Film Success in China

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Project 2
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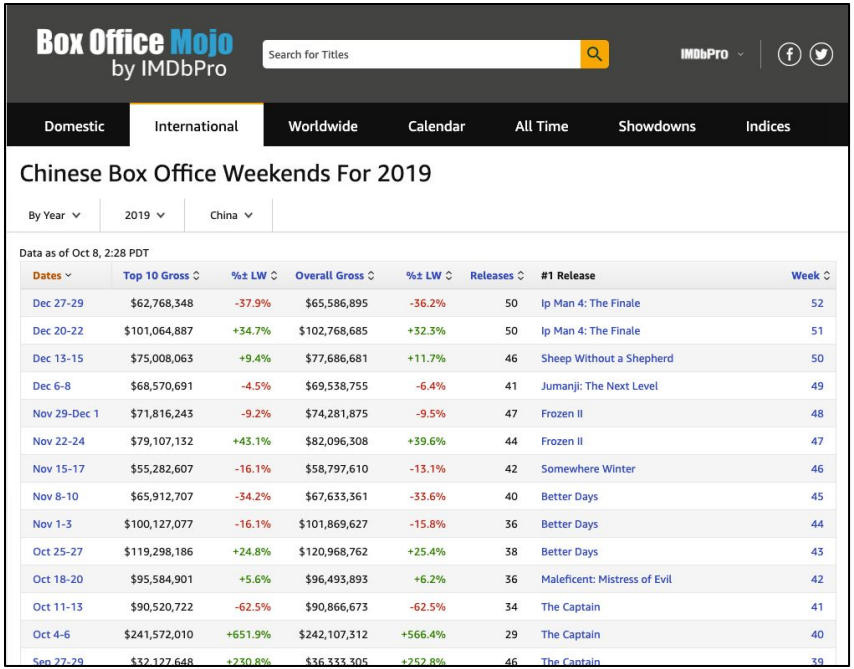
What explains the success of films in the Chinese market?

Collect Chinese Box Office Data from Box Office Mojo using Beautiful Soup

- ⤵️ Pair with Kaggle IMDB dataset

→ **1177 titles**



Box Office Mojo by IMDbPro

Search for Titles

IMDbPro

Domestic | International | Worldwide | Calendar | All Time | Showdowns | Indices

Chinese Box Office Weekends For 2019

By Year | 2019 | China

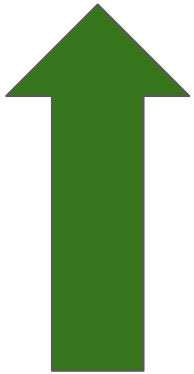
Data as of Oct 8, 2:28 PDT

Dates	Top 10 Gross	%± LW	Overall Gross	%± LW	Releases	#1 Release	Week
Dec 27-29	$62,768,348	-37.9%	$65,586,895	-36.2%	50	Ip Man 4: The Finale	52
Dec 20-22	$101,064,887	+34.7%	$102,768,685	+32.3%	50	Ip Man 4: The Finale	51
Dec 13-15	$75,008,063	+9.4%	$77,686,681	+11.7%	46	Sheep Without a Shepherd	50
Dec 6-8	$68,570,691	-4.5%	$69,538,755	-6.4%	41	Jumanji: The Next Level	49
Nov 29-Dec 1	$71,816,243	-9.2%	$74,281,875	-9.5%	47	Frozen II	48
Nov 22-24	$79,107,132	+43.1%	$82,096,308	+39.6%	44	Frozen II	47
Nov 15-17	$55,282,607	-16.1%	$58,797,610	-13.1%	42	Somewhere Winter	46
Nov 8-10	$65,912,707	-34.2%	$67,633,361	-33.6%	40	Better Days	45
Nov 1-3	$100,127,077	-16.1%	$101,869,627	-15.8%	36	Better Days	44
Oct 25-27	$119,298,186	+24.8%	$120,968,762	+25.4%	38	Better Days	43
Oct 18-20	$95,584,901	+5.6%	$96,493,893	+6.2%	36	Maleficent: Mistress of Evil	42
Oct 11-13	$90,520,722	-62.5%	$90,866,673	-62.5%	34	The Captain	41
Oct 4-6	$241,572,010	+651.9%	$242,107,312	+566.4%	29	The Captain	40
Sep 27-29	$32,127,648	+230.8%	$36,333,305	+252.8%	46	The Captain	39

What Makes a Film Successful in China?

