

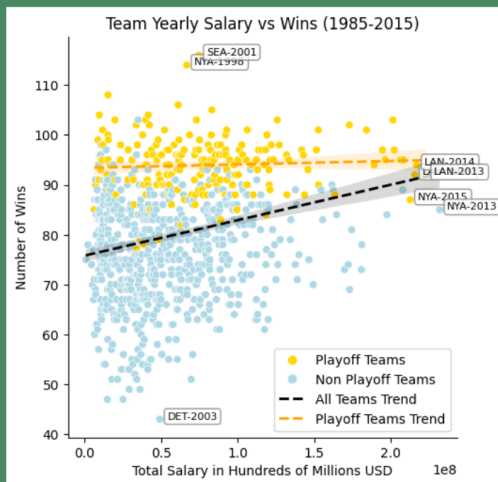
# MoneyBall

*Does higher spending guarantee success in the MLB?*

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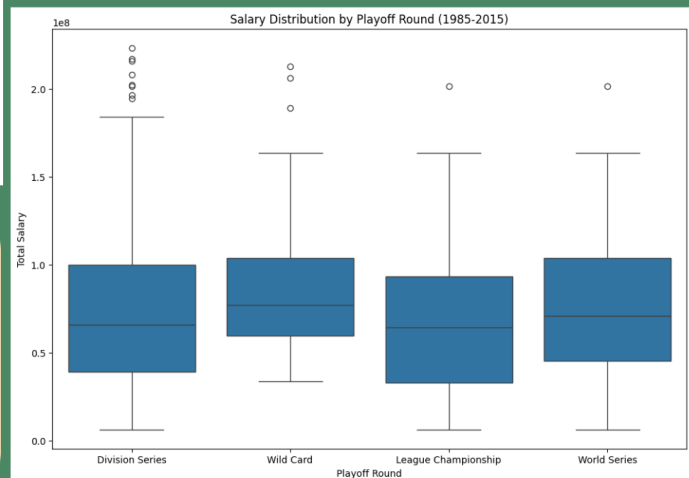
## Can Higher Spending Guarantee Success?

**The MLB is the only big 4 sports league in America without a strict salary cap. This has created some controversy over the years, as fans believe big market teams like NY and LA will always be able to spend their way to success. Is this really the case?**

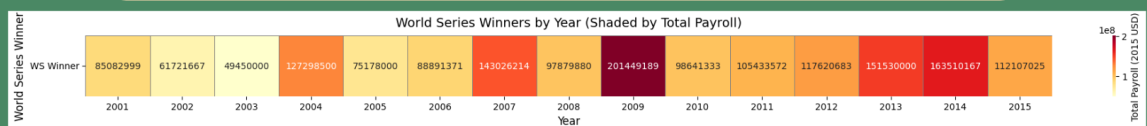


**As you can see from the scatterplot, there is a positive overall trend between a team's total payroll and their regular season wins. Not only this, but the spread of the data gets much tighter as you move along the x-axis. However, for teams that make the playoffs, the data seems to be pretty evenly distributed along the x-axis. What kind of trends do we see once you are in?**

**Looking at the box plots, we can see that the mean spending does not follow a certain trend once you are into the playoffs. It goes up, then goes down, then goes up again. While it looks like world series teams spend the 2<sup>nd</sup> most on average in the playoffs, you can not definitively say that higher spending leads to more playoff success.**



**Finally, this heatmap shows world series winners from 2001-2015, shaded by payroll. As you can see, world series winners do spend more on average, but there is lots of variety.**



This infographic was made using Canva, and contains all three of the final visualizations I made in Notebook 2. It aims to answer the main question, "Can higher spending guarantee success in the MLB?". Moving down the infographic you can see we start from

overall trend in the data, then we look at playoff teams, then world series winners. Moving chronologically like this made the most sense in my mind as we can look at three of the most important phases of the MLB season.

## Manifest of Resources

Name	Type	Description	Link / Path
Prepare_Data.ipynb	Notebook	Loads raw data, explains data sources, and prepares/examines the dataframe that will be used for the project.	<code>final_project/Prepare_Data.ipynb</code>
Explore_Data.ipynb	Notebook	Contains all EDA, preliminary/final visualizations, and feature exploration.	<code>final_project/Explore_Data.ipynb</code>
Final_Product.ipynb	Notebook	Final infographic, explanation, and manifest of resources.	<code>final_project/Final_Product.ipynb</code>
Data	Data Folder	Contains all csv's that were downloaded from Kaggle.	<code>final-project/Data</code>
Final_Infographic.png	Image	Exported image of the final product.	<code>final-project/Final_Infographic.png</code>