The Impact of NBA Player Salary Structure on League Competitiveness: An Analysis Based on Salary Caps and Team Competitiveness

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Abstract. This study examines the impact of NBA player salary structure on league competitiveness, focusing on the interplay of salary caps, salary cap exceptions, and team strategies. Through literature review and analysis of the cases of Los Angeles Lakers, Golden State Warriors, and Oklahoma City Thunder, it is found that although the salary cap aims at balancing the competition, large-market teams can still break through the restriction through market attraction and maintain competitiveness through superstar attraction, while small-market teams rely on the draft and fine management but face the risk of losing core players. Although the salary cap exception can enhance the flexibility of team operation, it is difficult to make up for the competitive imbalance brought about by market differences. Based on this phenomenon, it is recommended to optimize the luxury tax rules, increase the exposure of small-market teams and revenue-sharing mechanism, and reform the waiver clause to enhance the flexibility of contract renewal. The study provides a theoretical basis for the optimization of the NBA payroll system and aims to promote the competitive balance and sustainable development of the league.

Keywords: NBA salary structure, Salary cap, Team competitiveness, Competitive equilibrium, Salary cap exceptions.

1 Introduction

1.1 Research Background and Research Theme

As the most influential professional basketball league in the world, the salary structure of the NBA profoundly affects the competitiveness of teams and the competitive pattern of the league through mechanisms such as salary caps and salary cap exceptions. The salary structure design of professional sports leagues needs to balance competitive fairness and commercial sustainability [1]. Currently, large-market teams often break through the salary limit to form super teams by virtue of their market attractiveness and financial advantages; while small-market teams rely on draft and management strate-

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gies but face the plight of core player loss and long-term development restrictions. Although the salary system aims to balance the competition, the actual effect is still controversial, and a systematic study of its specific mechanism is urgently needed.

1.2 Purpose and Significance of the Study

This study aims to reveal the influence path of NBA salary structure on team competitiveness and league balanced development. On the theoretical level, it fills the theoretical gap of the relationship between the salary system and the competitiveness of sports leagues through case analysis; on the practical level, it provides policy recommendations for optimizing NBA salary rules and improving small-market teams' viability, and it can also provide a reference for the system design of other professional sports leagues.

1.3 Methodology and Sequence of Studies

The literature analysis method is used to sort out the related studies under the perspectives of economics and management, and the three typical cases of Los Angeles Lakers, Golden State Warriors and Oklahoma City Thunder are analyzed in terms of salary strategy, salary cap constraints and market differences. The whole paper follows the logical framework of "Theory - Case Study - Model Refinement", and finally puts forward targeted policy suggestions.

2 Literature Review

2.1 Economic Analysis of Salary Structure

Existing studies have generally explored the impact of the NBA payroll system on the competitiveness of the league from an economic perspective, in which the salary cap is regarded as the central mechanism. Wang pointed out that by limiting the size of team expenditures, the salary cap aims to prevent star monopoly and promote competitive equilibrium [2]. Also salary caps force teams to allocate resources more rationally, recent machine learning studies show that player salary shares correlate strongly with on-court performance, such as prioritizing the renewal of contracts for high-contributing players with longer average minutes and playing time [3]. However, the actual effect of this mechanism is controversial: Fort and Quirk argue that a soft salary cap, despite its flexibility, struggles to curb the non-salary advantage of large-market teams [4]. Meanwhile, Berri and Schmidt point out that the 'hard limit' of the salary cap instead strengthens the bargaining power of large-market teams, leading small-market teams to fall into a vicious cycle of 'cultivate-turnover' [5]. These controversies highlight the complexity of the salary system in theoretical design and practical implementation.

2.2 Theoretical Controversies on Salary Ceiling and Competitive Equilibrium

The salary cap is set with the goal of balancing the competitiveness of large and small market teams, but its dynamic moderating effect remains divergent. Hard salary cap and luxury tax system in the short term can curb the monopoly of super teams, for example, the Warriors signed Durant in 2016 was forced to dismantle the lineup due to luxury tax pressure. However, big-market teams like the Lakers and Knicks often break through the limitations by virtue of their commercial exposure and urban appeal, such as attracting veterans with base salaries or utilizing exception clauses to supplement their rosters, indirectly weakening the balancing function of the salary cap. This contradiction shows that the actual effectiveness of the salary cap is highly dependent on the market environment and management strategies, and its theoretical equalization goal faces significant challenges in practice.

2.3 Flexibility and Limitations of the Salary Cap Exception

Salary cap exceptions (e.g., Byrd clause, mid-level exception) are used as a supplement to the salary system, and their application effect varies significantly depending on the team's resources. Take the Warriors as an example, it utilizes the Byrd right super cap to extend the contract of Curry and other core players and reinforces the role lineup through the base salary exception, successfully maintaining long-term competitiveness. In contrast, the Thunder, due to the lack of waivers and insufficient salary space, were forced to trade Harden and other stars, and instead relied on low-cost operations such as the draft and short-term contracts to accumulate assets. Klein pointed out that the waiver clause is more favorable to the team with sufficient resources, which may exacerbate the league's Matthew effect [4]. While this flexibility provides teams with room to maneuver, it also exposes the system's natural bias toward small-market teams, further emphasizing the inequality of payroll policies [6].

