

I'll Have What She's Having: Network Formation and Social Spillovers on Film Consumption on Letterboxd.com

Johnny Ma

University of Chicago

May 2, 2018

- 1 Introduction
 - Motivation
- 2 Literature and Theory
 - Papers
- 3 Data
 - Letterboxd.com
 - Site
 - Users
 - Summary Statistics
- 4 Results
 - Box Office
 - Letterboxd.com
 - Final Result
- 5 Future Plans

Questions

- Why do we watch what we watch?
- Do we base film consumption decisions on friend recommendations (social information) ?
- Do we watch movies simply because they are popular, and we want to be a part of the conversation (social utility) ?

Motivation

Main Question

Do film consumption decisions during a box office run depend on social information or social utility?

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Main Question

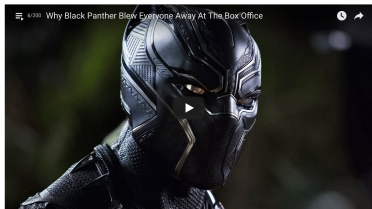
How can I convince my friends to watch a movie with me?

Why Study Film Consumption?

- Global Entertainment Industry worth billions of dollars and hours.
- Box Office dynamics: Pareto distribution, winner take all. Hype and word of mouth important.
- Numerous different information signals from marketing prior to Week 1, various information signals after.
- Who doesn't watch movies?

Black Panther and Avengers

Why Black Panther blew everyone away at the box office



Julia Bianco @jewstbianco

Black Panther doubled [initial box office tracking numbers](#) in its opening weekend, smashing early \$100 to \$120 million projections with a record-breaking [\\$235 million](#) four-day total. This is good for the second biggest Marvel opening weekend and the fifth biggest domestic opening weekend of all time. These numbers are even more impressive when you consider the fact that *Black Panther* opened in February, which is typically one of the slowest box office months of the year.

How did *Black Panther* manage to crush expectations and take over the cultural consciousness? While every Marvel movie can be expected to be a commercial juggernaut, *Black*

'Avengers: Infinity War' Opens with Record Shattering \$250M Domestically & \$630M Worldwide

by Brad Brevet
April 29, 2018

Audiences assembled worldwide as Disney and Marvel's **Avengers: Infinity War** broke both the [domestic opening weekend box office record](#) and worldwide opening record with a massive \$250 million domestically and \$630 million worldwide. In its wake, the majority of films on the weekend box office chart fell dramatically, though fellow [Marvel Cinematic Universe](#) release **Black Panther** improved its position from eighth place last weekend to a spot in this weekend's top five, truly making this a *Marvel-ous* weekend.

Infinity War's opening weekend bests the previous record of \$247.9 million set by **Star Wars: The Force Awakens** back in December 2015 by just over \$2 million, but it's also worth mentioning Disney under-estimated **Black Panther's** \$202 million opening by nearly \$10 million on Sunday. The studio also under-estimated **The Avengers's** performance by \$7 million and under-estimated **Avengers: Age of Ultron** by \$3.6 million. As such, don't be surprised to see **Infinity War's** debut blossom come actuals on Monday afternoon. At this moment, the film accounts for 84.4% of the domestic top twelve, second only to **Ultron's** 84.5% market share.

GET MORE: [Compare Infinity War's opening weekend to fellow \\$200M+ openers!](#)

Additional domestic records of note include the largest single Saturday gross, largest single Sunday gross, largest April opening, largest Spring opening, widest PG-13 release and fastest film to \$150, \$200 and \$250 million.

Internationally, **Infinity War** delivered a monstrous \$380 million from approximately 72% of the international marketplace. The debut is the [second largest](#) to **Fate of the Furious** though its important to note that film had the benefit of China grosses over its opening weekend, which represented \$185 million (41.7%) of its \$443 million international debut. Altogether, **Infinity War's** global debut reached \$630 million, shattering the previous record of \$541.9 million set by **Fate of the Furious** and doing so without China, where the film will open on May 11.

Empirical Literature

- Becker (1991) first hypothesizes that "the pleasure from some goods is greater when many people want to consume it."
- Gilchrist (2016) use weather shocks to identify early viewership orthogonal to quality. Finds social utility effect.
- Conley and Udry (2010) use Pineapple farmers in Ghana to model social learning in networks using "surprise."
- Einav, DellaVigna, etc. provide some empirical background for regressions on movies.
- Bursztyn et al. (2014) run a great experiment identifying social learning versus social utility in finance assets.