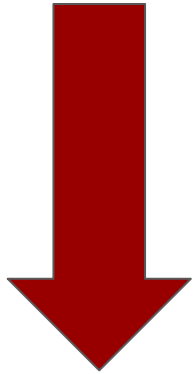
- Genre?
- Chinese production?
- International production?
- Domestic (Chinese) only release?
- US box office success?
- Film runtime?
- Time of year released?

Used in Model



- USA gross revenue
- Released only in China
- Chinese production
- Runtime
- Release Period
- Release Month
- Genres:
  - Action
  - Adventure
  - Animation
  - Comedy
  - Crime
  - Documentary
  - Drama
  - Fantasy
  - Romance
  - Thriller
  - War

Low or No Importance (not used)



- Genres:
  - Biography
  - Family
  - History
  - Horror
  - Musical/Music
  - Mystery
  - Sci-Fi
  - Sport
  - Western

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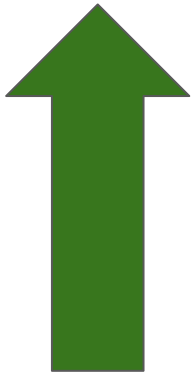

Target

- Chinese gross revenue

Low or No Importance (not used)

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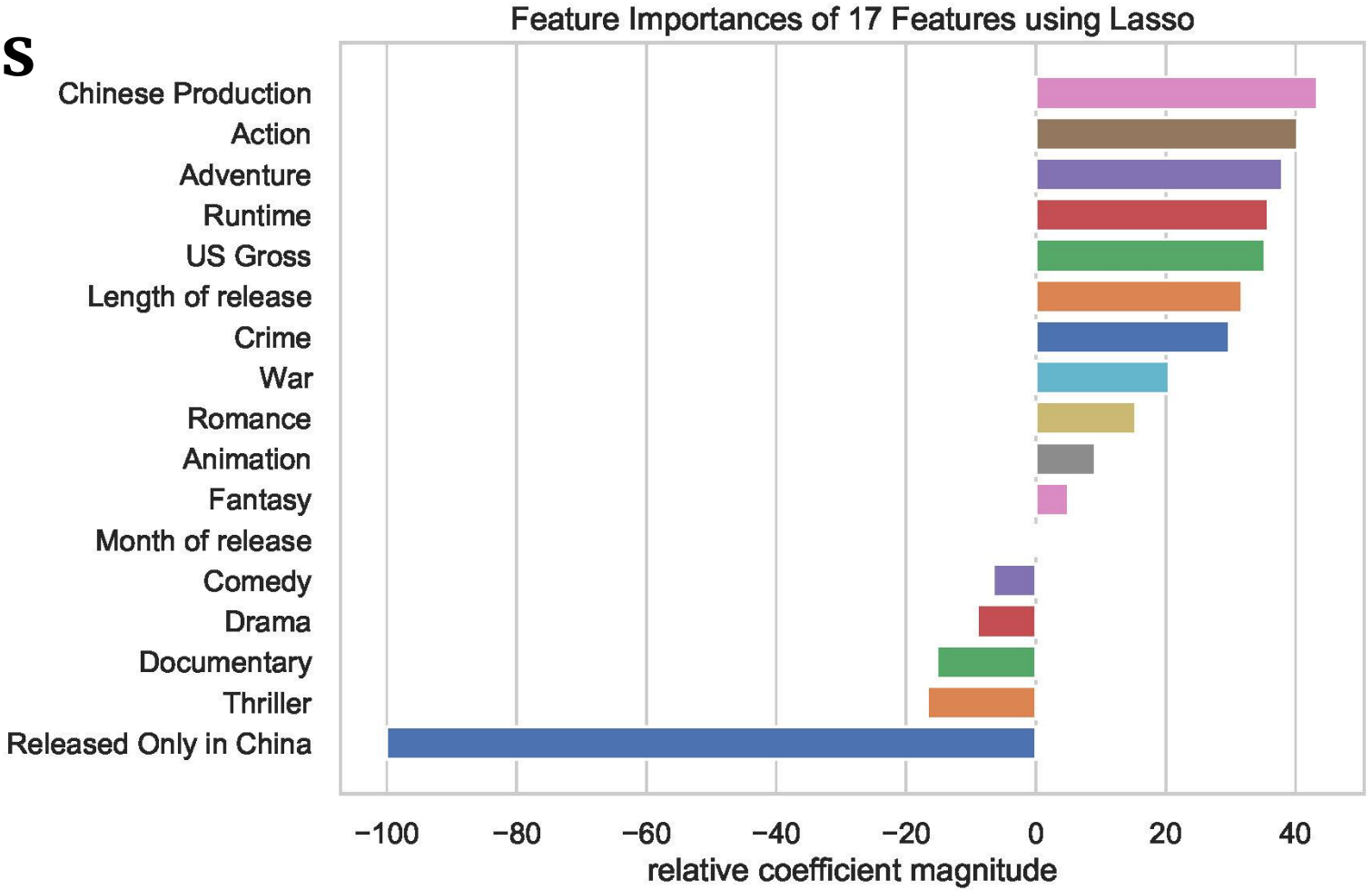
Results


