

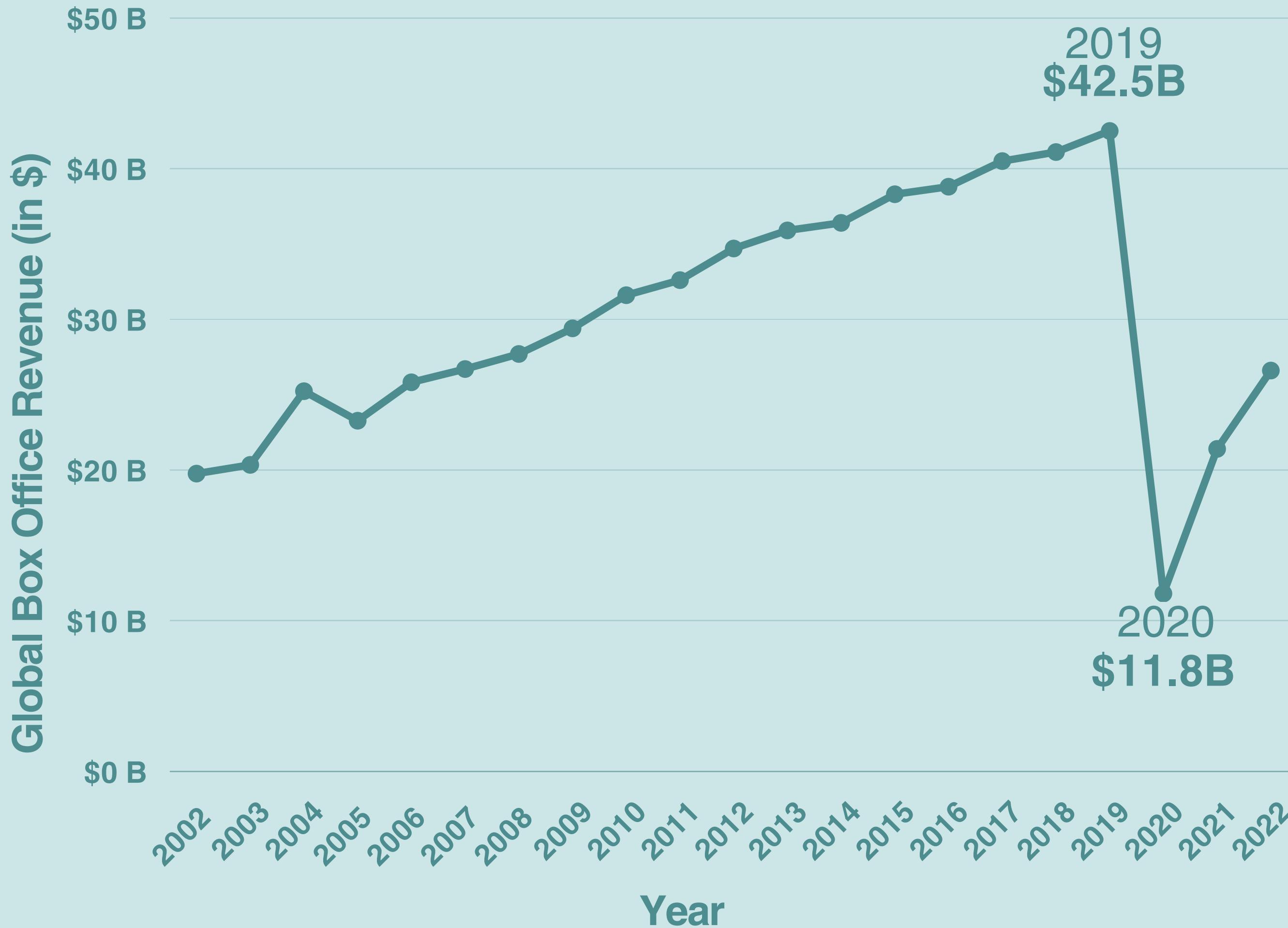
# WHAT MAKES A HIT FILM?

Kyle Eunice Anisco



Global box office revenue experienced a 72% drop in 2020.

Source: Motion Picture Association





# Unlocking the Secrets of Successful Films: A Data-Driven Approach

# Define a metric that describes a 'hit movie'

- **Guide Questions**

- What are the **current trends** in the movie industry, and how can we gain insight from these trends to create successful movies?
- **When** are movies most profitable?
- Which **genres** have been profitable over time?
- What **shared characteristics** do highest rated movies have?

