Bird Rights. Poole earned a rise of $24,803,958 with a four year/$140M contract while Wiggins earned a four year/$109M contract. These moves drove the Warriors deeper into the luxury tax. Since the Warriors have been in the tax for four of the last five seasons, they are subject to the dreaded repeater tax, which was added in the 2017 CBA to discourage spending by super teams like the Warriors. The repeater tax increases their projected luxury tax bill by an extra dollar for every dollar they are over the luxury tax threshold.

Even with the high luxury tax bill, the Warriors are keeping up with their expenses. In the 2021-22 season, the Warriors generated the most revenue even after accounting for revenue sharing ($765 million) and earned the most operating income in the NBA ($206 million). Their $150 million in arena sponsorships was more than double that of the next team and $250 million generated in premium seating was by far the most in the league (Forbes, 2022). In the ten-year period between the 2011-12 and 2021-22 seasons, the Warriors have increased their franchise value more than tenfold, from $555 million to $7 billion (Forbes), more than making up for the luxury tax payments they are set to incur over the next few seasons. They have shot up to become the most valuable franchise in the NBA and this figure only expects to grow. With star player and four-time NBA champion Stephen Curry nearing the end of his prime, these moves are seen as an extension to their championship window and their extra spending appears to be worth every penny.

This practice is bringing unintended consequences to the league. Since the 2017 CBA, the divide between teams who spend just outside the luxury tax threshold compared to teams who spend above the luxury tax threshold is steadily getting larger. At the end of the 2021-22 season, the base salary difference between the lowest spender within the luxury tax (the Philadelphia 76ers) versus the highest spender outside the luxury tax (the Indiana Pacers) was $8,711,156. The figure is almost an advantage of one taxpayer mid-level exception (worth $9,536,000 that season) and the highest as a function of percentage of the salary cap in the history of the luxury tax. When factoring in luxury tax payments and the distribution benefit, the difference in net team spending for between the Pacers and 76ers was $24,333,613. The practice, in nature, may be further defining the line between “taxpaying franchises” and “non-taxpaying franchises.” While that hasn’t been detrimental to competitive balance (the aforementioned 2022 Boston Celtics made the Finals after dodging the luxury tax), it is worth keeping an eye on as the new CBA lurks closer.

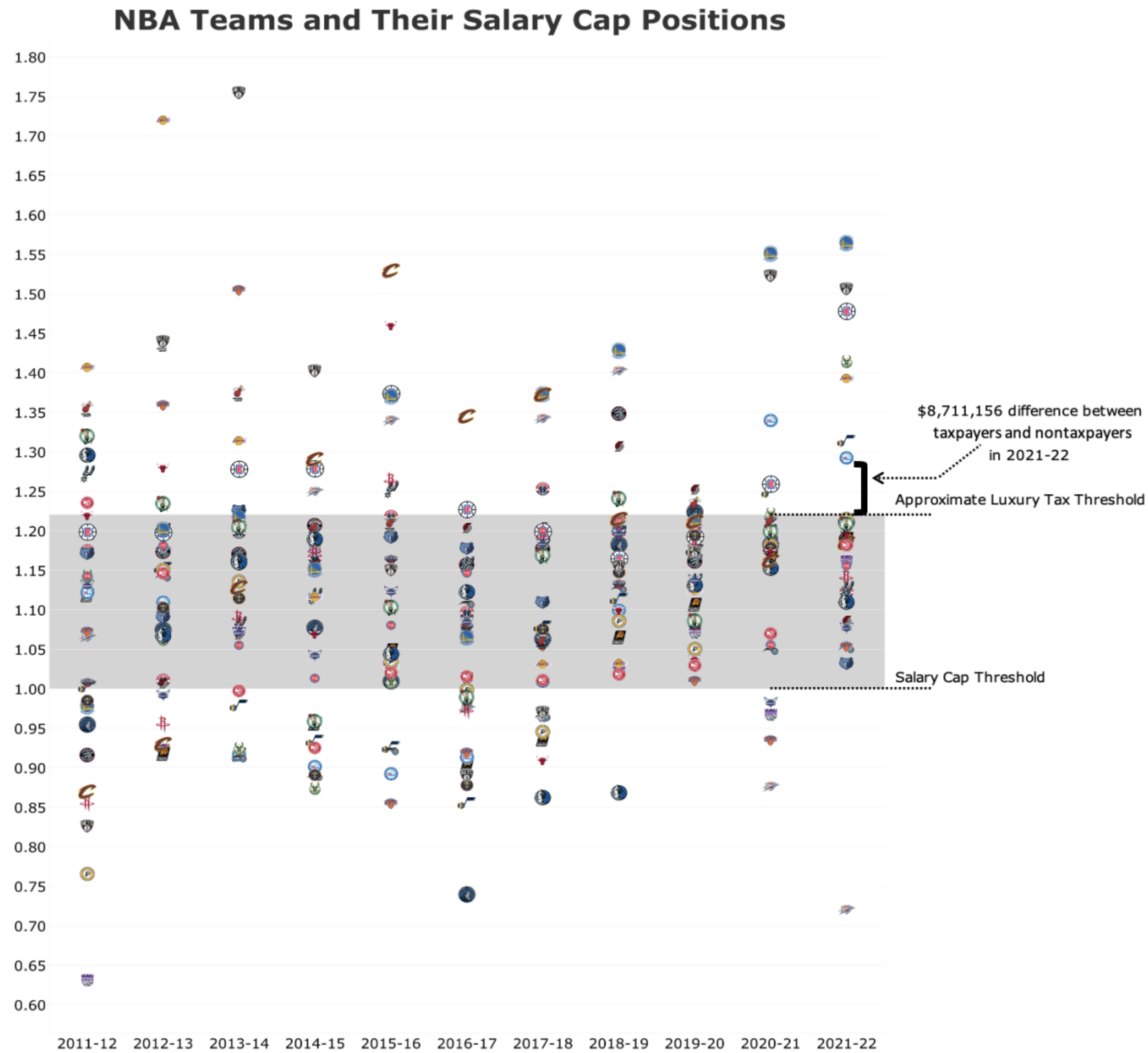

Figure 10: This graph shows where each individual team is in terms of spending as a percentage of the salary cap. The Pacers and 76ers contributed to a wider than usual gap between a taxpaying and non-taxpaying team last season.