Feature Importances of 17 Features using Lasso
Chinese Production
Action
Adventure
Runtime
US Gross
Length of release
Crime
War
Romance
Animation
Fantasy
Month of release
Comedy
Drama
Documentary
Thriller
Released Only in China
−100
−80
−60
−40
−20
0
20
40
relative coefficient magnitude

Conclusions

- Paradox:
  - Release only in China is strongest (negative) feature

Conclusions

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  - Chinese production next strongest (positive) feature

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- Best performing genres:
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Conclusions

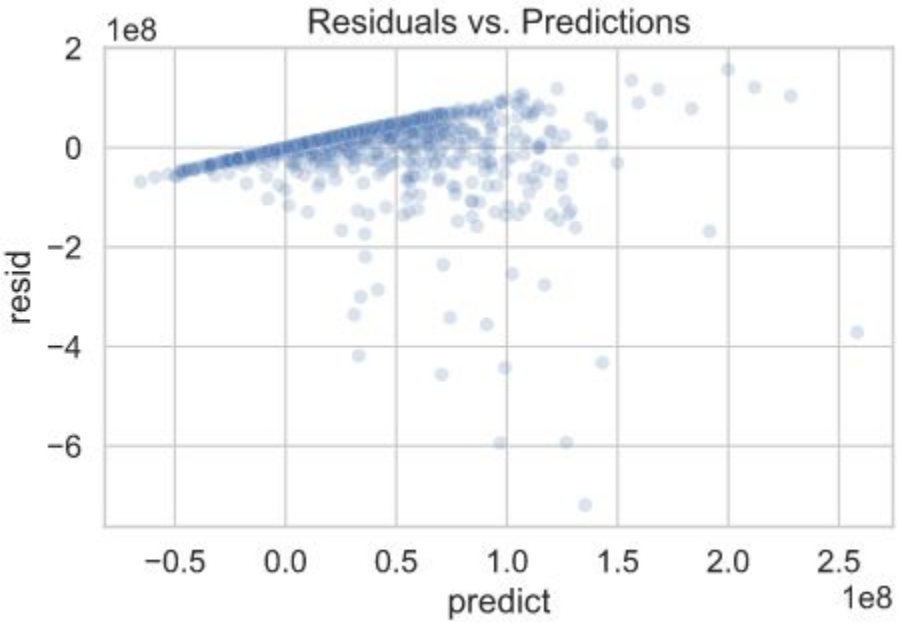
- Paradox:
  - Release only in China is strongest (negative) feature
  - Chinese production next strongest (positive) feature
- Best performing genres:
  - Action, Adventure, Crime
- Worst performing genres:
  - Documentary, Drama, Thriller

