

How Salary Caps Impact Professional Sport

A Case Study into the English Premier League and Leicester City's Miracle Win in 2015-16

Intro:

- Interested in money in sport, David Conn “Richer than God”
- Salary caps in theory help teams from dominating by either not letting teams go over or imposing a luxury tax to the team for going over the salary
- Makes sport more fair overall
- Premier League has good player wage data since 2000 and has no salary cap for the teams in it, unlike American Sports

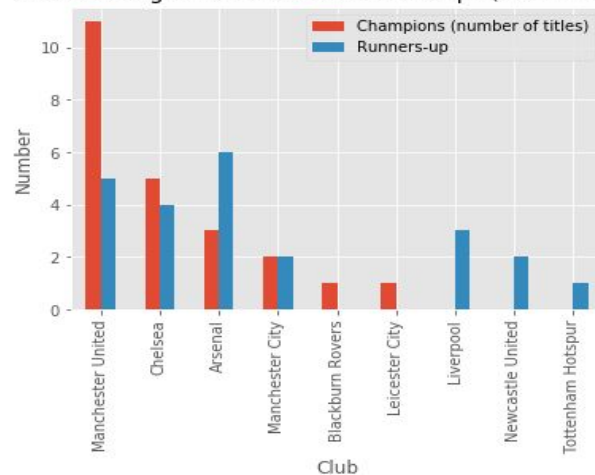
Does imposing a Salary Cap actually help?

- I analyze the NBA, MLS, NFL, and MLB champions of the same time period, 1992 - 2016, when sports teams were becoming more lucrative
- How does a League with no salary cap compare? Is it more competitive? Is it dominated?

English Premier League Dominated by a Few Clubs

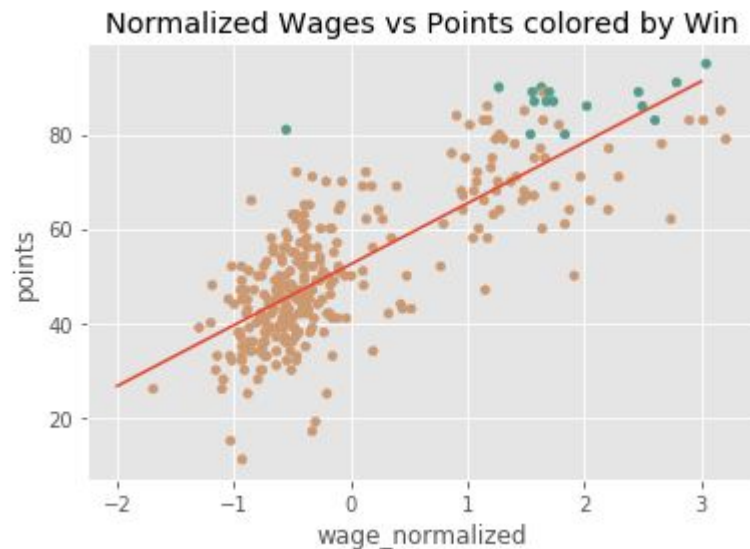
- 6 clubs have won since 1992, 4 have won most
- Clubs are spending 100-250 million pounds on a squad of 20-30 players
- In perspective, the NFL's full Salary cap for 53 person roster is around 160 million USD

Premier League Winners and Runner-ups (1992-Present)



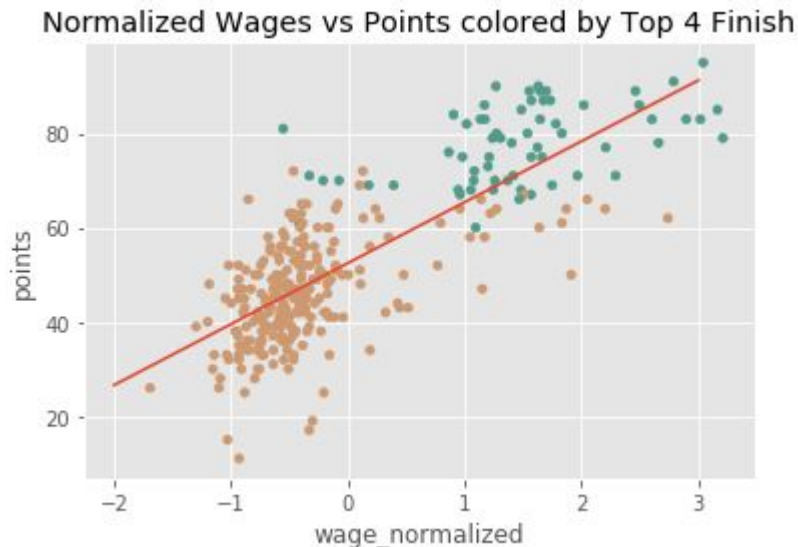
Does spending more on wages increase your chances of winning?

- Data from David Conn
- Plotted all teams from 2000-2016
- Normalized it because of inflation



What other factors increase your chances of winning the English Premier League

- Top 4 finish seems to be more easily predicted by money
- Did an OLS, only goals scored and clean sheets were relevant variables
- Do wages matter in these models?



How did Leicester City win this league?

- Small Club, picked by most pundits to finish in the bottom 3 pre-season
- How did they win in a League so Dominated by money?
- Questions:
 - How much money did they spend?
 - Does a kNN or Logistic Regression predict them to win?
 - Did other teams get less points than normal for their spot in the league?
 - Did they do well against the top 6?
- Analyze overall data and season data to answer these questions