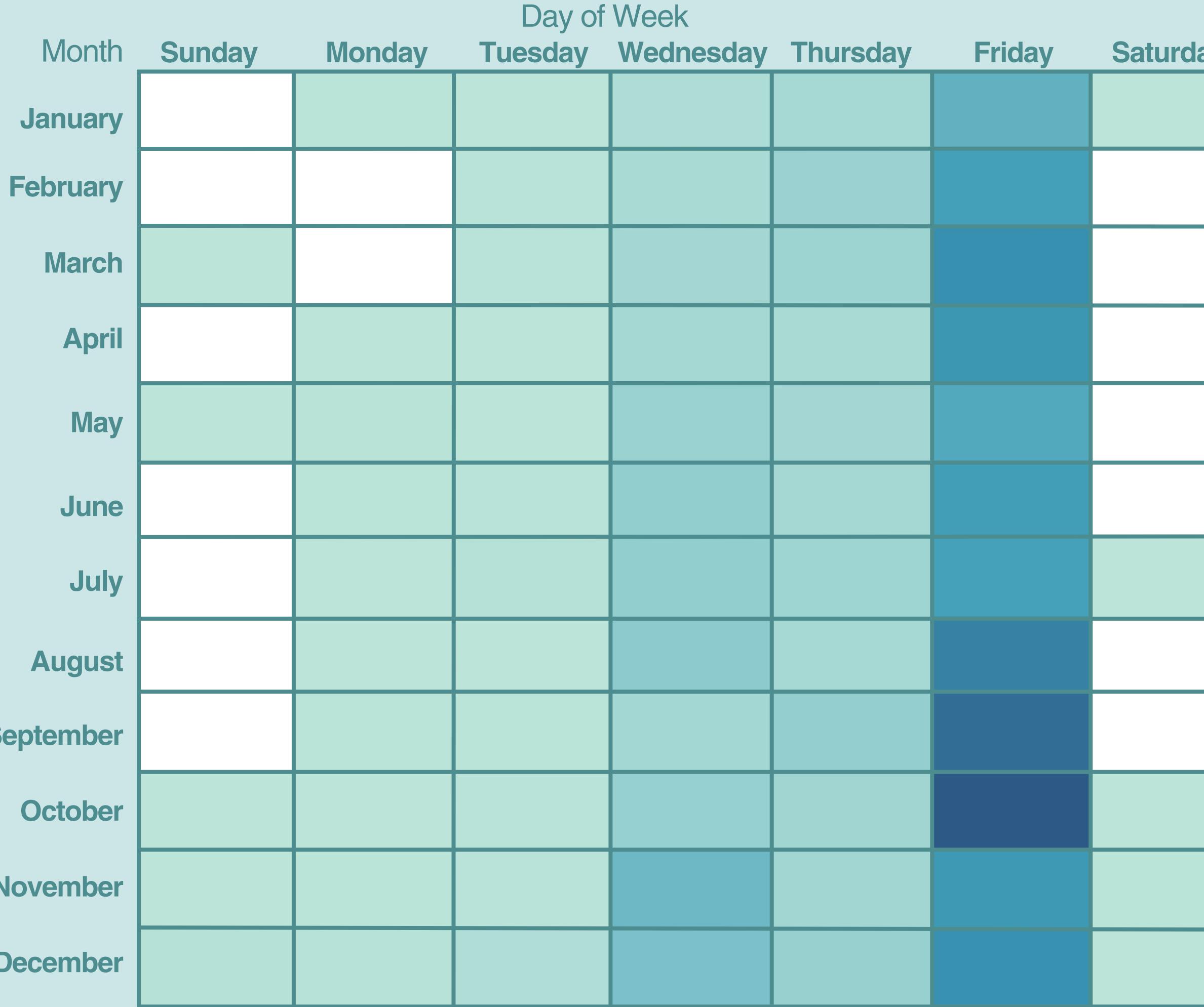


# Limitations

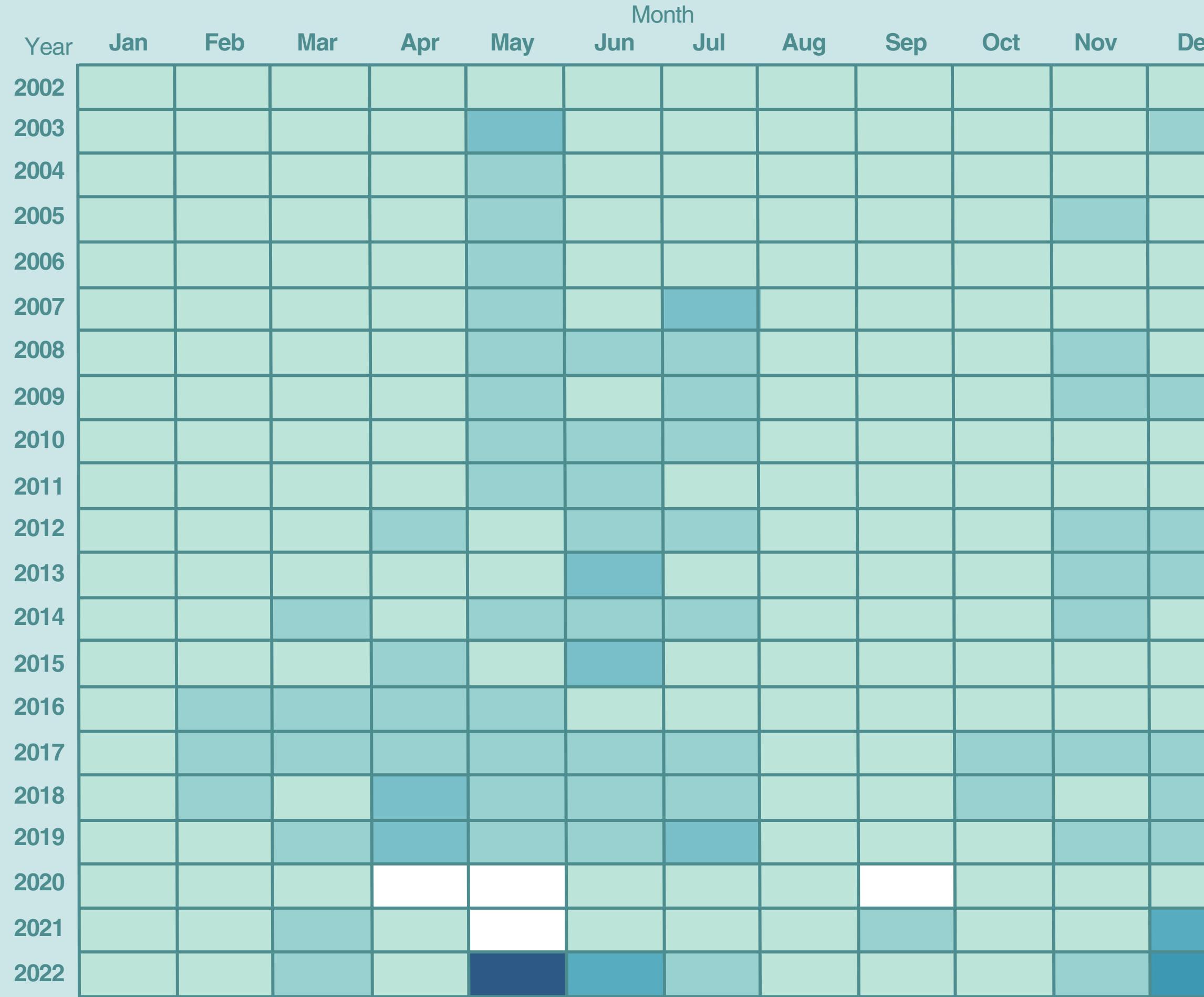
The scope of the dataset is only from 2002-2022.  
Films with below 25000 votes in IMDb are not included in the analysis.

Data is sourced from IMDb for general film data and thenumbers.com for box office data.

# Count of Movies Released per Day of Week and Month (2002-2022)



# Avg. Profit of Movies Released per Month (2002-2022)



Films released during **May to July (summer)** and **November to December** usually enjoy the highest average profit.

