## The Economics of Winning: Market Size, Payroll, and Salary Cap Impacts on NBA Performance

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Introduction: The National Basketball Association (NBA) has long been viewed as a league where financial investment and market size play a critical role in determining team success. However, the relationship between market size, payroll, and performance remains complex. This paper examines the factors that influence NBA team performance from 2000 to 2024, focusing on the effects of payroll, market size, and the league salary cap. Using a fixed-effects OLS panel regression with data from 30 teams over 25 seasons, the study investigates how market size, measured by metropolitan population, impacts team performance across three dependent variables: winning percentage, playoff rounds won, and team rank by league wins.

Methods: The analysis is conducted across three models: (1) a baseline fixed-effects model with payroll and population, (2) the same model with year dummy variables to account for league-wide changes, and (3) an extended model that includes the salary cap variable.

Results: The results show a significant negative relationship between market size and both winning percentage and rank, but a marginally positive relationship between market size and playoff rounds. Controlling for payroll and the salary cap provides deeper insights into the financial dynamics of team success. Payroll consistently has a positive and significant effect on team performance, while the salary cap exhibits a significant negative effect, particularly after 2017, when stricter financial regulations were implemented.

Conclusion: By demonstrating how the positive effect of payroll strengthens with the inclusion of year dummies, while the negative effect of market size weakens, this study highlights the unintended consequences of salary cap policies and provides valuable insights for strategic decision-making in professional sports management. The 2024 - 2025 NBA season is a prime example of the results of this paper, as 2 small-market teams faced off in the finals.