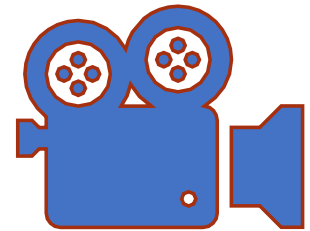


# MICROSOFT MOVIE STUDIOS

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Exploration of box offices successes and failures

Johnny Dryman



# OVERVIEW

This analysis is designed to guide Microsoft through the early stages of film development and production.

We aim address the following questions:

What is the relationship between production budget and box office revenue?

Which genres are the safest bets for the first few films?

What MPAA rating makes the most sense for return on investment?



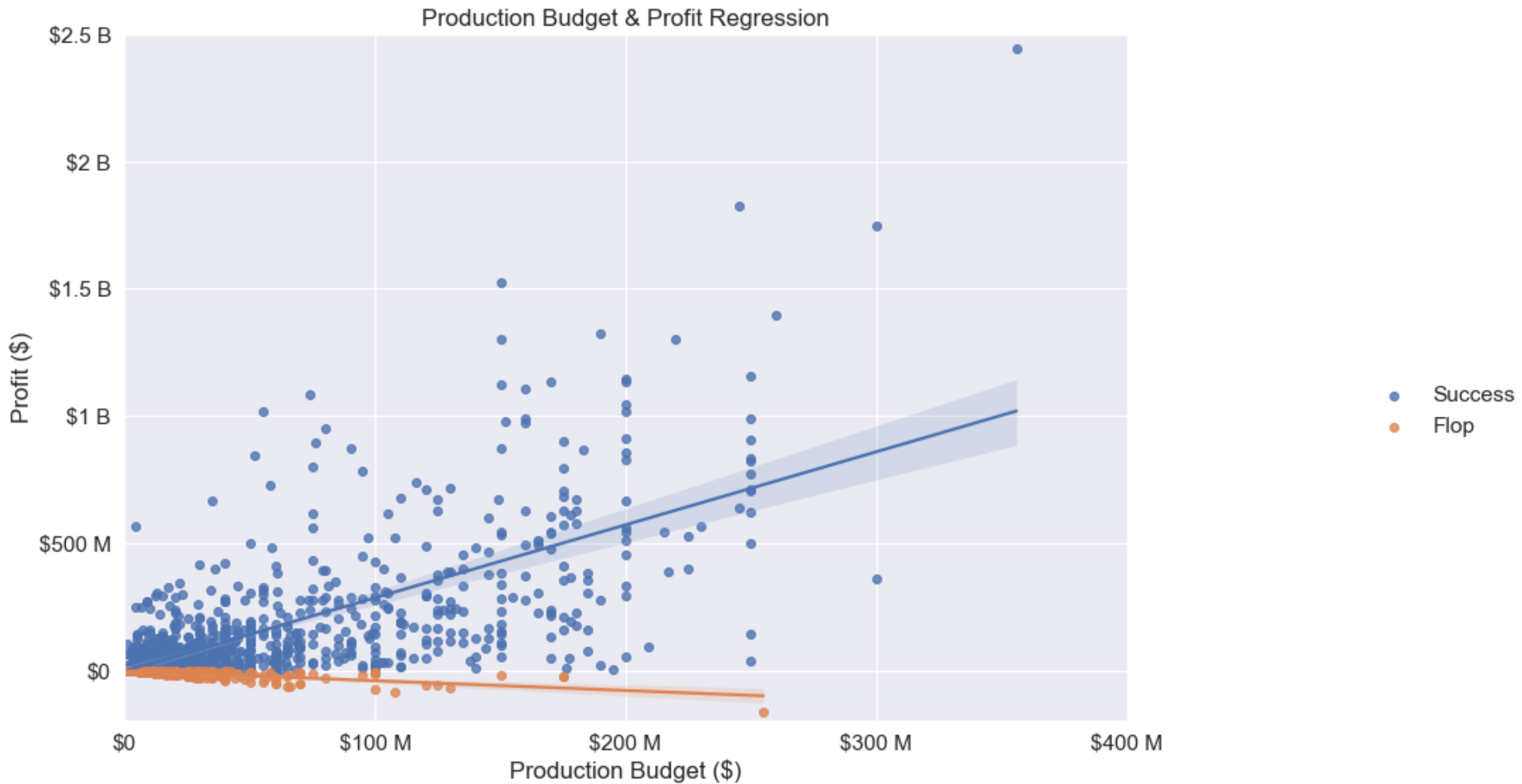
# METHODOLOGY

All data was sourced from The Movie Database (TMDB) using their provided API.