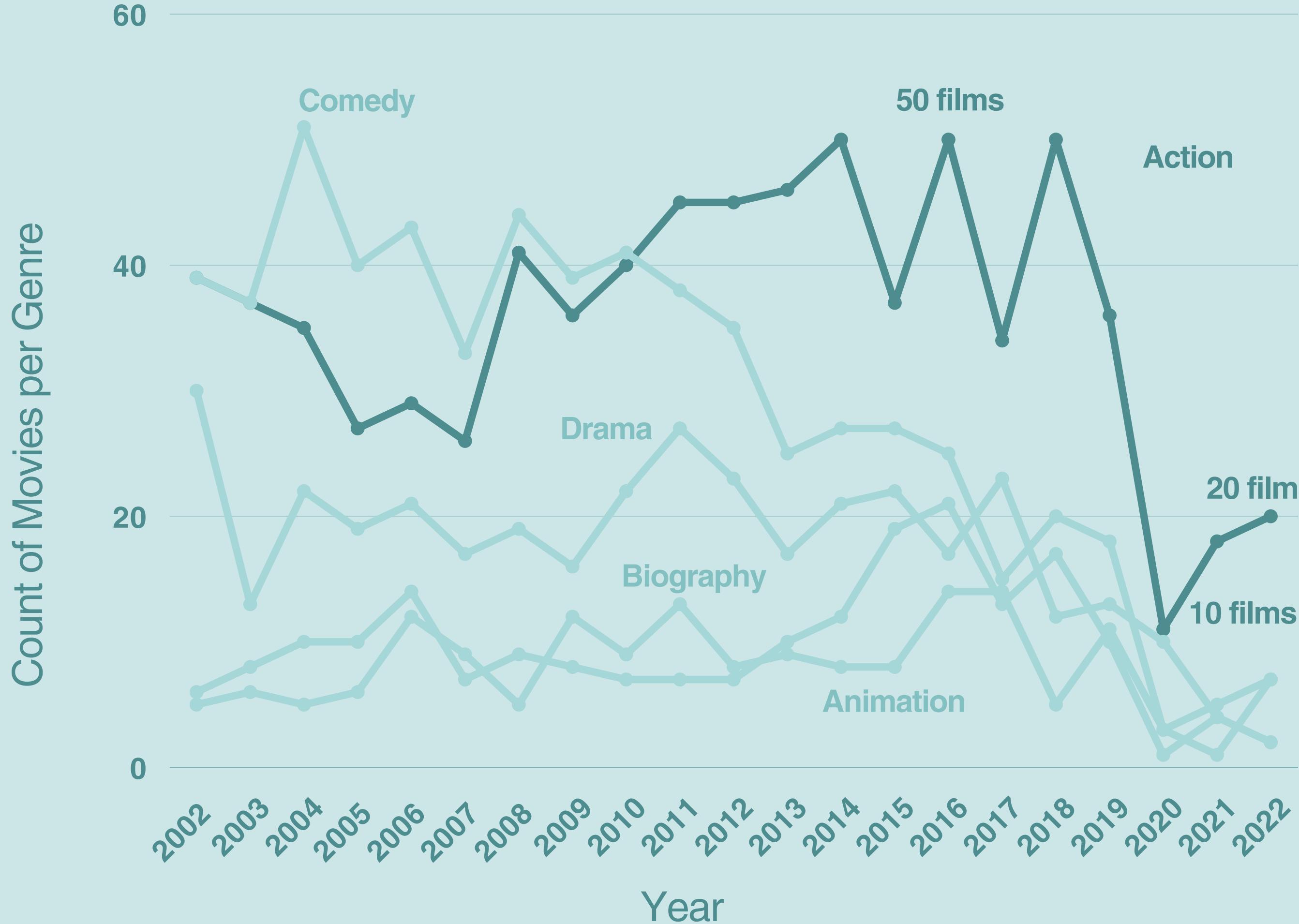
Average Profit



\$0

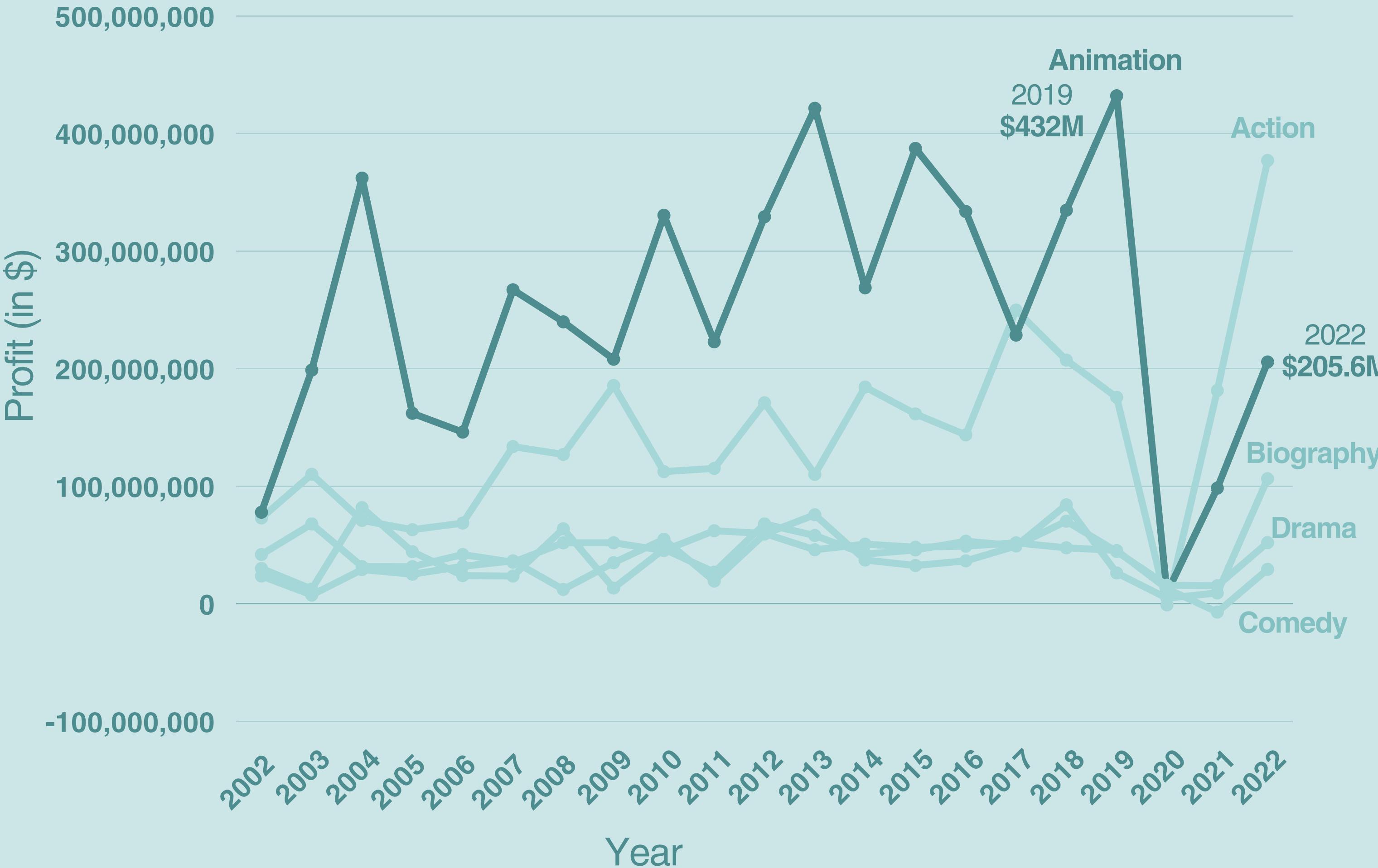
\$1B

# Count of Movies Released per Genre (2002-2022)



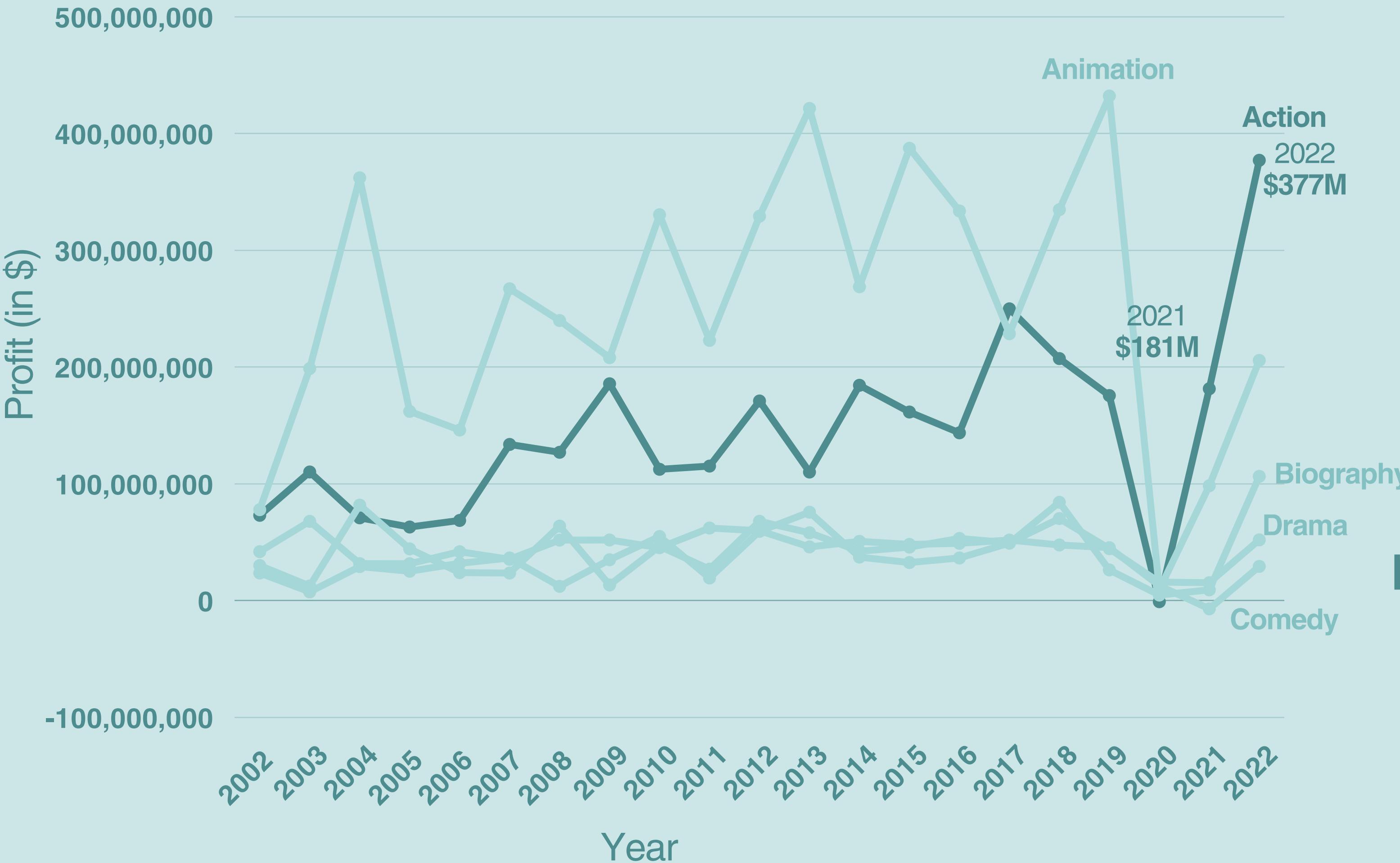
Action movies are the most prevalent genre in film since the 2010s.

# Average Profit of Movies Released per Genre (2002-2022)



Animated movies have the highest average profit per movie among all genres.

## Average Profit of Movies Released per Genre (2002-2022)



However, action movies lead all genres in average profit per movie after 2020.



# IMDb Weighted Rating

Weighted Rating =  $(v \div (v+m)) \times R + (m \div (v+m)) \times C$

where: R = average rating for the movie (mean)

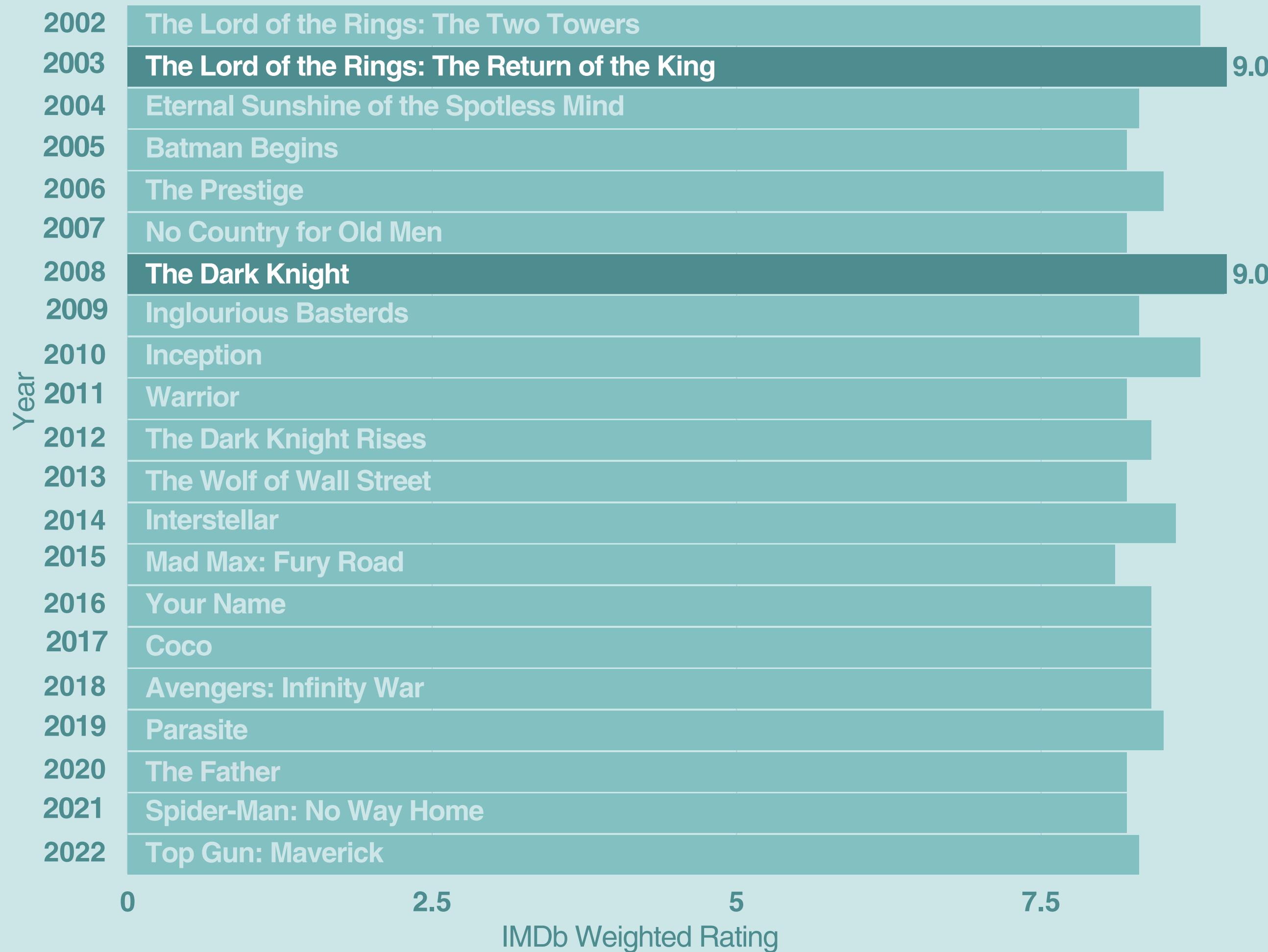
v = number of votes for the movie

m = minimum votes required to be listed in the Top 250 (currently 25,000)