These statistics are just supportive of a larger shift in preferences regarding what "zone" NBA teams favor since the 2017 CBA. Historically, the league has seen a more standard normal distribution of where teams were operating. Arguably, this is good for the league economy in theory because it creates options for franchises in different situations. For example, if a team needs to shed salary, they can talk to a team with cap room, instead of relying on a non-simultaneous trade exception. When examining the percentage at which teams spent in relation to the salary cap amount, it doesn't look like a one-year anomaly.

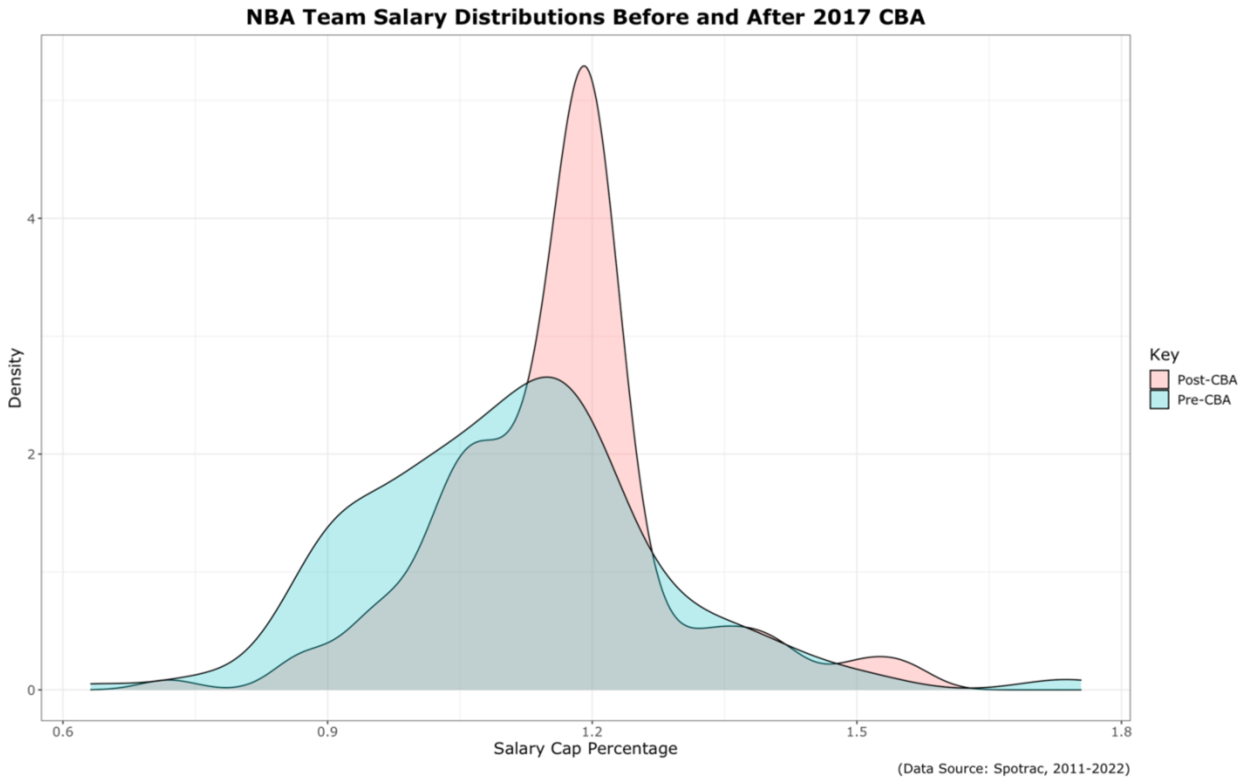

Figure 11: The histogram shows that more teams are centered around the luxury tax threshold, resulting in an increase in average salaries relative to the salary cap and lesser variance among teams. (Data Source: Spotrac, 2022)

Economically, this sequence of events is leading to players being paid more than ever, even relative to the salary cap. Teams are spending ever closer to the luxury tax line, with the average salary falling closer to the luxury tax threshold each season, rather than the salary cap. Economically, this is due to the nature of the market. With high-spending teams like the Warriors retaining players and signing them to higher contracts, there is additional pressure on contending teams to keep up with their spending, increasing demand. Additionally, with less talented players on the free agent market, supply is also reduced. This increase in demand and decrease in supply are leading to a higher equilibrium price for players, and new average spending for teams.