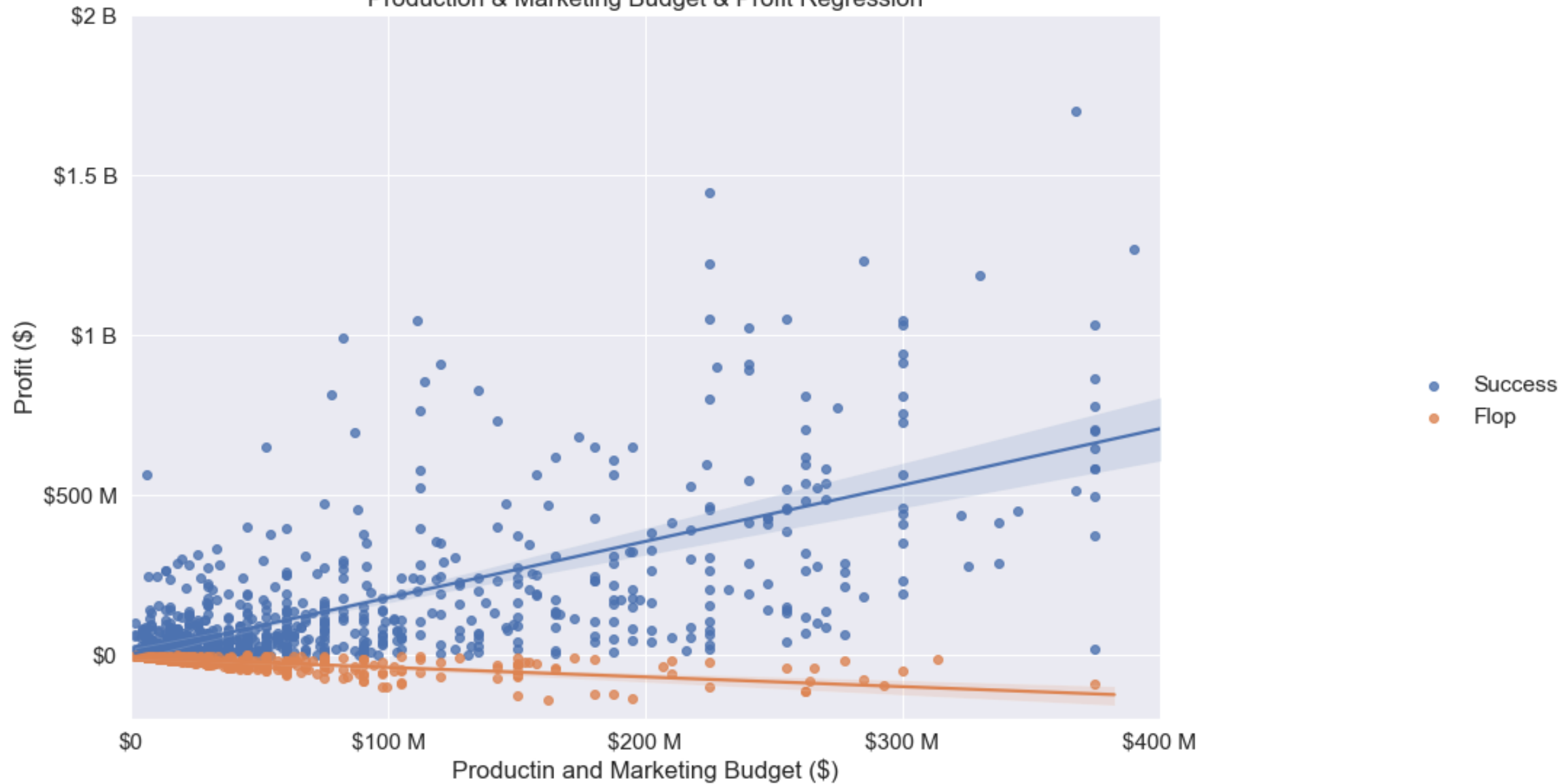


## Filters used:

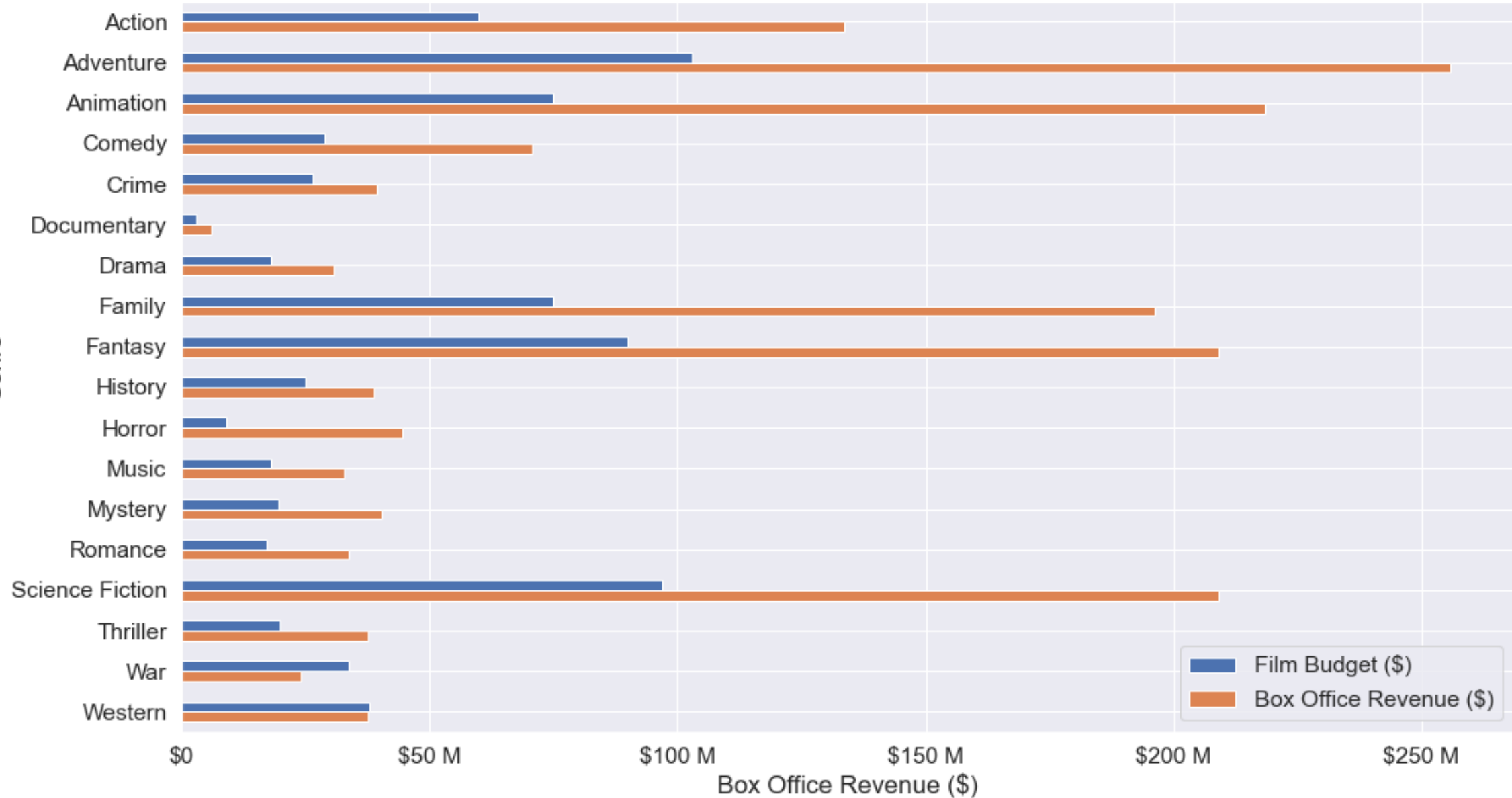
|                                  |   |   |  |                     |                               |
|----------------------------------|---|---|--|---------------------|-------------------------------|
| Release<br>year<br>2012-<br>2019 | Production<br>budgets<br>exceeding<br>\$1 million | Box office<br>revenues<br>greater<br>than \$0 | Runtimes<br>longer<br>than 80<br>minutes | English<br>language | Wide<br>theatrical<br>release |
|----------------------------------|---|---|--|---------------------|-------------------------------|