C = the mean vote across the whole report (currently 7.0)

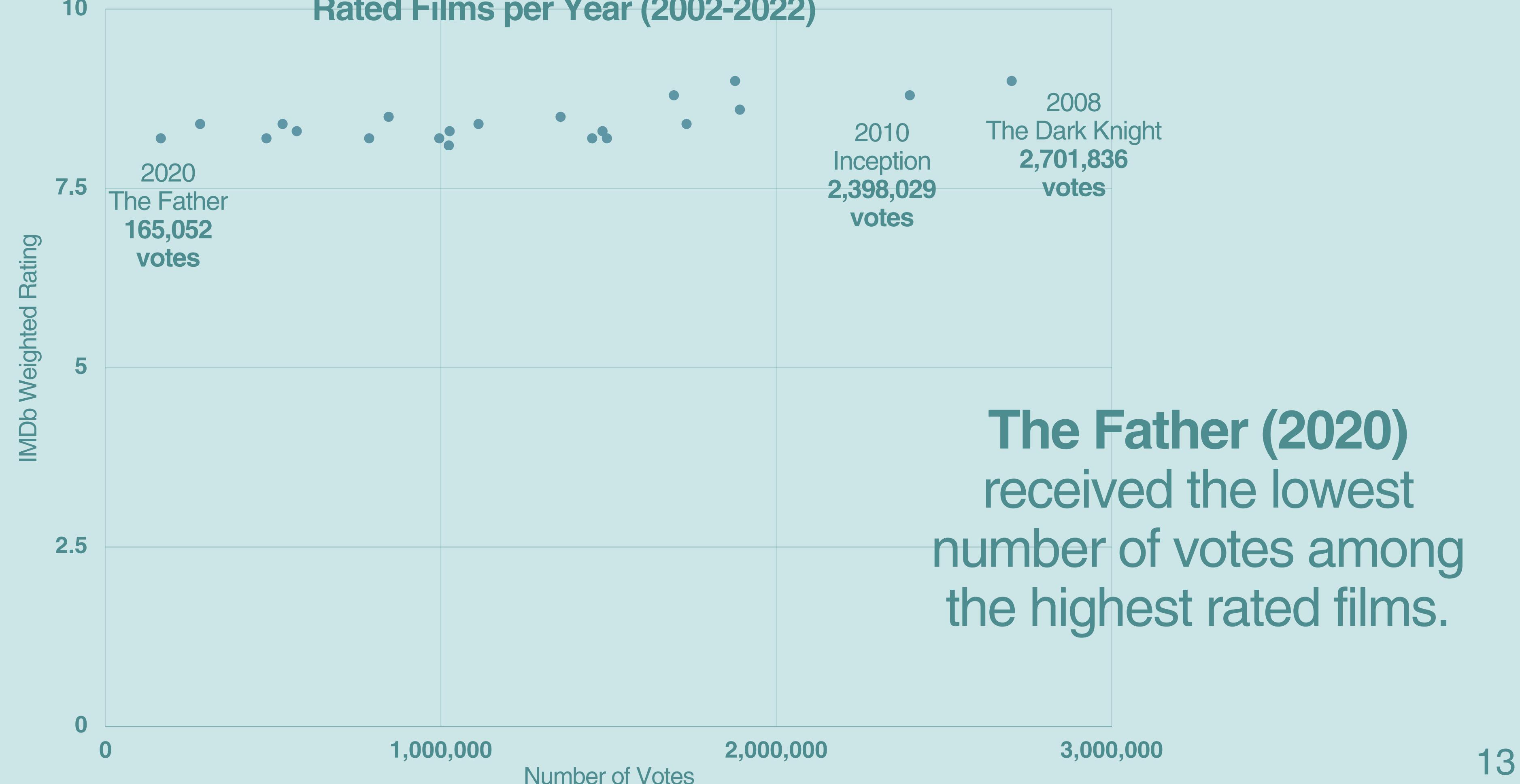
Source: IMDb

## Highest Rated Films per Year (2002-2022)

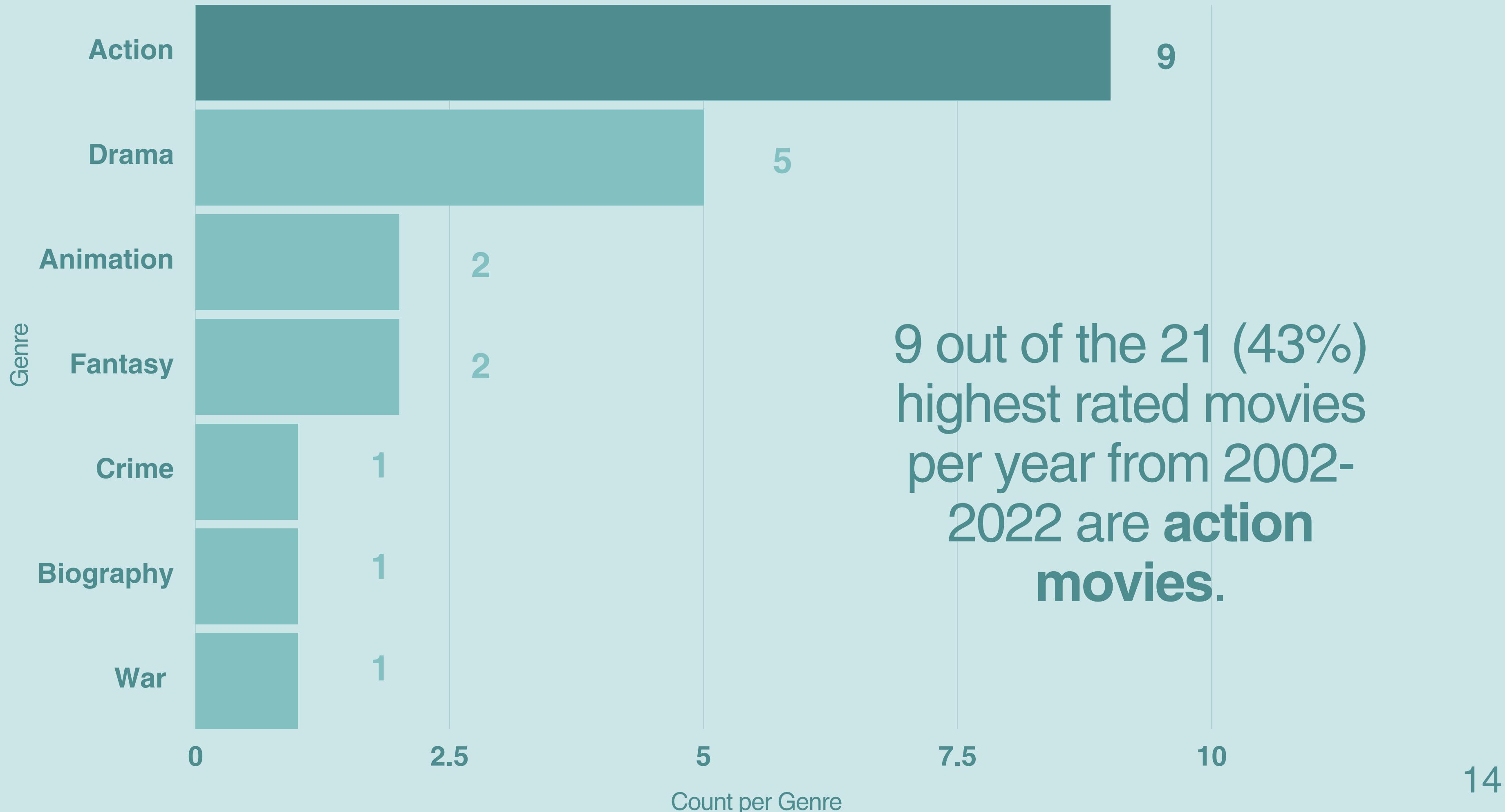


LOTR: The Return of the King and The Dark Knight are both adapted screenplays derived from fiction and comics.