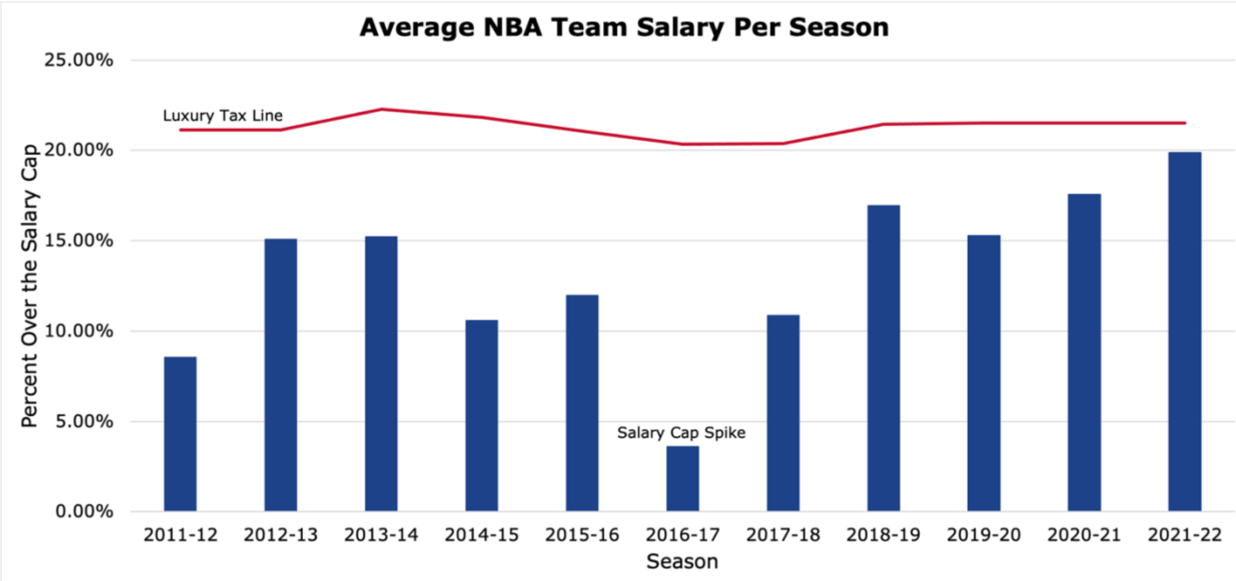

Figure 12: With team spending closer to the luxury tax threshold and further into the luxury tax, average salaries are higher relative to the salary cap. (Data Source: Spotrac, 2022)

However, if teams can just use these non-simultaneous trade exceptions as a means of creating cap room, then does it matter if the distribution of where teams lie looks different? When the NBA decided to implement a salary floor of 90% of the salary cap, this result was probably anticipated, especially with the rules regarding trade exceptions. Small-market teams spending over the salary limit is a "problem" that most other sporting leagues would like to have. The only concern for the NBA is maintaining competitive balance. Even with overall average higher spending, the league must continue to disincentivize spending higher into the luxury tax.

Concerns Regarding the Upcoming Collective Bargaining Agreement

At the end of the 2021-22 season, both the league and players' union can opt out of the Collective Bargaining Agreement. With both sides wanting different changes, a new CBA is expected to be ratified this upcoming offseason.

The biggest issue to investigate involves revenue increases. The league could correspond to a significant increase in the TV revenue contract from the major networks the NBA is partnered with. Already, the NBA has stated that they are looking for $50 to $75 billion in their next broadcasting deal, potentially tripling the existing 9 year/$24 billion contract the league currently holds with ESPN and Turner and rivaling the NFL's $113 billion it signed in 2021. Additionally, this will correspond to the largest salary cap increase in history. If this deal comes to fruition, it could have a drastic impact on player salaries, much like the 2016 CBA.

The NBA and National Basketball Players Association (NBPA) are trying to avoid a similar issue they faced in 2016 when the NBA's media contract went from $930M to 9 years/$24 billion. Because the salary cap is tied to projected BRI, the NBA projected a significant cap increase in the following season. Instead of doing something known as cap smoothing, where the league raises the cap incrementally over a multi-year timespan to limit the potentially drastic effects of a sudden increase in the salary cap, the NBA raised the salary cap by $34 million that season. This was mostly due to pushback from the NBPA who didn't want to risk potentially losing out on any extra cash from the new media deal.

In the new 2023 CBA agreement, the league and players may agree to put new provisions in to prevent a similar situation from happening with the new TV deal coming up in 2024-25. By doing it this way, the league will help maintain competitive balance and avoid overspending on one free agency class. Additionally, if the salary cap threshold were to rise above the luxury tax apron like it did in 2016, it could bail some teams out of paying the luxury tax. When crafting a new CBA with this increase in revenue in mind, the league may look to adopt policies to penalize teams even more for spending into the luxury tax.

Where does the Tax Get Settled in the 2023 CBA?

At the forefront of any salary cap changes are teams like the Golden State Warriors, who are facing multiple repeater tax penalties because players have priced out of their contracts. This increased spending has led to immense success and some teams may argue that the league must input new measures to retain competitive balance. For teams not making as much revenue as the Warriors, they may feel priced out if they are unable to spend into the luxury tax. Although, this begs the question: how much should a team be punished if it is following league rules, hasn't utilized free agency as much as other super teams, and is already facing hundreds of millions of dollars in luxury tax payments?

The NBA has also explored adding a hard spending limit for team salaries in the next CBA to potentially help this competitive balance issue. This idea has been met with resistance by the NBPA. While this move would, in theory, increase competitive balance because teams would have access to the same resources, it could also force teams like the Golden State Warriors to make tougher roster decisions and potentially break up because of a hard spending limit. Although, the main reason may be the reduction of the distribution benefit that non-taxpaying teams are receiving by taxpaying teams. When teams spend over the luxury tax, the NBA collects these payments and redistributes them out to the individual teams. Last season, the 23 teams that did not pay the luxury tax received $10.46 million, according to Basketball Noise, or half of the $481 million in luxury tax payments. This figure is only rising too. As of the beginning of the 2022-23 NBA season, ten teams are slated to pay a combined $689 million to the league in luxury tax payments. This figure may decrease before the end of the season when teams like the 2022 Boston Celtics try to shed salary at the trade deadline, but still is anticipated to be the largest luxury tax payment ever received.

For small market teams, this distribution benefit is huge. Since the inception of the luxury tax, only nine teams have spent over $100 million. Last season, the Golden State Warriors spent $170 million. Eight teams have paid less than $10 million in luxury tax. This includes both Charlotte and New Orleans, who have never paid the NBA luxury tax in their respective franchise histories. As a result, both teams have net a combined $56 million in luxury tax revenue sharing payments.

It's hard to even come to a consensus on where the league would set a hard cap amount in the new CBA. If the NBA makes the luxury tax threshold a hard cap, teams will have to alter their payrolls for the following seasons. In the 2021-22 season, the combined spending over the NBA tax threshold was $163,576,411. Assuming all teams that were over still spend up to the luxury tax line, the payroll decrease would be equivalent to $5.4 million per team. While, in theory, each team having the same monetary resources would increase competitive balance, in practice, it would completely alter the fabric of how trades are made and executed. With no limit on how much salary each team can have, teams are allowed to be more creative in making trades and signings and always have the option of signing their players to long term contracts.