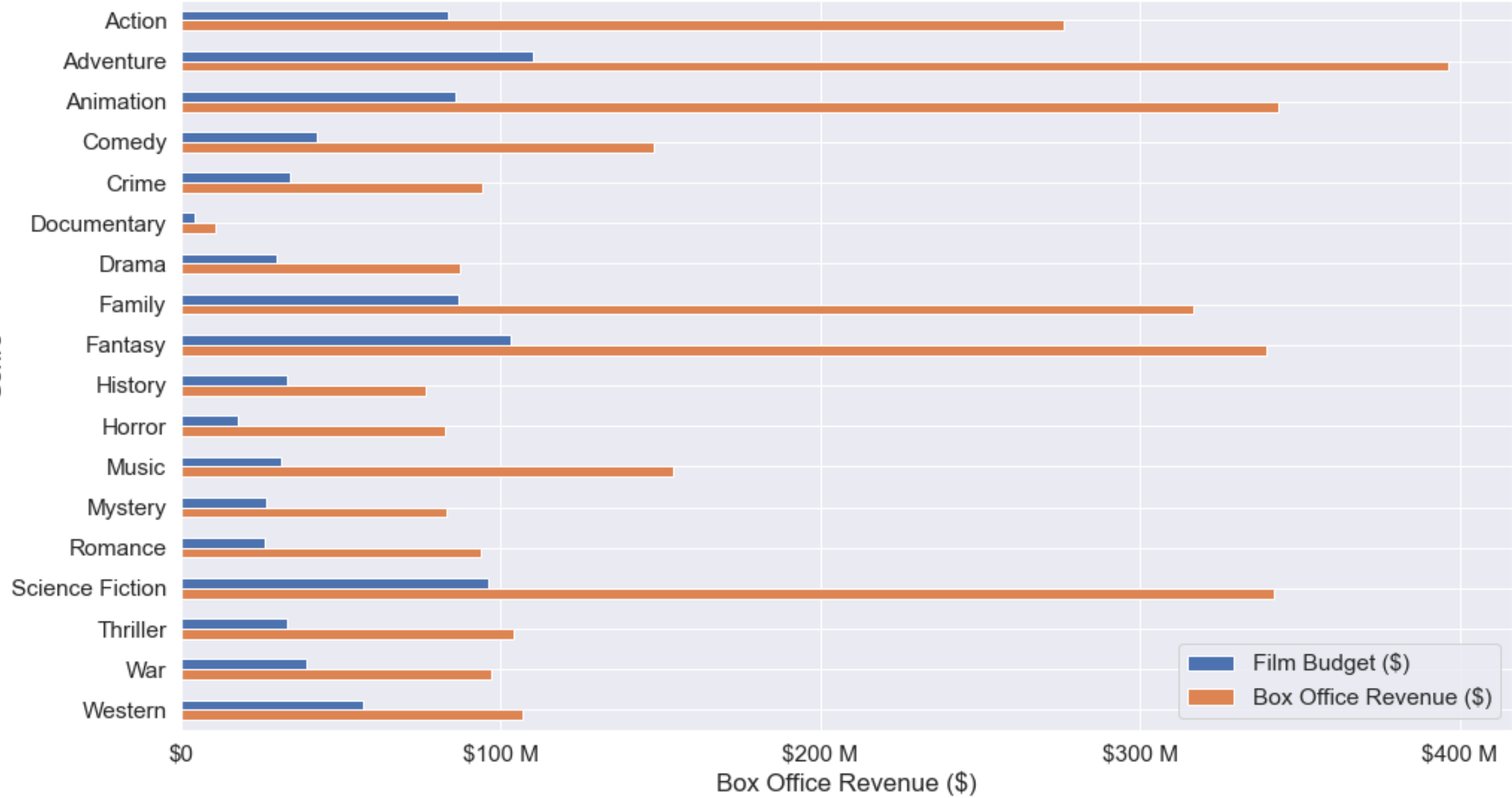
Production & Marketing Budget & Profit Regression