Moretti (2011)

Moretti (2011) sets up a model of "expected appeal" and information from peers and tests using aggregate sale data.

- Sign of realization over expected quality diverges sales.
- Some notion of priors, some notion of type of shock.
- Positive shocks are strong for those in large social networks.
- Can estimate some social multiplier.

Overall an interesting model. We will borrow the idea of "surprise" and microfit the model. Not sure how reliable aggregate sales data can ever be.

Moretti Model

$$U_{ij} = \alpha_j^* + CV_j + \epsilon_{ij}$$

$$\alpha_j^* \sim N(X_j' \beta, \frac{1}{m_j}), \quad CV_j \sim N(f(X_j' \beta), \frac{1}{d_j}), \quad \epsilon_{ij} \sim N(0, \frac{1}{k_j})$$

$$P_1 = Pr(\mathbb{E}_1[U_{ij1}|X_j' \beta]) = Pr(\omega_j X_j' \beta + (1 - \omega_j) f(X_j' \beta) > q_{i1})$$

With S_{ijt} quality signals from f peers in i 's network k and RES_{jt} shocks for each film:

$$P_t = Pr(\mathbb{E}_t[U_{ijt}|X_j' \beta]) = Pr(\omega_{j1t} X_j' \beta + \omega_{j2t} f(X_j' \beta) + \sum_{f \in k} \omega_{j3f} S_{ijf} + \omega_{j4t} RES_{jt} > q_{it})$$

The idea is Bayesian priors prompt viewing during OW, self-selected crowd. The only difference between OW and 2nd week is updated information from Friend Reviews (social information) and Unanticipated Popularity (social utility).

Empirical Predictions

- 1 In the presence of strong social utility, stronger (weaker) than expected OW demand increases (decreases) probability of watching.
- 2 In the presence of strong social learning, high (low) share of OW above average reviews increases (decreases) probability of watching.

Social Model of Film Consumption

$$Pr(Watch_{ij})_{t+1} = \alpha_i + \beta_1 * s(\text{friend})_{k,t} + \beta_2 * (\text{residual})_{j,t=1} \\ + \beta_3 * \text{user}_i + \beta_4 * Z_j + \epsilon_{ijt}$$

j films, i individuals. Each i individual is in a network of k 'friends'. With user fixed effects and some film controls.

$s(\text{friend}) \in [0, 1]$ is the share of friends in your private network that liked the film above the film's average. This is "private information" connected by taste, the social information.

$(\text{residual}) \in [0, 1]$ is the residual from regression of number of screen on opening gross. This is the week 1 "surprise" defined in Moretti. This is the aggregate shock, the unexpected difference in attendance, the channel of unexpected social utility.

Empirical Contributions

- Using both box office returns and **panel-level viewing behavior** instead of aggregates.
- Using data from social media platform, the future of human interaction.
- Can decompose heterogenous user-network information and aggregate demand shock.

What Is Letterboxd.com?

- Founded in 2011 as a "social network for sharing your taste in film."
- Growing community of film-fanatics ranging from CEO of Indiewire to Professional Bloggers to college students
- Typically used as a movie diary, but social aspects are heavily incorporated.
- Amazing panel-data to scrape, almost every action is recorded.

BROWSE BY YEAR ▾ GENRE ▾ POPULAR ▾ RATING ▾ SERVICE ▾ OTHER ▾

FIND A FILM

POPULAR FILMS THIS WEEK

MORE



👁️ 50k 🗳️ 20k ❤️ 21k



👁️ 51k 🗳️ 13k ❤️ 19k



👁️ 117k 🗳️ 33k ❤️ 41k



👁️ 104k 🗳️ 31k ❤️ 40k

JUST REVIEWED...

165,020,672 films watched



POPULAR REVIEWS THIS WEEK

MORE

CREW PICKS



Avengers: Infinity War 2018

👁️ 1.1k 🗳️ 1.1k ❤️ 1.1k



LATEST NEWS

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Coming of Age

We caught up with Greta Gerwig, Luca Guadagnino and Todd Haynes at the 55th New York Film Festival to ask them about their childhood movie influences.