An Alternative to a Hard Cap

With the increase in team spending, the luxury tax threshold is operating as a salary cap for most teams. Unlike the large difference between the salary cap threshold and the luxury tax threshold, the difference between the luxury tax threshold and luxury tax apron is only $6 million (CBA FAQ), a gap four times less than the former. With team preferences shifting, it might be time to reevaluate this gap.

If the NBA were to raise or lower the luxury tax threshold by a certain percentage, they would indirectly raise or lower average NBA player salaries as a result, all variables being equal. This is because in the last few seasons, there have been four teams that hover around the NBA luxury tax. While the luxury tax rate may go up or down, these teams at the barrier will more than likely stay at the barrier, even with an increase.

The NBA can pursue multiple avenues for changing the monetary disparity between the luxury tax threshold and apron. One of these involves proposing a decrease in the tax limit from 53.51% of projected BRI (approximately 21% of the salary cap) where it currently sits, to somewhere closer to 50%. This would further penalize teams currently over the luxury tax as rates would increase due to them being further over the threshold. Also, it would artificially lower overall player salaries since teams already spending to the threshold would likely continue to do so, just at a lower level. Since the luxury tax apron is calculated through the addition of an integer value, the difference between the two would go from approximately $6 million, or 4.5% of the salary cap, to 8% of the salary cap. Additionally, there will be a larger window for teams over the tax before the hard cap amount, which would spread the variance of salary distribution.

Using projected 2023-24 salary cap figures, we can visualize what a change may look like for certain teams. Early estimates project the salary cap to rise by 8.4% to $134 million, with a tax level of $162 million. The luxury tax apron can be estimated by adding the projected tax threshold by the product of this 8.4% increase and the difference between 2022-23’s apron and threshold. This number is approximately $169 million.

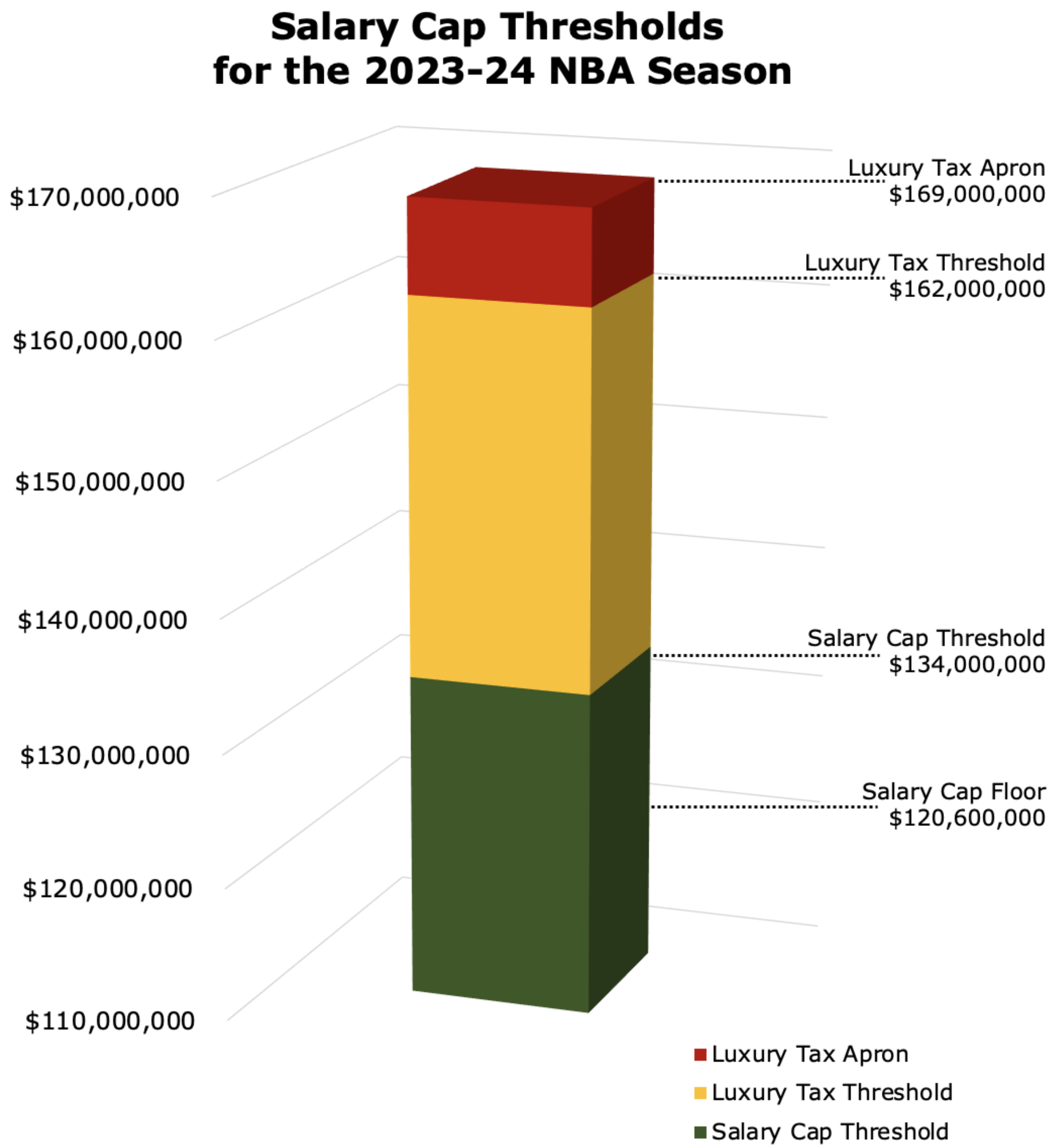

Figure 13: Projected salary cap figures for the 2023-24 season

If the NBA lowered the luxury tax threshold without changing the apron, the new figure in 2023-24 would be $156,313,800. This would leave a gap of $12,686,200 between the luxury tax threshold and the luxury tax apron. Potentially, more teams could use their taxpayer mid-level exceptions and bi-annual exceptions and hard cap themselves with the difference being a wider margin.