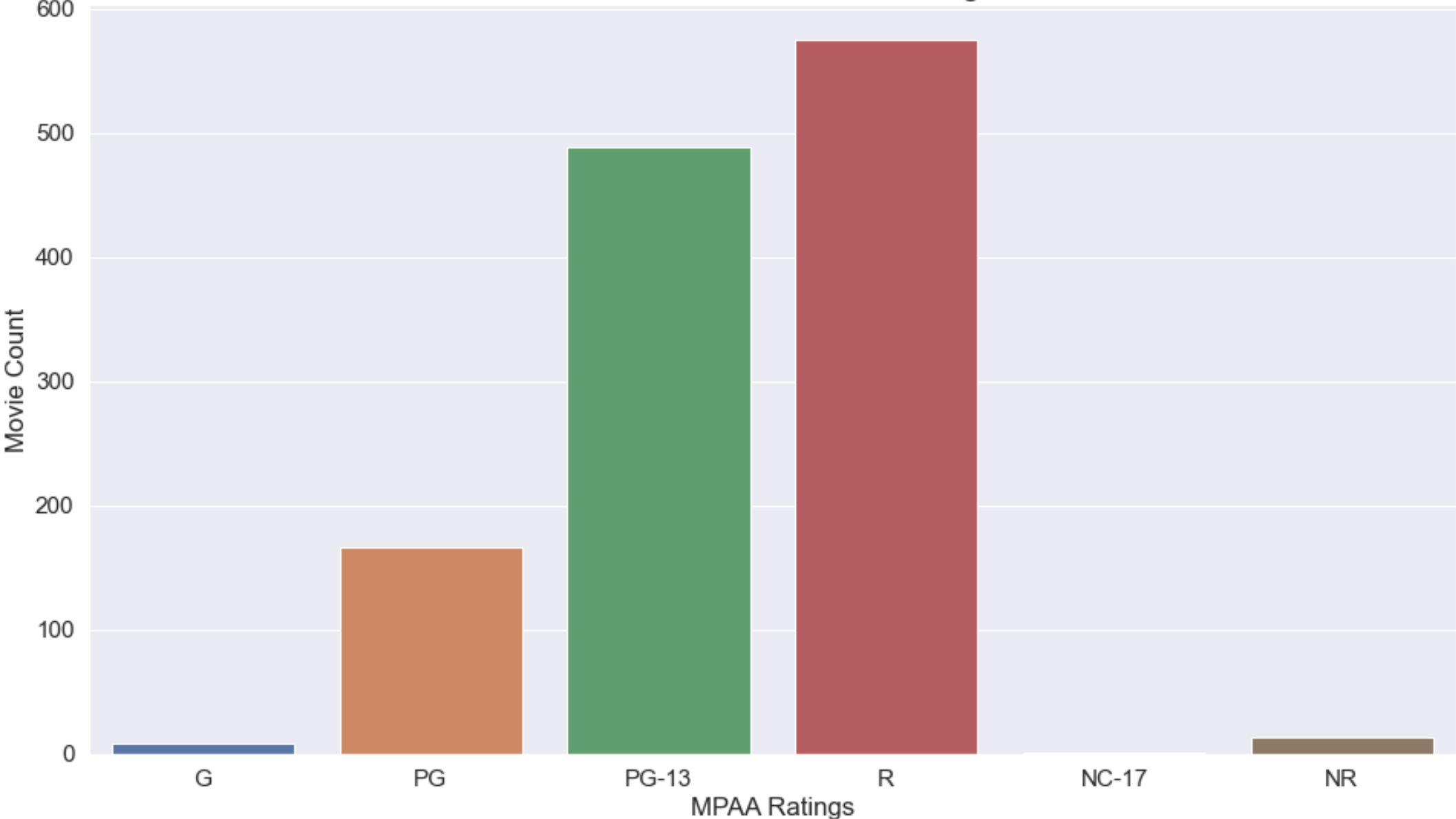
Median Production Budget and Box Office Revenue by Genre