2.4 Theoretical Integration: a Multidimensional Model of the Impact of Salary Structure on Competitiveness

Based on Kesenne's economic framework and Leeds' competitive equilibrium model [7], this study proposes a three-dimensional model of "salary-market-management" to systematically explain the path of salary system's impact on competitiveness. First, salary constraints theoretically inhibit star monopoly, but market differences (e.g., commercial attractiveness of big cities) weaken its effectiveness; second, market endowment determines a team's ability to break through salary constraints, for example, the Lakers attract free agents through non-salary advantages; finally, management ability becomes a key to the survival of small-market teams, and the Thunder make up for the resource disadvantage through the accumulation of draft picks and innovation of waivers. This model reveals the complex interaction between the salary system and competitive equilibrium, provides a theoretical framework for the subsequent empirical analysis, and emphasizes the need to optimize the policy from multiple dimensions to achieve the sustainable development of the league.

3 Case Description: Lakers, Warriors & Thunder

In this paper, three representative NBA teams - Los Angeles Lakers, Golden State Warriors and Oklahoma City Thunder - will be selected to analyze the impact of salary structure on team competitiveness. Each of these teams has different characteristics in terms of payroll operation and competitiveness, which is beneficial to reveal the role of payroll structure in different market environments.

As a traditional NBA powerhouse with 17 NBA championships, the Lakers have a big market like Los Angeles. They are also very good at taking advantage of the big market to attract top players like James and O'Neal and will also maintain competitiveness through the salary operation of star players. Nevertheless, there will be high salary players lead to salary space tight situation, affecting the team's flexibility.

The Warriors were not a chronically competitive team until the 21st century. As described by Leeds and von Allmen, successful teams need to balance core player extensions with role player additions within salary constraints [7]. Since coming to the 21st century, the Warriors have gotten high draft picks by swinging for the fences. Coupled with the Warriors' management is good at using poisonous vision, through the draft selected to build the team core Curry, as well as suitable for the team's system of players Klay, Green, etc., the team and the head coach of their own cultivation to build the league's top title contenders' lineup. And then through their own strength, attract those who are eager to get the championship of high-level players.

The Thunder are the poster child for small-market teams who have risen to prominence multiple times over the past decade or so through savvy payroll management and draft strategy. They amassed Durant, Westbrook, and Harden through the draft between 2007-2012 before being forced to dismantle their roster due to salary pressures. In recent years, the Thunder have traded for SGA, the centerpiece of the team for the next decade, and have also continued to rely on the draft to accumulate young talent and trade for a large number of future picks, demonstrating a different model of payroll operations.

4 Case Analysis

Based on the three-dimensional analytical framework proposed in the previous section-integrating the interactive effects of salary constraints, regional market characteristics, and management strategies-this section takes the Los Angeles Lakers, the Golden State Warriors, and the Oklahoma City Thunder as examples to empirically examine the mechanism of the salary system's effect on team competitiveness. The framework unfolds from three levels of financial constraints, non-economic resource endowments and management innovations: first, analyzing how teams adjust their strategies under the salary cap rule, such as the differential application of waiver clauses and means of avoiding luxury tax; second, exploring how external resources such as the city's commercial potentials and fan bases can weaken the expected effects of salary constraints; and third, focusing on the small-market teams' layouts for the future through the draft, Third, it focuses on the paths of small-market teams to break through operational bottlenecks through management practices such as trade negotiation flexibility and contract structural design. By comparing the differences in financial decisions, market positioning, and management effectiveness among the three teams, this study aims to reveal the actual impact of the payroll system on the league's competitive landscape, validate the explanatory power of the theoretical model, and respond to the core questions: How do the interactions of different dimensions shape the competitiveness of teams? How are their strategic choices constrained by or break through the institutional constraints? Ultimately, it provides more operational insights for league policy optimization.

4.1 Salary Structure in Relation to Team Building Strategies

The Lakers strategy is to use market appeal to bring in superstars, for example, signing O'Neal in 1996, signing James in 2018, and getting Davis through a trade in 2020, all of which succeeded in winning championships. Of course they have also had their share of missteps, in 2021 they got Westbrook through a trade, wanting to continue to hit the championship by forming a big three. But Westbrook's decline, the BIG 3 of poor compatibility, so that the Lakers' record is far lower than expected, this strategy also brings the problem of limited payroll space, making it difficult for the team to fill the role of players, affecting the long-term stability of the team [8].

The Warriors have built a long-term stable championship roster through reasonable contract extensions and salary cap exceptions. Since Curry, Green, Thompson and these players are the Warriors' own rookies, the Warriors naturally own their bird's rights, and they have utilized the Bird rights to super-salary cap extensions for their core players, while making reasonable use of the base salary and mid-career exceptions to fill out the lineup and remain competitive. Speaking of loyalty to the team, although there will be very good chemistry, but with the team core age gradually increased, the team's strength is also declining year by year [9].