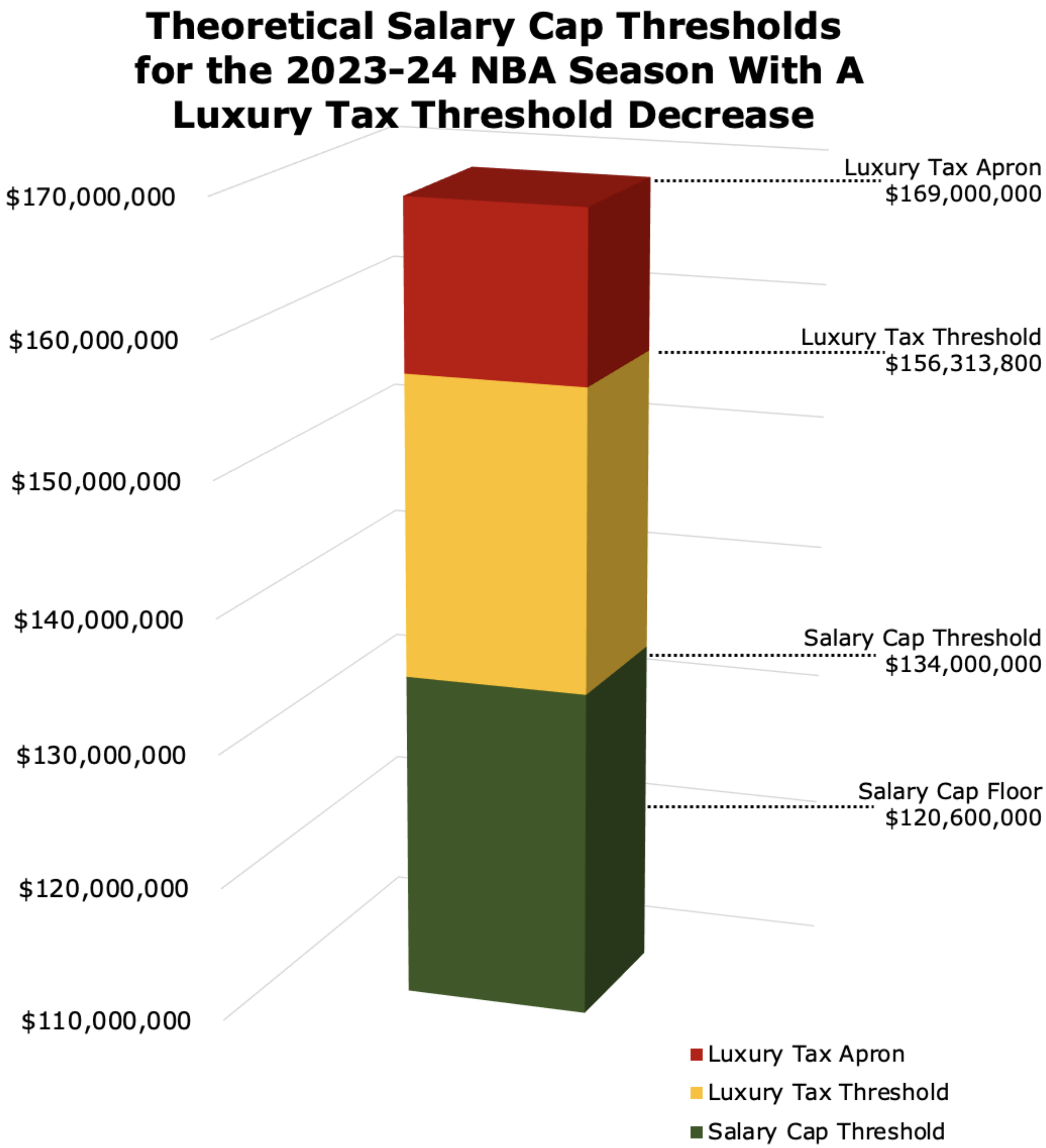

Figure 14: Unlike Figure 13, this graph shows theoretical salary cap thresholds in 2023-24 if a decrease in the luxury tax threshold took place. This would increase luxury tax payments and decrease player salaries, making it league friendly.

Another idea would be to slightly open the luxury tax distribution benefit to luxury tax paying teams and could even be used in conjunction with the previous idea. Maybe this wouldn't be the full amount but could be prorated from the split of the distribution, with the team further within the luxury tax receiving less benefits than a team barely within the luxury tax. While this decision would decrease the penalty that comes with paying the luxury tax, it would prevent this cluster of teams trying to dodge the threshold each season. Even with the decrease, teams would still be cautious of the repeater tax which still takes into effect if a team is in the tax four out of five seasons. The teams that are not spending into the tax threshold don't receive as many distribution benefits, therefore encouraging them to spend more and even into the luxury tax.

Luxury Tax and Contract Incentives

Another factor to consider with the salary cap changes is the emphasis the NBA is placing on "load management." Recently, NBA teams have been sitting players to save them from the grind of an 82-game season. This practice is mostly used for star players, with the thought process being that they will be fresher if a team gets to the playoffs but is hurting box office revenues each time a star player can't play.

In the recent 2021-22 NBA season, only five players played all 82 games. This signifies the fewest full-season participants in an NBA season. However, this figure must be taken with the context that the omicron COVID-19 variant infected more than half of the league last season. Even still, the number of players playing in every game is decreasing. While discussions to reduce the number of games played in a season have been had, less games equal less ticket and media revenue, as well as alter NBA records going forward.