[READ MORE](#)

POPULAR REVIEWS WITH FRIENDS

MORE



Mr. DuLac

Thor: Ragnarok 2017

★★★★★ 2

What are you, Thor, god of hammers?

-Odin

It took *Taika Waititi* to have *Thor* go full *Banzai*. In 2013 when I watched *Thor: The Dark World* I said that the comic book was like the *Buckaroo Banzai* of the *Marvel Universe* and then in 2015 I wrote that *Thor* was "*The Flash Gordon of the Marvel Cinematic Universe*". Wish I wouldn't have said either, because now I have nowhere to go with *Thor: Ragnarok* because now THIS really is... [more](#)

Like review 16 likes



Grimbo

Murder on the Orient Express

2017

★★★★★ 1

It's this years *Girl on the Train*. A book based movie that I really shouldn't have liked!

And I'm not going to lie to look cool in the playground today cos I enjoyed it!

Even though my Dad and brother spoiled it on Sunday, I still enjoyed guessing who would be killed instead of who killed them.

And Johnny Depp was good!

Like review 7 likes



Tay

Call Me by Your Name 2017

★★★★★ 27



Matt Singer

I Love You, Daddy 2017

13

**Johnny** PRO

Chicago

EDIT PROFILE

289

Films

15

This year

1

List

31

Following

14

Followers

Profile

Activity

Films

Diary

Watchlist

Lists

Likes

Tags

Network

Stats

Invitations



FAVORITE FILMS



BIO

A UChicago undergrad studying Economics and Art History.

STATS FOR 2018 ▾

WATCHLIST

88



RECENT ACTIVITY

ALL



★★★★



★★★★½



★★★ ≡



★★★★ ≡

DIARY

119



- 27 Avengers: Infinity War
- 21 You Were Never Really Here
- 14 A Quiet Place
- 5 It Follows
- 1 Holy Motors

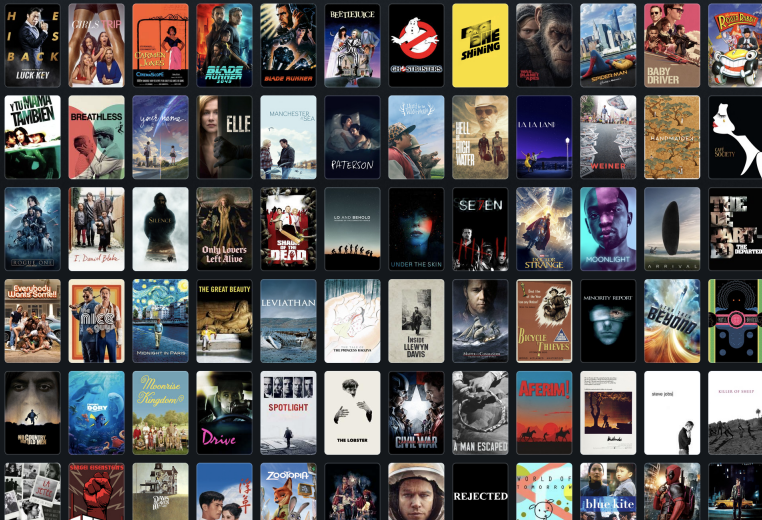


- 31 Kong: Skull Island
- 30 Blue Is the Warmest Color
- 29 The Maltese Falcon
- 3 Get Out
- 1 Dunkirk