Mean Production Budget and Box Office Revenue by Genre

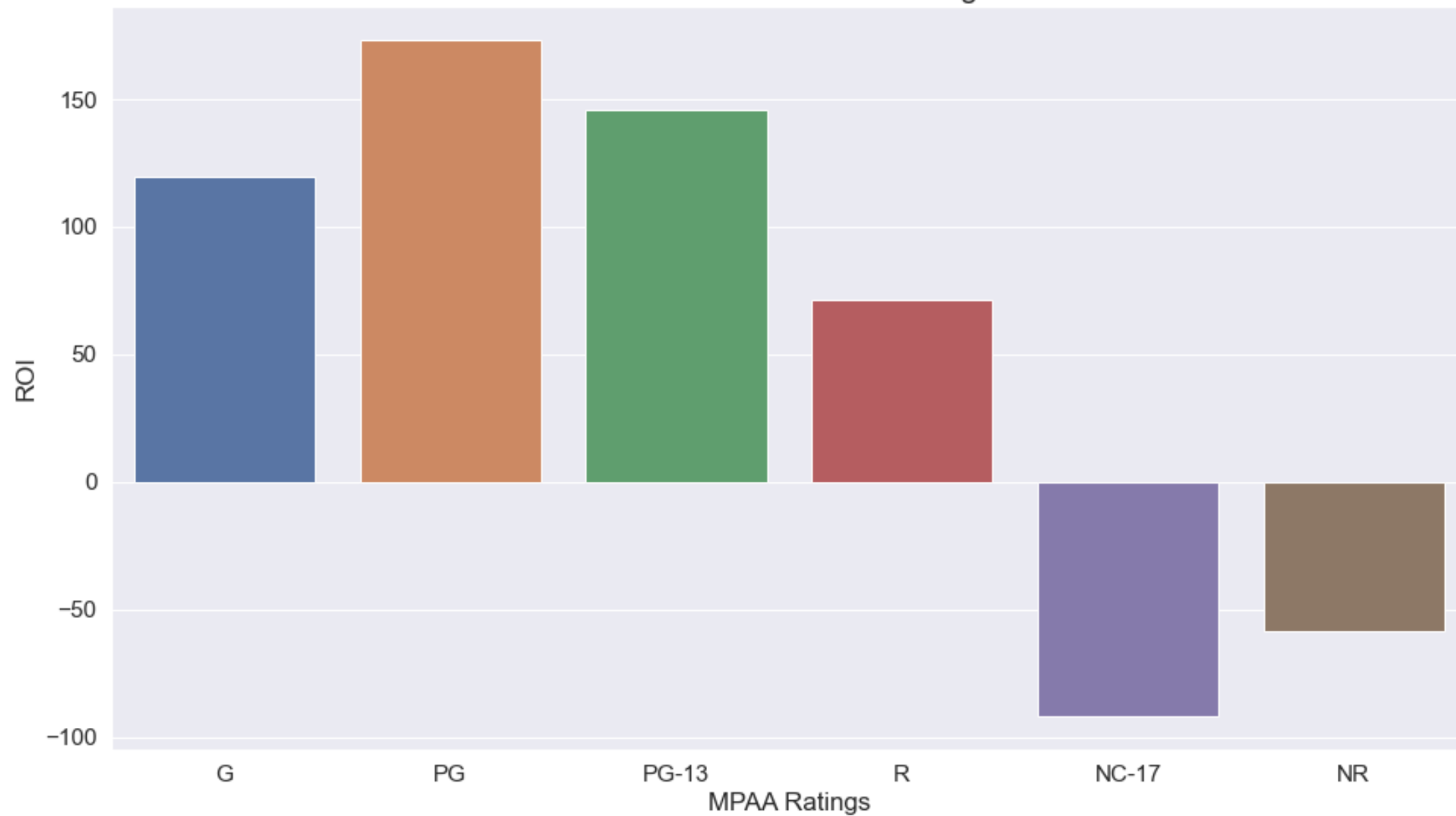


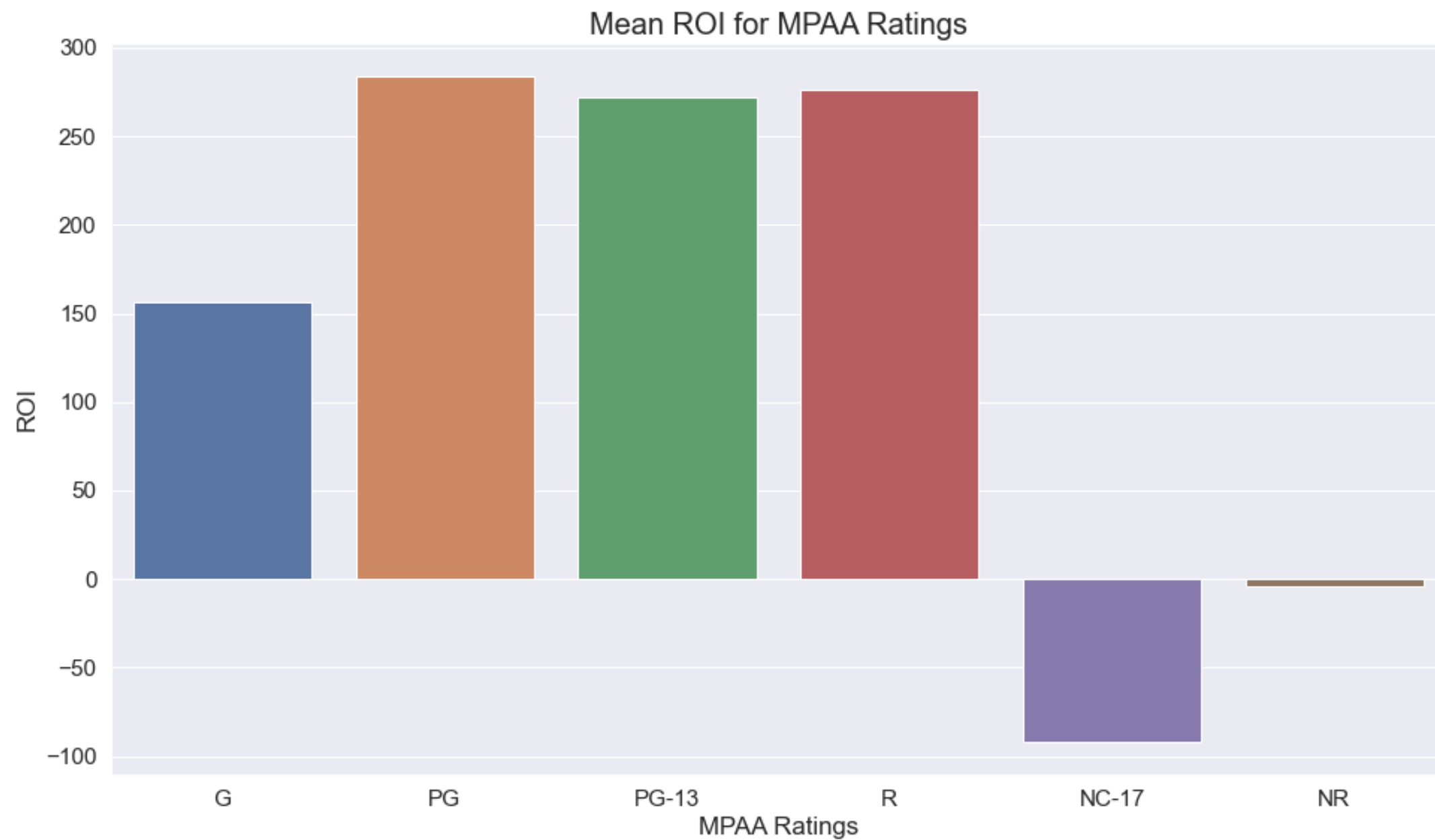
Movie Count Per MPAA Rating





Median ROI for MPAA Ratings





# CONCLUSIONS

**Budget and revenue are correlated, but avoid wasteful spending**

Data represents studios with decades of experience

Microsoft is new to the business, and should allocate budgets with discretion

**Focus on Adventure, Animation, Family, Fantasy, and Science Fiction genres.**

Elements of action and comedy could be a bonus

Horror, Music, Mystery, Romance, and Thriller are profitable, but only with lower budgets

**Appeal to all ages to maximize profit potential**

PG and PG-13 ratings earn the highest ROI's

R rated movies should be approached with more caution, NC-17 movies should be avoided entirely

# FURTHER ANALYSIS

## **What are the commonalities of box office flops?**

Further explore successes and flops by isolating instances in separate dataframes

## **Who are the winners and losers in the most profitable genres?**

Investigate elements of strong and weak performers

## **Expand data to include multiple sources (e.g. Rotten Tomatoes)**

Combine TMDb data with data from Box Office Mojo, The Numbers, Rotten Tomatoes, and Metacritic

Crystallize current dataset by ironing out financial discrepancies

Identify trends in critic and audience popularity