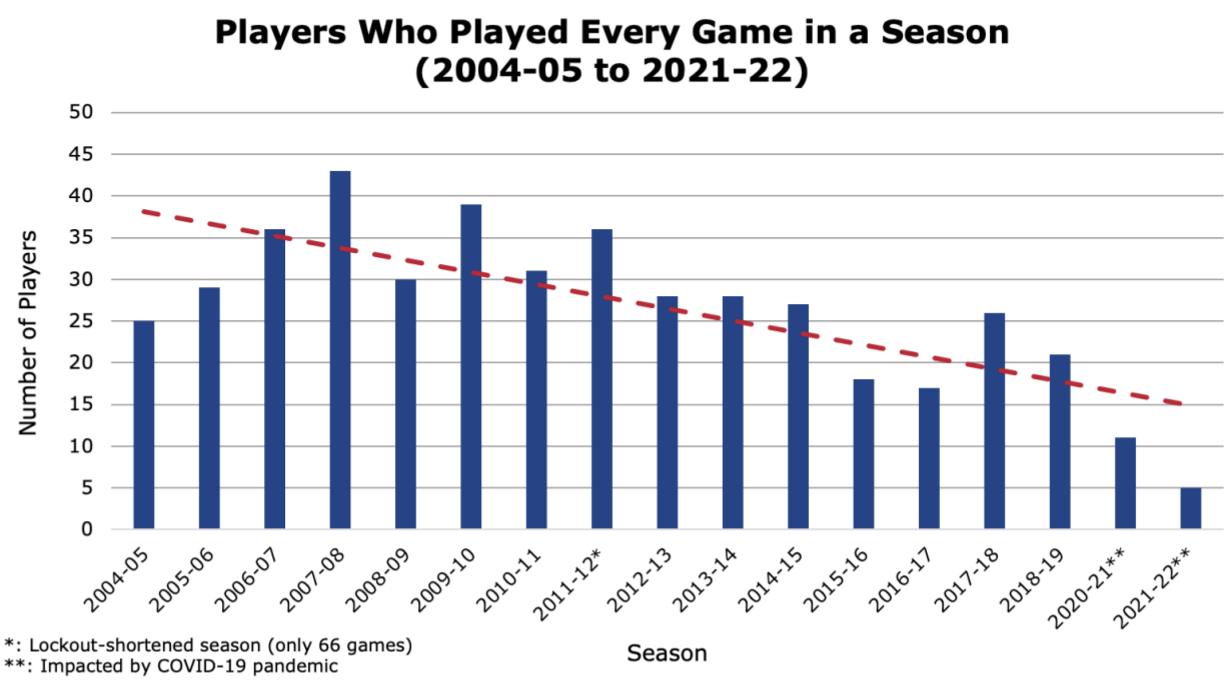

Figure 15: The number of players who play every game in an NBA season is steadily decreasing, even before the COVID-19 pandemic.

This concerning trend has caught the attention of the league. Commissioner Adam Silver has proposed a system where incremental money would be used to pay players who played in more games. Additionally, contract guarantee structures on contracts could trigger if a player plays in more games.

If guarantee structures changed on contracts, smarter teams may find a loophole to dodging the luxury tax by sitting players. For example, if a team is under the luxury tax by $500,000 and a player earns a $1,000,000 bonus on a contract for playing in a certain amount of games, then a team may have cause to sit that player intentionally. In trades, this clause could artificially get a team under the luxury tax threshold.

A potential solution to this issue could be to use luxury tax distributions to partly finance incentives for players who play in more games over the course of the season. This way, players are rewarded for playing in more games, ticket revenues increase because more star players are in the lineup, and it creates a beneficial way to use the rising luxury tax distributions.

This concept has been seen in newer NBA contract structures. In previous years, a team would often have to send draft picks to teams to take overpaid players with contracts spanning over one season. Now, teams have started to give players contracts with partial or non-guarantees in the final year of their contract. Thus, a team can release that player with none or little consequence in the final season of their contract, or trade that contract to a team looking to create room under the luxury tax to match the contract of another overvalued player.

Other Concerns in the Next CBA Negotiation

The NBA has proposed a midseason tournament to be added to the next collective bargaining agreement. This tournament would theoretically take place in November and December, with eight teams advancing to games in December. While the regular season schedule would be reduced to 78 games to account for the extra games played by the players, the overall number of games played in a season would largely remain unchanged.

The NBA compares this idea to European soccer, where teams play in tournaments midseason, which helps to keep the consumer engaged for the entire season. However, the model the NBA might follow is that of college basketball. In November, multiple college basketball teams play each other in company-sponsored tournaments around the country. For example, the Maui Invitational, sponsored by Jim Maui (sunglasses company), ranks as one of Hawaii’s top revenue-generating events. The estimated revenue brought to Maui from tourism from the tournament is $8 million and ESPN holds the long-term TV rights. The single-elimination tournament consists of eight college basketball teams, historically one from each conference, that rotate every year. Each team plays a total of three games and the team that wins all three games is crowned as champion. The NBA could implement a similar idea, matching up teams out of conference, or even out of the league.

It doesn’t have to stop at one tournament. With a similar style, the NBA could implement this within the new CBA in multiple places at different times. This could even help expand emerging markets and rotate locations each year.

In the 2019-20 NBA bubble, the NBA adopted an additional tournament to their league season, the Play-In Tournament. Instead of the normal playoff structure of eight teams per conference, commissioner Adam Silver expanded the playoffs to ten teams per conference, or 66% of the league. The move was made to discourage teams throwing in the towel early to try to land a higher draft pick, but also to create more single-elimination games. In this tournament, the 7 and 8 seeds play, as well as the 9 and 10 seeds. The winner of the higher seed matchup moves on to the playoffs, while the loser plays the winner of the 9-10 matchup in a do-or-die elimination to earn their spot in the playoffs. Even with some initial concerns about matchups for the higher seed, the idea has been renewed. This tournament could be the structure for a potential mid-season tournament and gives the league confidence that a single-elimination tournament structure can have success.