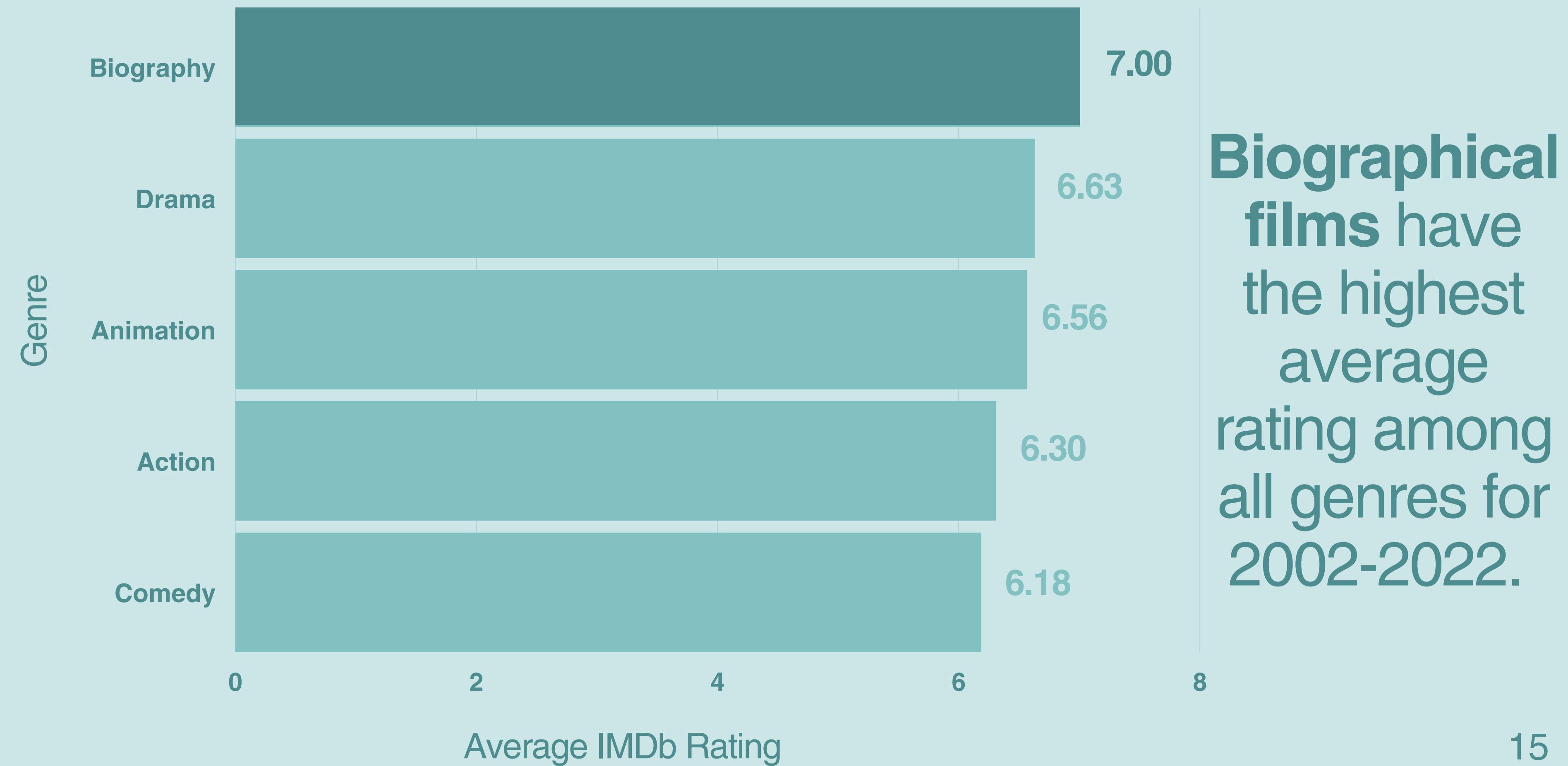
# Rating vs. Number of Votes of the Highest Rated Films per Year (2002-2022)



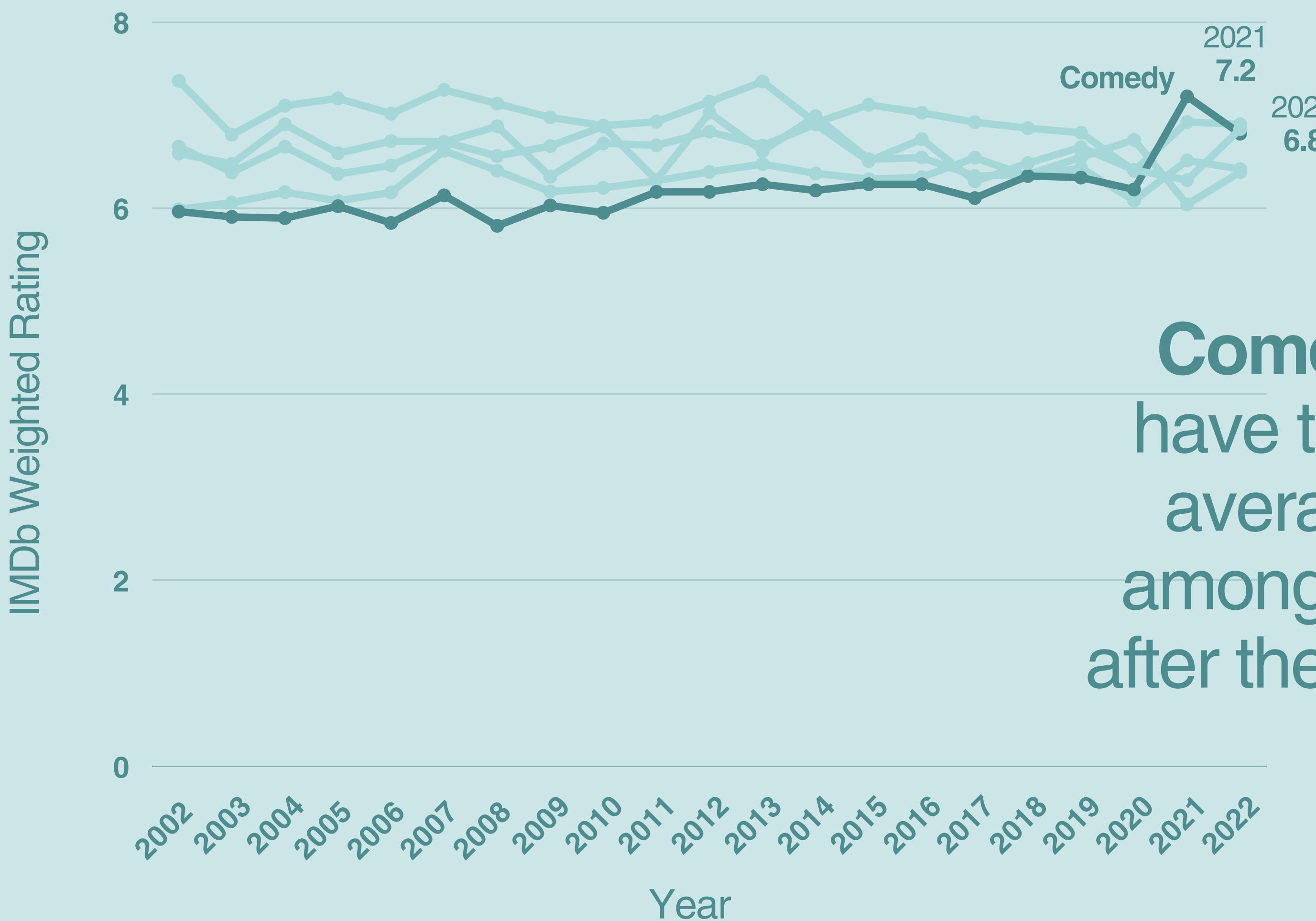
# Count per Genre of Highest Rated Films per Year (2002-2022)