RECENT REVIEWS

MORE







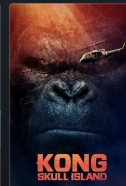
★★★★ Apr 30



★★★★½ Apr 21



★★★ Apr 15



★★★★ Apr 10



★★★★½ Apr 10



★★★★★ Apr 10



★★★★ Apr 10



★★★★½ Apr 10



★★★★½ Apr 07



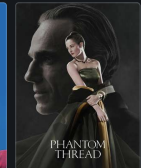
★★★★½ Mar 06



★★★★ Mar 06



★★★★★ Feb 21





Johnny PRO

Profile

Activity

Films

Diary

Watchlist

Lists

Likes

Tags

Network

Stats



WATCHED

DIARY

REVIEWS

RATINGS

RATING ▾

YEAR ▾

DECADE ▾

GENRE ▾

SERVICE ▾

Sort by WATCHED DATE ▾



MONTH

DAY

FILM

RELEASED

RATING

LIKE

REWATCH

REVIEW

EDIT



27



Avengers: Infinity War

2018

★★★★★



21



You Were Never Really Here

2017

★★★★★



14



A Quiet Place

2018

★★★★★



05



It Follows

2014

★★★★★



01



Holy Motors

2012

★★★★★



31



Kong: Skull Island

2017

★★★★★



30



Blue Is the Warmest Color

2013

★★★★★



29



The Maltese Falcon

1941

★★★★★



03



Get Out

2017

★★★★★



01



Dunkirk

2017

★★★★★



JAN
2018

26

**Icarus**

2017



26

**Heathers**

1988



19

**Call Me by Your Name**

2017



19

**Phantom Thread**

2017



13

**I, Tonya**

2017



DEC
2017

28

**Darkest Hour**

2017



27

**The Shape of Water**

2017



17

**Star Wars: The Last Jedi**

2017



NOV
2017

22

**Lady Bird**

2017



OCT
2017

27

**The Shining**

1980



14

**Blade Runner 2049**

2017



JUL

06

**Spider-Man: Homecoming**

2017





81k 19k 23k

WATCH

Play trailer

Amazon US RENT BUY

iTunes US RENT BUY

MORE SERVICES

GoWatchIt

Casablanca

 1942 Directed by Michael Curtiz

THEY HAD A DATE WITH FATE IN CASABLANCA!

In Casablanca, Morocco in December 1941, a cynical American expatriate meets a former lover, with unforeseen complications.

CAST CREW DETAILS GENRES

Humphrey Bogart Ingrid Bergman Paul Henreid

Claude Rains Conrad Veidt Sydney Greenstreet Peter Lorre

S.Z. Sakall Madeleine Lebeau Dooley Wilson Joy Page

John Qualen Leonid Kinskey Curt Bois Enrique Acosta

Ed Agresti Louis V. Arco Frank Arnold Leon Belasco

Nino Bellini Oliver Blake Monte Blue Eugene Borden

Dick Botiller Maurice Brierre Sebastian Cabot

Anita Camargo George M. Carleton Spencer Chan

Show All...

102 mins More details at [IMDB](#) [TMDB](#)



Watch



Like



Watchlist

Rate



Review or log

Add to a list

Share

RATINGS

1.7K FANS



ACTIVITY FROM FRIENDS

19 WATCHED • 2 WANT TO WATCH



★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★

REVIEWS FROM FRIENDS

MORE



Review by **Mr. DuLac** ★★★★★ 2

Here's looking at you kid.

-Rick



👁️ 20k 🗺️ 4.7k ❤️ 2.6k

WATCH

▶️ Play trailer

🍷 Amazon US RENT BUY

🍏 iTunes US RENT BUY

MORE SERVICES

🕒 GoWatchit

POPULAR REVIEWS

MORE



Review by **ellie** ★★★★★

i would let 90's ralph fiennes carry my dead body through the desert

♥️ Like review 57 likes



Review by **PTA** ★★★★★ 8

The more that I watch this film, the more it creeps up my top 100 film's of all time list. This film is an overlooked gem nowadays, even though it won a lot of awards back in 96.

An undeniable masterpiece and it almost puts every other film ever made to shame. Seriously give it another try if you don't believe me and if you have watched it more than once and you still aren't a fan then what can I say.

The direction and storytelling are impeccable and the cast all around are outstanding! Especially Juliette Binoche! And Ralph Fiennes, Kristin Scott Thomas, Willem Dafoe, Naveen Andrews (brilliant) and Colin Firth and freaking amazing.

Yep, I like this movie just as much as Taxi Driver, 2001 A Space Odyssey, Magnolia and Pulp Fiction...rounding out my top 5 film's.

♥️ Like review 43 likes



Review by **Naughty aka Juli Norwood** ★★★★★ 3

A sweeping epic tale of an ill fated love that transcends distance, time and even death! I found the slow reveal thru a series of flashbacks to be deliriously intoxicating!

Extraordinary performances by one and all! However I felt Ralph Fiennes and Juliette Binoche performances were beyond exceptional!

The visuals were absolutely breathtaking!

♥️ Like review 39 likes



👁️ 50k 🎬 20k ❤️ 21k

WATCH

▶️ Play trailer

📄 Amazon US

MORE SERVICES GoWatchIt

Avengers: Infinity War

2018 Directed by Joe Russo, Anthony Russo

AN ENTIRE UNIVERSE. ONCE AND FOR ALL.