The Thunder team adopts the strategy of "long-term accumulation of draft picks + low-cost development of young players", and Sarlis explains the logic of the Thunder team's sustainable development through the accumulation of draft picks, small-market teams must optimize recovery and economic strategies to compete [10]. They are willing to sacrifice short-term competitiveness for long-term sustainability. They prefer to take on expiring junk contracts in exchange for draft picks so that they can maintain the flexibility of the team's future payroll space, putting them in a favorable position for future free agency or the trade market. But small-market owners are equally interested in saving money and don't want an exploding payroll, so the Thunder's own well-developed rookies likely won't have the money to extend their contracts and will have to be forced into trades.

4.2 Balancing the Salary Cap with League Competitiveness

The NBA created the salary cap to improve the competitiveness of small market teams by limiting the spending of high paying teams and giving small market teams more opportunities to retain players of their own choosing. For example, the Warriors managed to sign Durant in 2016 due to a sudden rise in the salary cap, creating a super team in the short term. But with the increase in the luxury tax, they had to dismantle part of their lineup, exemplifying the moderating effect of the salary system on the league's balanced competition. In this season's Thunder team can also mention embodiment, in this previous off-season, the Thunder team are basically expiring contracts and rookie contracts, they have enough space to give Haltenstein an other supercapital team cannot give a big contract of 2 +1, and so got the meat and potatoes of the free market. Not only that, after two years, the Thunder can also choose not to implement the team option and go to leave enough space to extend J.Williams and Holmgren, so as to maintain the competitiveness of the team, but also reflects the salary cap system to give the small ball market opportunities.

4.3 Free Market Versus Payroll Restrictions

Today's league is more commercialized, and more players are more willing to think about their exposure, minus the buddy basketball. For example, last offseason Jones bottom salary to join the sun, rather than go to some fish brisket team to get a bigger contract, so that is for his next contract can be bigger. So, the big market teams can use the market attraction to break through the salary limit, for example, the Lakers they even in the case of salary constraints, can still attract a lot of players still have the oil veteran base salary to join. And small market teams due to the lack of attraction, low exposure, even if there is salary space is difficult to sign the top players, which leads to the league competition is still uneven phenomenon.

4.4 Case-based Policy Recommendations

By studying these three cases, this paper makes the following policy recommendations. First, as suggested by Wang and Bai Lin, the league needs to raise the luxury tax threshold to reduce the burden on small-market teams [9], and also refer to the NBA Collective Bargaining Agreement to adjust the waiver clause [8]. Optimize the luxury tax system by implementing a stricter progressive tax rate for consecutively over-taxed teams to limit the unrestricted hoarding of stars by large-market teams. Second, increase the commercial value and exposure of small-market teams and enhance their ability to attract free agents through league revenue sharing and national broadcast quota allocation. Third, reforming special provisions, such as designing "rookie matching rights" for small-market teams to allow them to break some salary limits when renewing their own rookies, thus reducing the risk of losing core players and promoting the league's long-term competitive balance.

5 Conclusion

This study systematically analyzes the impact of NBA salary structure on league competitiveness and finds that the salary cap system, while theoretically designed to balance competition, exhibits a clear dual effect in practice. Large-market teams are able to utilize city attractiveness, business resources, and waiver clauses to bypass salary constraints and sustain competitiveness, while small-market teams are forced to rely on the draft and short-term contracts due to financial pressures and lack of free-agent attractiveness, leading to core player attrition and fluctuations in long-term competitiveness. In addition, salary cap exceptions (e.g., Bird rights, mid-level exception), while enhancing the flexibility of team operations, also exacerbate the imbalance in the distribution of resources, making it easier for large-market teams to maintain their super lineups, while small-market teams are caught in a vicious cycle of "cultivation-loss".

The limitations of this study are mainly in three aspects. First, the case selection focuses on three teams, the Lakers, Warriors, and Thunder, which, while representative, fails to comprehensively cover teams of different market sizes (e.g., Grizzlies, Bucks, etc.), which may affect the generalizability of the conclusions. Second, the study's short time span (2010-2023) fails to incorporate the long-term effects of earlier payroll regimes, limiting the depth of historical comparisons. Finally, the study does not adequately quantify the interference of non-payroll factors such as coaching systems, player injuries, and management decisions on competitiveness, which may lead to biased inferences of causality.

Future research can be further deepened in the following directions. The first is to expand the scope of empirical analysis by comparing the payroll strategies and performance of 30 teams through panel data to enhance the statistical significance and reliability of conclusions. The second is to conduct cross-league comparative studies, such as comparing the NBA's payroll system with European soccer leagues (e.g., the English Premier League's Fiscal Fairness Act), so as to distill more generalized management experiences of professional sports leagues. The third is to construct a dynamic policy simulation model to quantify the long-term impact of different payroll rules on the behavior of teams and the competitive landscape of the league, so as to provide a scientific basis for policy formulation.

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