# Average Rating of Movies per Genre (2002-2022)

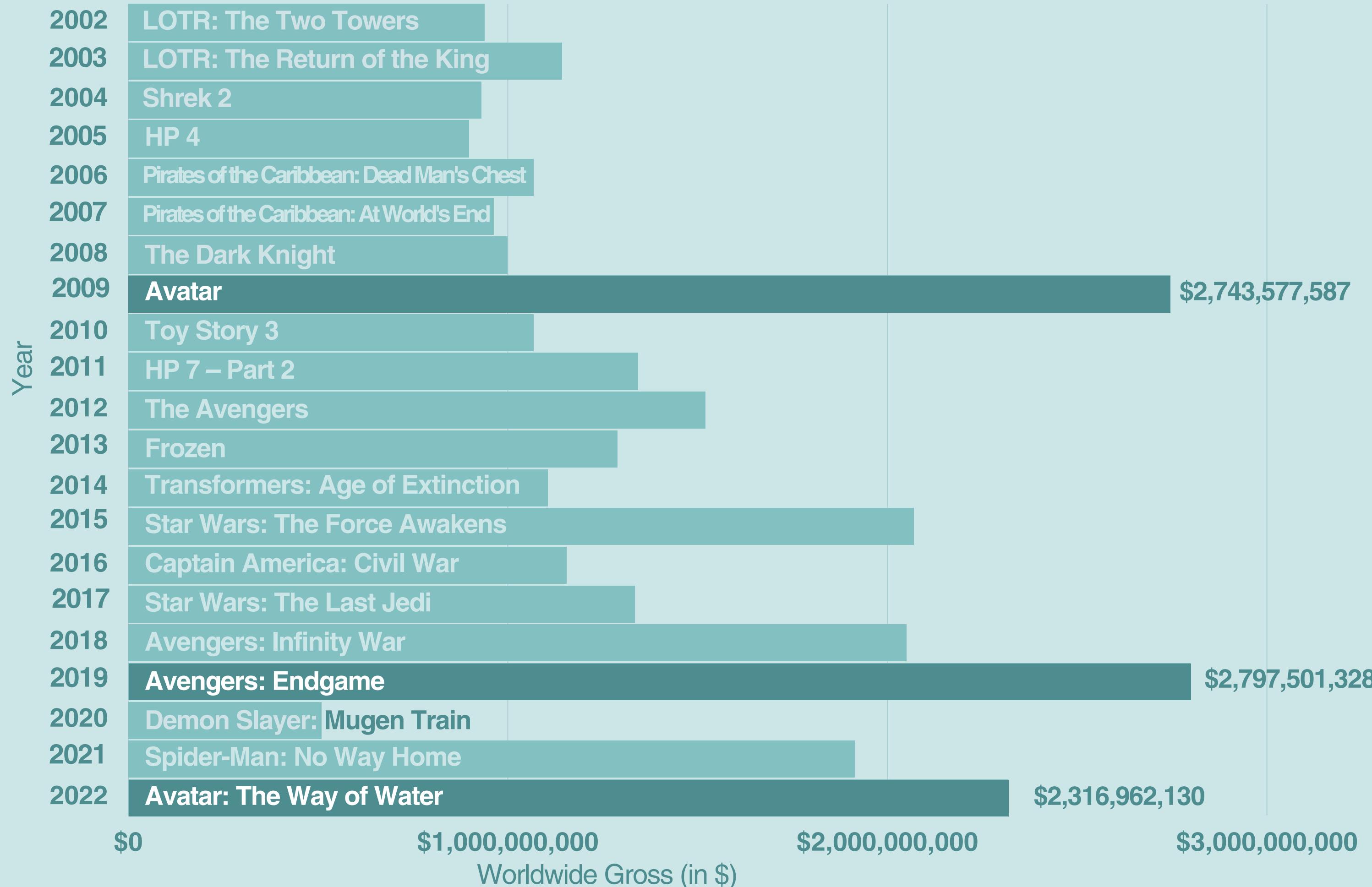


## Average Rating of Movies per Genre (2002-2022)



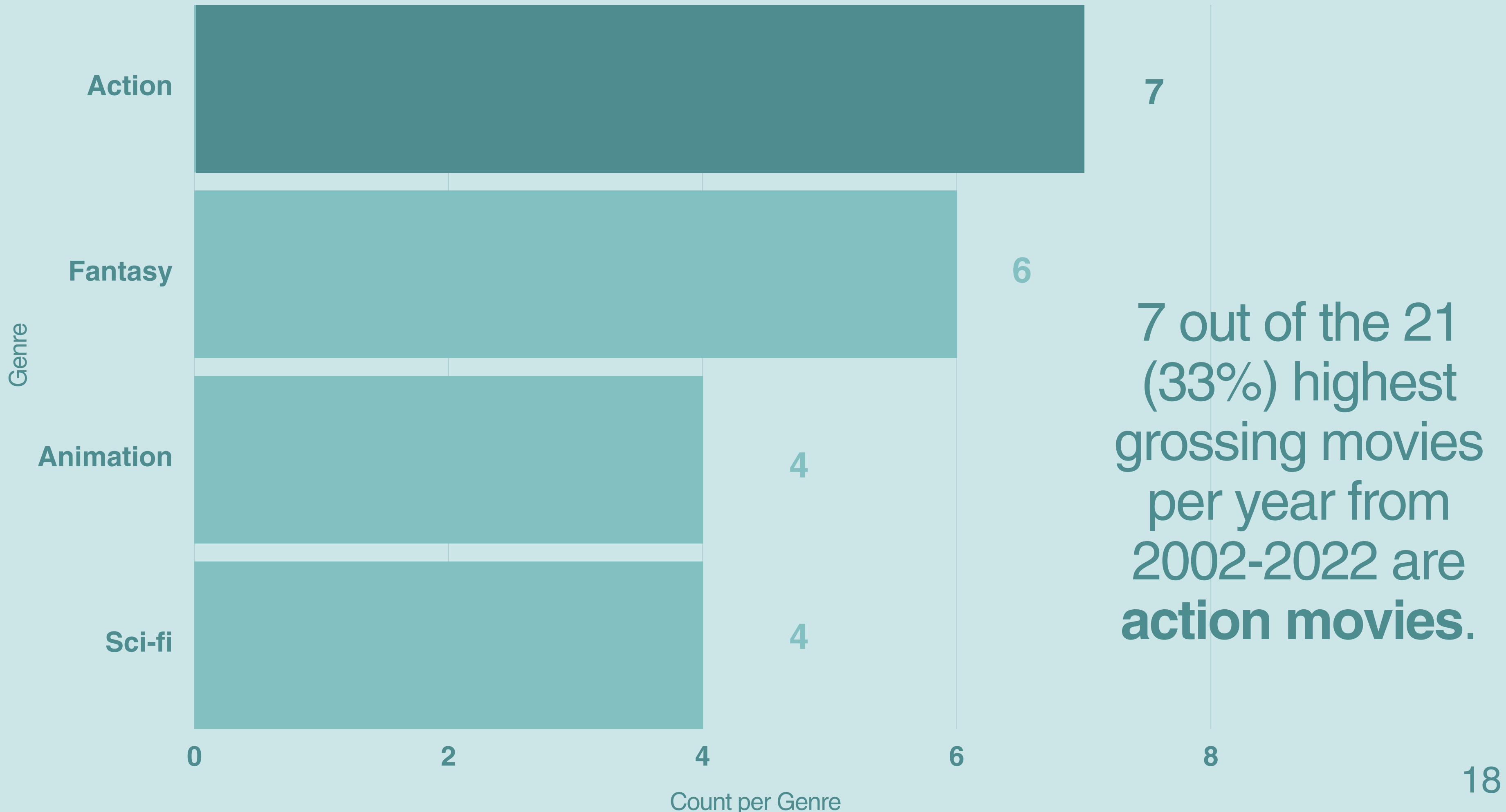
**Comedy films**  
have the highest  
average rating  
among all genres  
after the pandemic.

# Highest Grossing Films per Year (2002-2022)



Three films passed the \$2B mark.  
All three are action films or have action listed as a secondary genre.

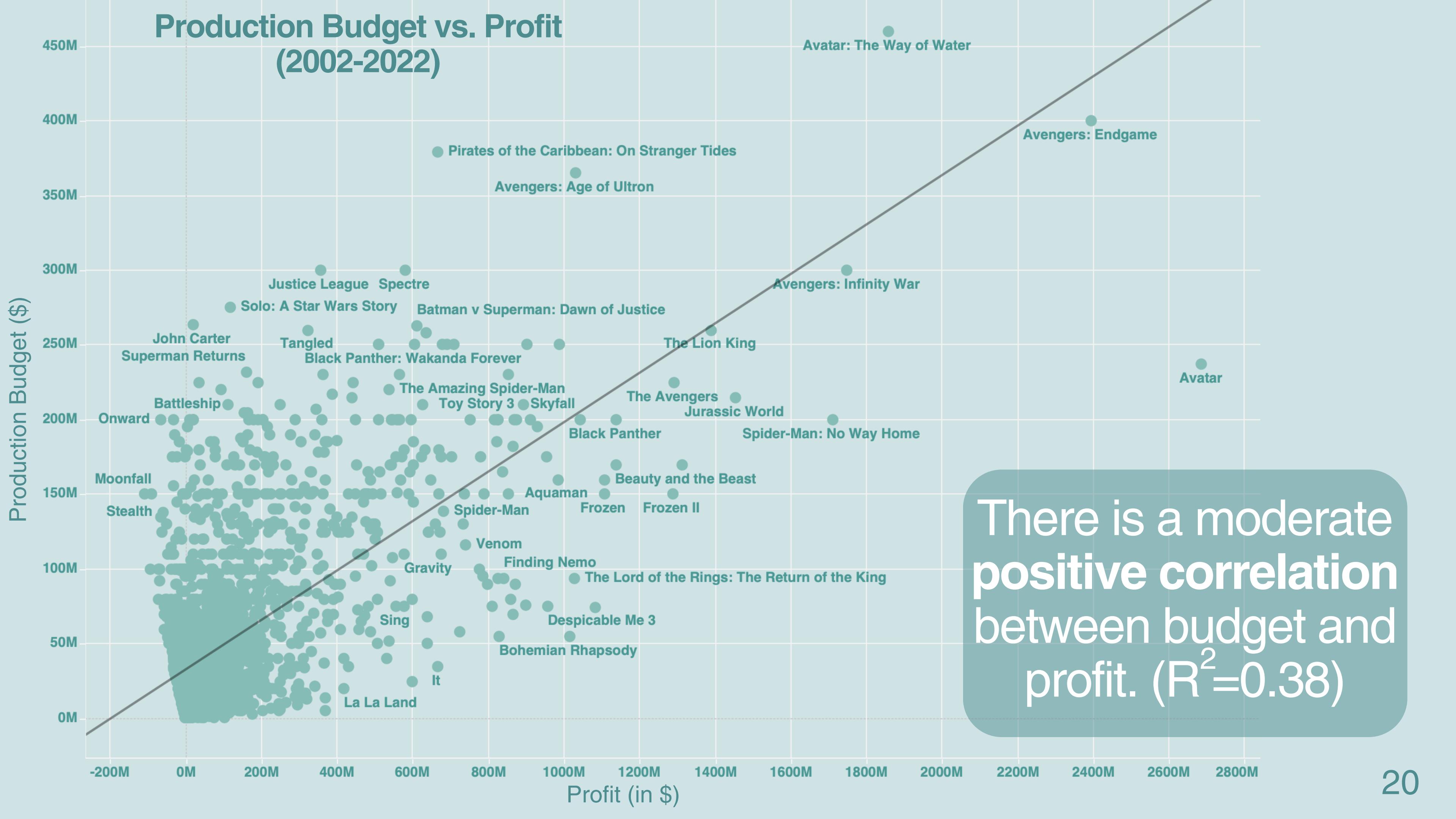
# Count per Genre of Highest Grossing Films per Year (2002-2022)