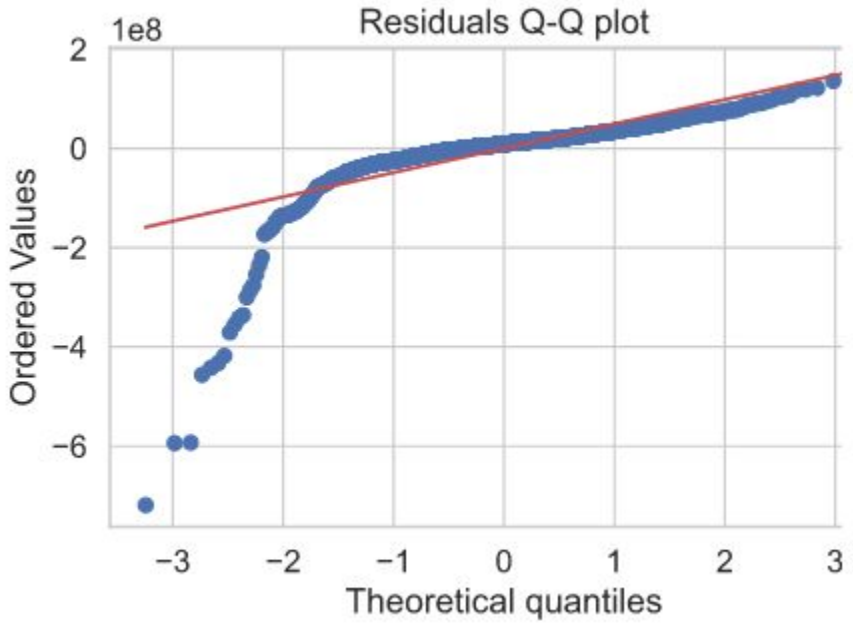
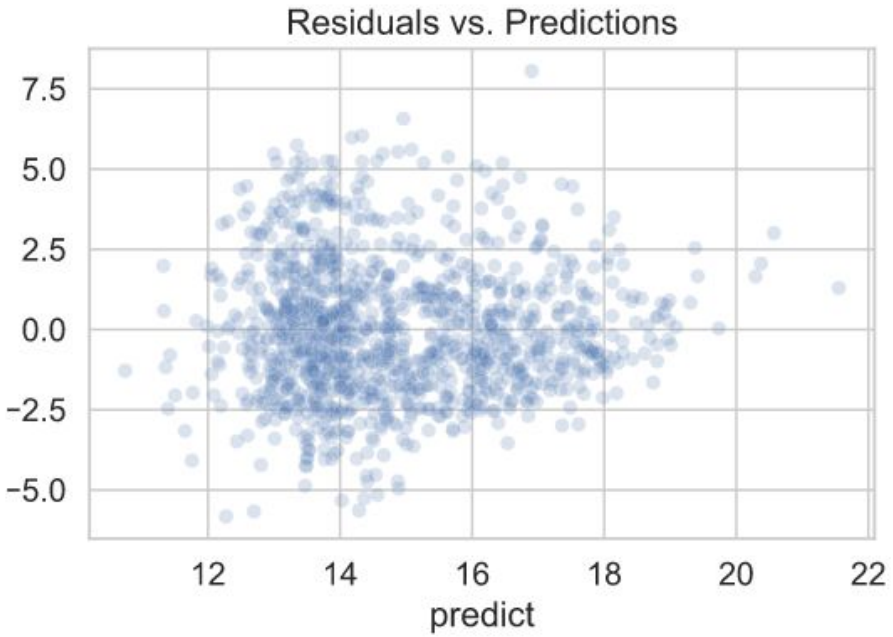
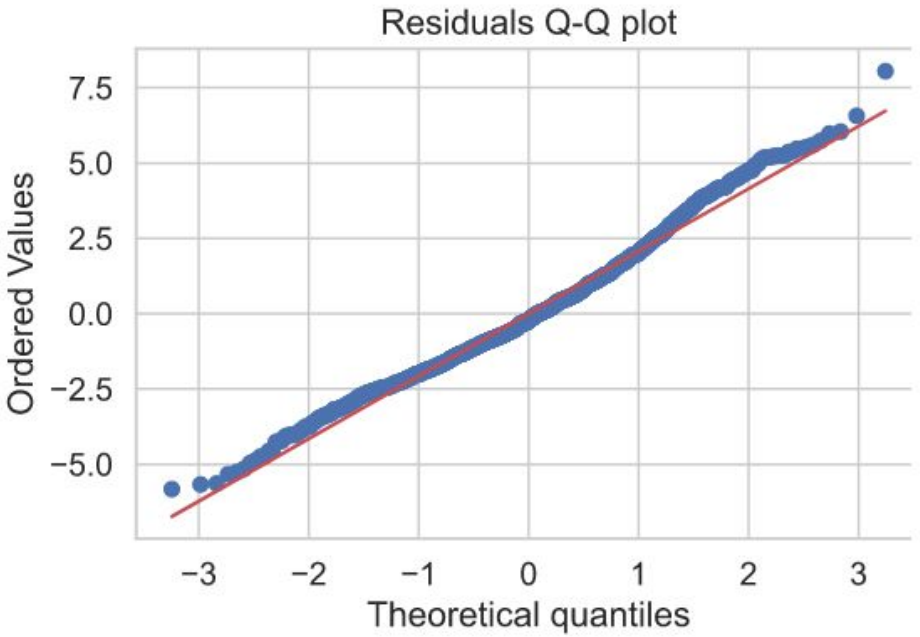
Future Work

- More and better data
  - Ideally using Chinese sources
- Investigate performance of Chinese films in international market

Thank You!

Appendix - Residuals: original target





Appendix - Residuals: log transformed target