Potential Increases in Basketball Related Income from New Changes

Adding a mid-season tournament will surely increase Basketball-Related Income, but by how much? It is tough to say officially what this total would come out to, but it would directly contribute to an increase in the salary cap. The calculation to Basketball Related Income is shown below.

Basketball-Related Income Includes:
Regular season gate receipts (minus taxes and fees)
Broadcast rights
Exhibition game proceeds (minus summer league expenses)
Playoff gate receipts
The value of all complimentary tickets (minus excluded complimentary tickets)
The value of complimentary suite admissions
Novelty, program and concession sales (in-arena and team-identified stores within arena proximity)
Parking
Proceeds from team sponsorships
Proceeds from team promotions
Arena club revenues
Proceeds from summer camps
Proceeds from non-NBA basketball tournaments
Proceeds from championship parades
Proceeds from mascot and dance team appearances
Proceeds from beverage sale rights
Proceeds from cart/kiosk sales in and around the arena
50% of proceeds from tours and ATM fees in arenas
50% of proceeds from arena signage
50% of proceeds from luxury suites
50% of proceeds from arena naming rights
50% of the proceeds from team practice facility naming rights
Proceeds from other premium seat licenses
Proceeds received by NBA Properties, (international TV, sponsorships, other special events)
Proceeds from gambling on NBA games

Figure 16: Basketball-Related Income is calculated using a complex calculation that combines all basketball-related revenues. Notably, this does not include revenue sharing and expansion team entrance fees. (Data Source: Coon, 2022)

For a midseason tournament, no games would be added, but each game would potentially net more viewers inside and outside the stadium. When the demand is higher, the NBA can charge higher for these games, closer to the price of a playoff game. Additionally, this would contribute to a more enticing media rights package to sell in 2024-25.

Broadcast rights staying equal, the NBA could potentially earn $800,000 extra per game solely from gate revenue. This figure is the difference between the NBA's average of $2 million in playoff gate revenue versus $1.2 million in gate revenue for regular season games. (NBC Sports Chicago, 2020) Gambling revenues and merchandise sales may go up too for these games. Under the college-basketball style tournament system, with one eight-team tournament and six separate four-team tournaments, this would create 38 more playoff-type games, which could result in $30,400,000 extra in gate revenue. Overall, if teams play in other cities, these tournaments could bring in upwards of $500 million in Basketball-Related Income, even excluding a new media contract. This alone would increase the salary cap by approximately $7.5 million.

When projecting Basketball-Related Income from the new media rights deal in 2024-25, this figure balloons. At a conservative estimate of $65 billion, all else equal, the new TV deal would net over $4.5 billion more per year and increase Basketball-Related income by 150%. This would contribute to a meteoric rise in the salary cap to $190 million, currently around $40 million over the luxury tax threshold amount. These salary figures emphasize how crucial it is for the league to outline every possible situation in the next CBA. If provisions aren't properly put in place, the league could be unprepared, teams could be looking at an average of $50 million in cap space, and NBA free agency could be turned upside down once again.

Conclusion

The NBA Collective Bargaining Agreement is a complex, ever-evolving document that is subject to lots of give and take. It is extremely important to maintain order within the agreement as it maintains competitive balance within the NBA and sets the rules for teams and the league going forward. With the league approaching an opt-out into its next CBA agreement, the NBA must eye changes towards the luxury tax structure and salary cap smoothing going forward in anticipation towards their new media rights deal in 2024-25.

References

Adams, L. (2019, March 14). *Hoops rumors glossary: Cap Holds*. Hoops Rumors. Retrieved December 8, 2022, from https://www.hoopsrumors.com/2019/03/hoops-rumors-glossary-cap-holds-3.html

Adams, L. (2019, March 25). *Hoops rumors glossary: Mid-level exception*. Hoops Rumors. Retrieved December 2022, from https://www.hoopsrumors.com/2019/03/hoops-rumors-glossary-mid-level-exception-3.html

Adams, L. (2022, February 4). *Thunder now operating under salary cap*. Hoops Rumors. Retrieved December 2022, from https://www.hoopsrumors.com/2022/02/thunder-now-operating-under-the-salary-cap.html

Adams, L. (2022, July 1). *Values of 2022/23 mid-level, bi-annual exceptions*. Hoops Rumors. Retrieved December 2022, from https://www.hoopsrumors.com/2022/07/values-of-2022-23-mid-level-bi-annual-exceptions.html

Adams, L. (2022, July 20). *How teams are using 2022/23 bi-annual exceptions*. Hoops Rumors. Retrieved December 2022, from https://www.hoopsrumors.com/2022/07/how-teams-are-using-2022-23-bi-annual-exceptions.html

Basketball Baba. (n.d.). *What is NBA basketball related income (or) BRI?* Basketball Baba. Retrieved December 8, 2022, from https://www.basketballbaba.com/2021/03/23/what-is-the-nbas-basketball-related-income-or-bri/

Bradley, R. (n.d.). *LABOR PAINS NOTHING NEW TO THE NBA*. The history of NBA Labor. Retrieved December 8, 2022, from https://www.apbr.org/labor.html

Carr, H. (2022, November 3). *The multiple revenue streams of the NBA*. Businessing Magazine. Retrieved December 2022, from https://businessingmag.com/9825/money/nba/

Charania, S., & The Athletic Staff. (2022, September 22). *NBA in-season tournament framework taking shape: Sources*. The Athletic. Retrieved December 2022, from https://theathletic.com/3580974/2022/09/09/nba-in-season-tournament-framework/

Coon, L. (2022). *Larry Coon's NBA Salary Cap FAQ*. CBAFAQ. Retrieved 2022, from http://www.cbafaq.com/salarycap.htm

Deeks, M. (2022, November 8). *A complete history of NBA Luxury Tax Payments, 2001-2022*. Forbes. Retrieved December 2022, from https://www.forbes.com/sites/markdeeks/2022/07/01/a-complete-history-of-nba-luxury-tax-payments-20012022/