# Average Worldwide Gross of the Top 20 Highest Grossing Films per Year (2002-2022)

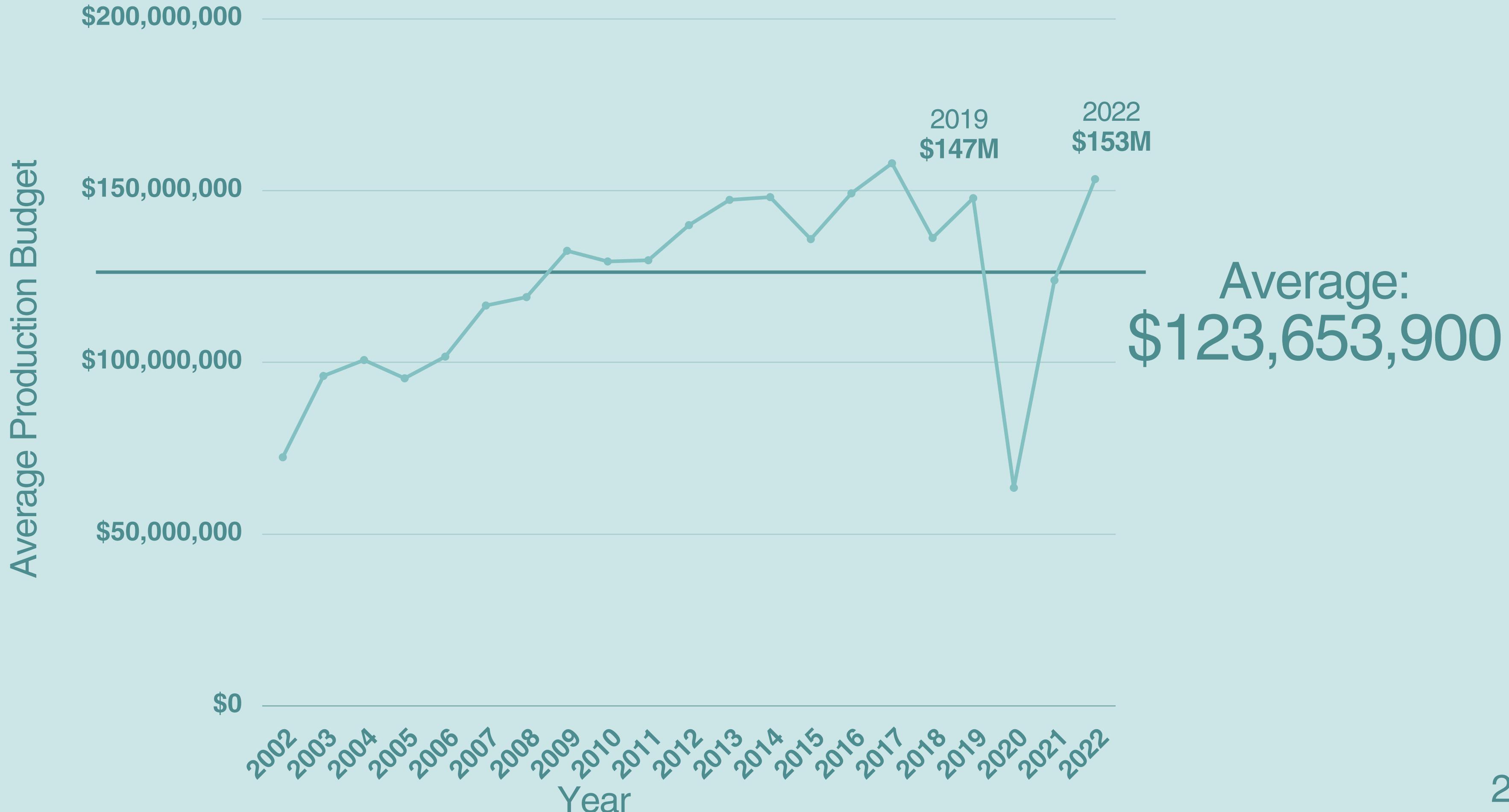


# Production Budget vs. Profit (2002-2022)

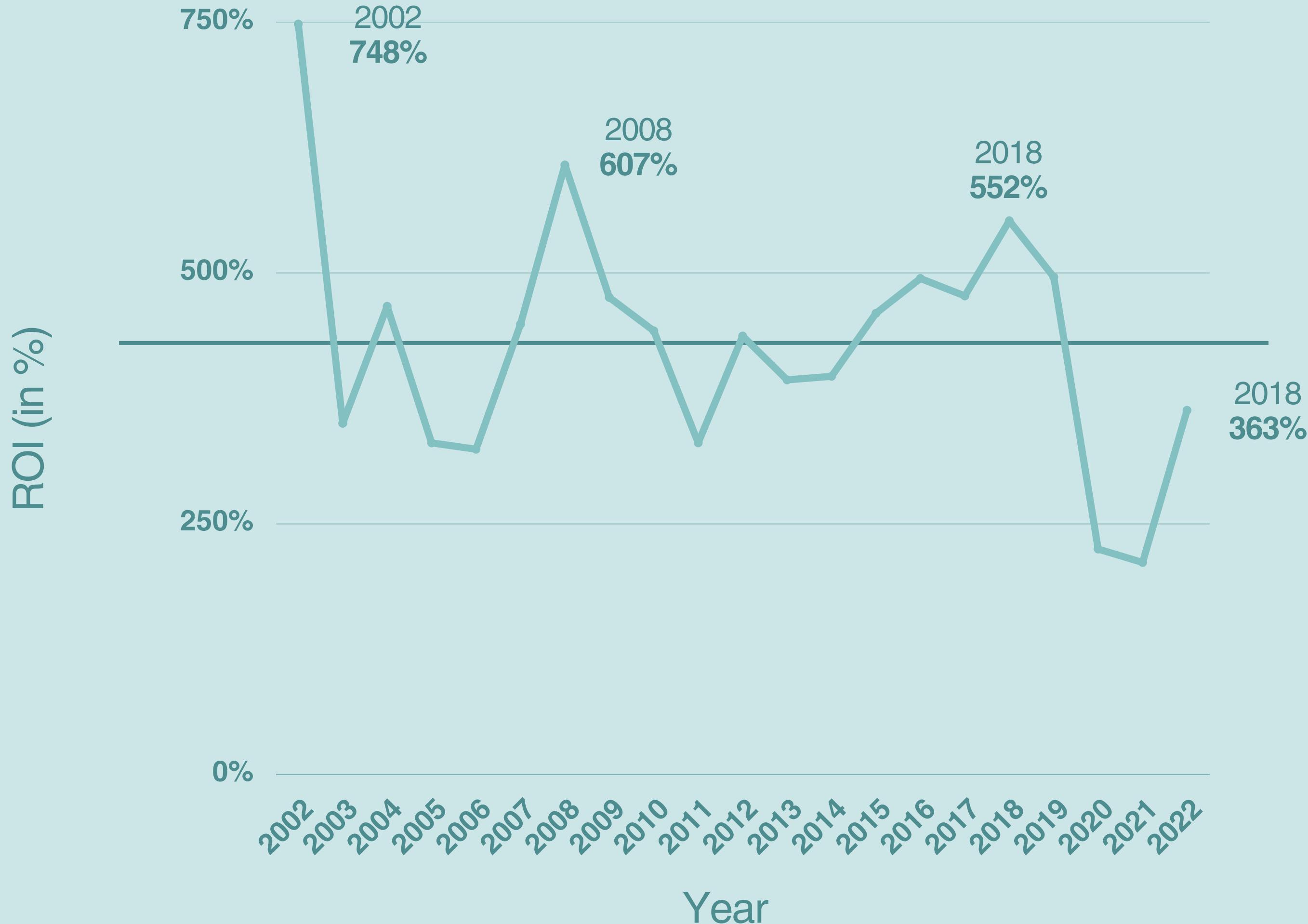


There is a moderate positive correlation between budget and profit. ( $R^2=0.38$ )

