

LUTHER

D.H. KIM

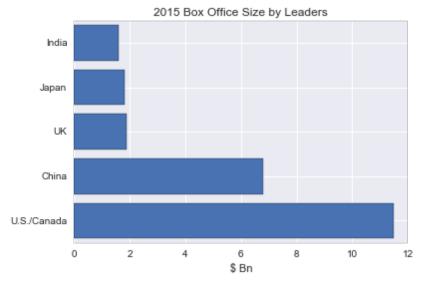
THE NARRATIVE

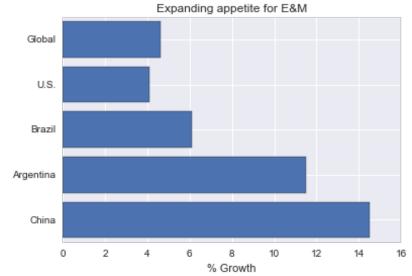
Film market is robust despite competitiveness

- 600 MPAA rated movies each year
- 50,000 total films globally

Over 80% of movies fail

- Growth concentrated in the big "6"
- 80% market share





PROBLEM TO INVESTIGATE

- Which movies perform well on revenue?
- Rationale: interest for this investigation is not the profitability of studios, but the preference of consumers

DATASET

- The Numbers
 - Database of 5321 movies
- Reservations
 - Not scaled for FX adjustments or inflation
 - Measuring mistakes
 - Missing values (opted not to impute missing values)

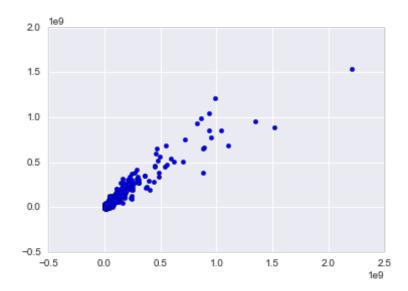
PARAMETERS

- Regressand Box office revenue (more or less ticket sales)
- **Regressors** Genre, Release Year, Production Budget, ... and other reliable and measurable parameters by data set
- 3281 data points x 35 parameters

FITTED VS. ACTUAL ON TRAIN



FITTED VS. ACTUAL ON TEST



PERFORMANCE

CV Scores: 0.8982948 0.89324894 0.91377667 0.91753944 0.90100841

• CV Mean Score: 0.90477365523

R-squared: 0.785177847709

Adj. R-squared: 0.633846372

MSE: 6.4 tr

AVG Benchmark MSE: 29.8 tr

COMMENTARY...

THANK YOU

http://www.pwc.com/gx/en/industries/entertainement-media/outlook.html

http://www.the-numbers.com/movie/budgets/all