Deeks, M. (2022, November 8). *A complete history of NBA Luxury Tax Payments, 2001-2022*. Forbes. Retrieved December 2022, from https://www.forbes.com/sites/markdeeks/2022/07/01/a-complete-history-of-nba-luxury-tax-payments-20012022/?sh=5c4bf2fc432f

Deveney, S. (2022, February 1). *Heading toward NBA trade deadline, Boston Celtics still eyeing luxury tax*. Forbes. Retrieved December 2022, from https://www.forbes.com/sites/seandeveney/2022/01/30/heading-toward-nba-trade-deadline-boston-celtics-still-eyeing-luxury-tax/?sh=4cda9aed2de8

Dunn, S. (2022, July 1). *NBA salary cap 2022-23: Inside the numbers*. Boardroom. Retrieved 2022, from https://boardroom.tv/nba-salary-cap-2022-23-details/

Freedman, D. (2019). *NBA salary Cap Overview*. CBA Breakdown. Retrieved 2022, from https://cbabreakdown.com/salary-cap-overview

Goldberg, R. (2022, October 15). *Warriors' projected salary, Luxury Tax Bill for '23-24 after Poole, Wiggins contracts*. Bleacher Report. Retrieved December 2022, from https://bleacherreport.com/articles/10052459-warriors-projected-salary-luxury-tax-bill-for-23-24-after-poole-wiggins-contracts

HoopsHype. (2022). *1997-1998 salaries of Chicago Bulls players*. HoopsHype. Retrieved December 8, 2022, from https://hoopshype.com/salaries/chicago_bulls/1997-1998/

Lewis, D. J. (2017, October 30). *NBA announces 9-year extension with ESPN, Turner, through 2025*. Sports Media Watch. Retrieved December 2022, from https://www.sportsmediawatch.com/2014/10/nba-tv-deal-espn-abc-tnt-nine-year-deal-2025-24-billion-lockout/

Louis. (2022, October 17). *What happens to NBA Luxury Tax Money?* Basketball Noise. Retrieved December 2022, from https://basketballnoise.com/what-happens-to-nba-luxury-tax-money/

Maniar, S. (2021, June 30). *NBA looking at a mid-season tournament to Triple Media Deals Revenue*. SportsMint Media. Retrieved December 2022, from https://sportsmintmedia.com/nba-mid-season-tournament-media-revenue/

Nath, T. I. (2022, July 13). *The NBA's business model*. Investopedia. Retrieved December 2022, from https://www.investopedia.com/articles/investing/070715/nbas-business-model.asp

NBC Sports Chicago. (2020, March 12). *Report: NBA could lose 'nearly $500 million' in ticket revenue without games*. NBC Sports Chicago. Retrieved December 2022, from https://www.nbcsports.com/chicago/bulls/report-nba-could-lose-nearly-500-million-ticket-revenue-without-games

Ozanian, M. (2022, October 29). *NBA Team values 2022: For the first time in two decades, the top spot goes to a franchise that's not the Knicks or Lakers*. Forbes. Retrieved December 2022, from https://www.forbes.com/sites/mikeozanian/2022/10/27/nba-team-values-2022-

for-the-first-time-in-two-decades-the-top-spot-goes-to-a-franchise-thats-not-the-knicks-or-lakers/

Pearce, A. (2017, October 1). *NBA revenue sharing: Small-market teams to benefit from New Sharing Structure*. Bleacher Report. Retrieved December 2022, from https://bleacherreport.com/articles/1039092-nba-revenue-sharing-small-market-teams-to-benefit-from-new-sharing-structure

Rapp, T. (2022, October 28). *Woj: NBA pursuing 'upper salary limit' in CBA negotiations with Players Union*. Bleacher Report. Retrieved December 2022, from https://bleacherreport.com/articles/10053937-woj-nba-pursuing-upper-salary-limit-in-cba-negotiations-with-players-union

RealGM. (2017). *NBA - CBA minimum annual salary scale*. RealGM. Retrieved December 2022, from https://basketball.realgm.com/nba/info/minimum_scale/

Sanders, M. (2020). *NBA luxury tax calculator*. Tableau Software. Retrieved December 8, 2022, from https://public.tableau.com/views/NBASalaryTaxCalculator/Dashboard1?%3Aembed=y&%3AshowVizHome=no&%3Adisplay_count=y&%3Adisplay_static_image=y&%3AbootstrapWhenNotified=true

Shea, B. (2022, June 16). *The NBA's Next Broadcast deal: After MLS' Payday, what can we expect?* The Athletic. Retrieved December 8, 2022, from https://theathletic.com/3369596/2022/06/16/nba-broadcast-deal-mls-apple/

Spotrac Team. (2022). *NBA Salary Cap History*. Spotrac.com. Retrieved 2022, from https://www.spotrac.com/nba/cba/

Spotrac. (2022). *NBA 2022-2023 cap tracker*. Spotrac.com. Retrieved December 2022, from https://www.spotrac.com/nba/cap/

Thanawalla, A. (2022, October 16). *Dubs' projected luxury-tax resurrects calls for CBA changes*. RSN. Retrieved December 2022, from https://www.nbcsports.com/bayarea/warriors/warriors-projected-2023-24-luxury-tax-bill-resurrects-calls-cba-changes

Toporek, B. (2022, July 15). *NBA commissioner Adam Silver Hints at pain points in upcoming CBA Negotiations*. Forbes. Retrieved December 2022, from https://www.forbes.com/sites/bryantoporek/2022/07/14/nba-commissioner-adam-silver-hints-at-pain-points-in-upcoming-cba-negotiations/?sh=3fd3ac462d4e

Urbina, F. (2018, November 6). *How does the NBA's luxury tax work?* HoopsHype. Retrieved 2022, from https://hoopshype.com/2018/10/11/nba-luxury-tax/

Wertheim, J. (2018, September 21). *How do NBA teams spend their money?* Sports Illustrated. Retrieved December 2022, from https://www.si.com/nba/2018/09/21/nba-teams-revenue-spending-breakdown-small-large-market