# Average Production Budget of the Top 20 Highest Grossing Films per Year (2002-2022)

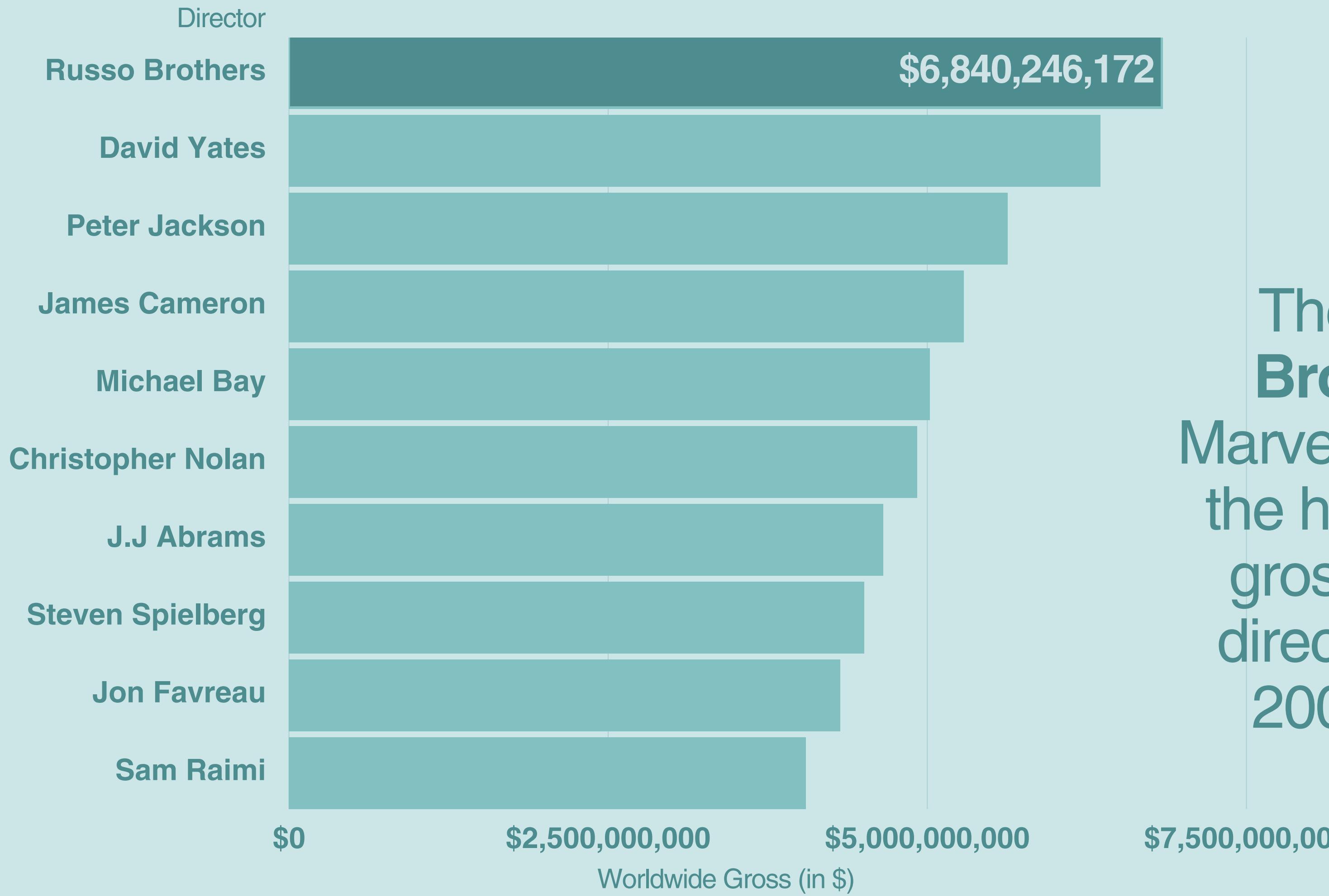


# Average Return on Investment of the Top 20 Highest Grossing Films per Year (2002-2022)



Average:  
429%

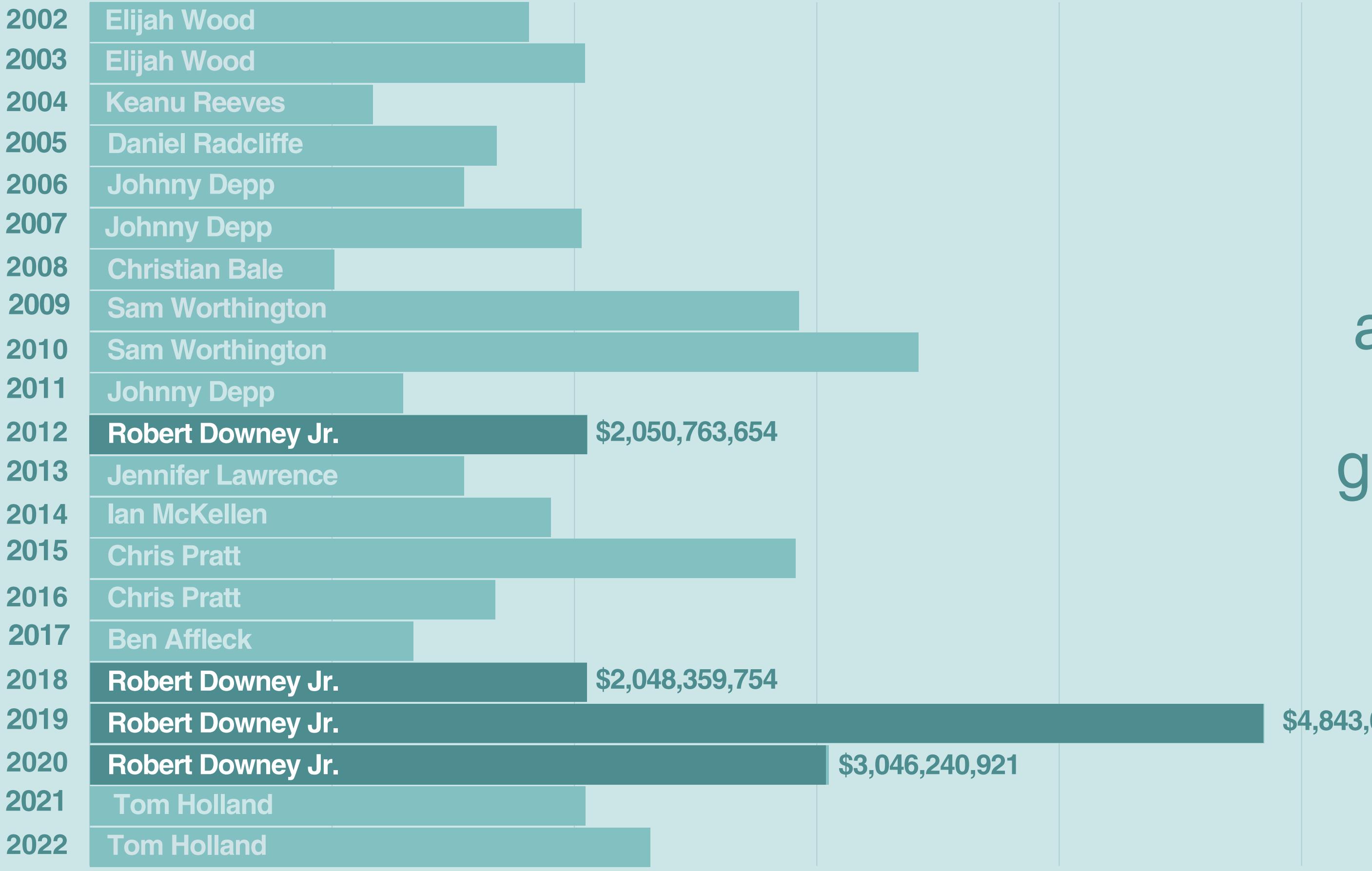
## Highest Grossing Directors (Totals) (2002-2022)



The Russo Brothers of Marvel fame have the highest total gross for films directed during 2002-2022.

# Highest Grossing Lead Actors of Current and Previous Year (2002-2022)

Year



**Robert Downey Jr.**  
appeared four times on the graph over the period covered.

# HIT FILMS METRICS



Seasonality

Genre

Ratings

Profit

Actors/Directors

# SUMMARY

## SEASONALITY

High number of movies released on Friday.

Movies are most profitable during summer months  
(May-July) and November-December.

# SUMMARY GENRE

Action movies are the most prevalent genre in film since the 2010s.

Animated movies have the highest average profit among all genres for the period covered, but action movies have the higher average profit during 2021- 2022.

# SUMMARY RATING

9 out of 21 (43%) of the highest rated films for each year during 2002-2022 are action films.

Biographical films have the highest average rating from 2002-2022 but comedy films have the highest average rating among all genres after the pandemic.

# SUMMARY PROFIT

There is a moderate positive correlation between budget and profit. ( $R^2=0.38$ )

# SUMMARY

## ACTORS & DIRECTORS

Directors and actors associated with the Marvel franchise top highest grossing lists.

Of the highest grossing lead actors of the current and previous year, only one is an actress.

# SUMMARY

## TOP 20 FILMS PER YEAR ACCORDING TO WORLDWIDE GROSS

The average gross of the top 20 films per year normally range from \$400M to \$800M, while the average ROI normally range from 300% to 600%.

The average production budget of these films range from \$100M to \$150M.

# THE KEY METRIC

## RETURN ON INVESTMENT

# THANK YOU

Kyle Eunice Anisco

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