As the Avengers and their allies have continued to protect the world from threats too large for any one hero to handle, a new danger has emerged from the cosmic shadows: Thanos. A despot of intergalactic infamy, his goal is to collect all six Infinity Stones, artifacts of unimaginable power, and use them to inflict his twisted will on all of reality. Everything the Avengers have fought for has led up to this moment – the fate of Earth and existence ...more

CAST CREW DETAILS GENRES

Action Adventure Science Fiction Fantasy

149 mins More details at [IMDB](#) [TMDB](#) [P](#)

ACTIVITY FROM FRIENDS

16 WATCHED



REVIEWS FROM FRIENDS

MORE



Review by [daVIDEhrlich](#) ★★ 🗨️ 153

and in the end it turns out the Marvel Cinematic Universe was just the story of Tony Stark trying to figure out faster and faster ways of getting dressed. a noble goal, to be fair, but still.



Logged



Like



Watchlist

Rated



Add a review

Log again

Add to a list

Share

RATINGS

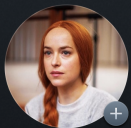
488 FANS



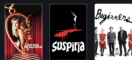
Film lovers, critics and friends — find popular contributors here.

POPULAR THIS WEEK

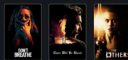
MORE

**jose**

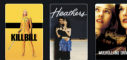
1.4k films 979 reviews

**Lucy**

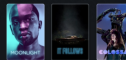
1.7k films 747 reviews

**brat pitt**

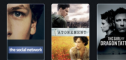
1.5k films 833 reviews

**Katie**

1.5k films 832 reviews

**adrianbalboa**

918 films 655 reviews

**davidehrlich**

1,267 reviews

👁️ 1,531

📺 29

❤️ 65

**SilentDawn**

1,325 reviews

👁️ 2,618

📺 96

❤️ 20,769

**Demi Adejuyigbe**

334 reviews

👁️ 947

📺 6

❤️ 789

**kirst**

48 reviews

👁️ 552

📺 4

❤️ 1,682

**andrea**

250 reviews

👁️ 599

📺 9

❤️ 9,267

**MasterLundegaard**

253 reviews

👁️ 562

📺 32

❤️ 2,425

**Jacko**

👁️ 952

📺 13

❤️ 3,536



YOU FOLLOW

31



FOLLOWING YOU

14



FIND FRIENDS

**Connect Twitter account**

Connect your Twitter account and we'll find your Twitter friends on Letterboxd. We will never tweet on your behalf.

**Find your Facebook friends**



Jonathan Paula

PATRON

Rockingham, NH Jogwheel.com JonPaula

FOLLOWING



2,699

Films

413

This year

47

Lists

604

Following

834

Followers

Profile

Activity

Films

Diary

Watchlist

Lists

Likes

Tags

Network

Stats



FAVORITE FILMS



BIO

I'm a quixotic 31 year old who makes YouTube videos (including movie reviews!) for a living - you might know me as the creator of "Is It A Good Idea To Microwave This?". Lover of movies, music (especially, Bruce Springsteen), traveling, the NFL, and my wife, Becka. I graduated from... [more](#)

STATS FOR 2017 ▾

RECENT ACTIVITY

ALL



★★★★

★★★★

★★★★★

★★½

WATCHLIST

136



DIARY

3,004



- 15 Doctor Zhivago
- 14 The Sound of Music
- 13 The Hitman's Bodyguard
- 12 Girls Trip
- 12 The Curse of Frankenstein
- 11 Pirates of the Caribbean: The Curse of the Black Pearl

RECENT REVIEWS

MORE



bel PATRON

ryngoslng

FOLLOW

584

Films

141

This year

14

Lists

327

Following

1,406

Followers

Profile

Activity

Films

Diary

Watchlist

Lists

Likes

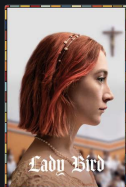
Tags

Network

Stats



FAVORITE FILMS



BIO



addicted to visually pleasing shots and a good soundtrack
favourite movies list
favourites: my absolute favourites EVER!!!

STATS FOR 2018

RECENT ACTIVITY

ALL



★★★



★★★★



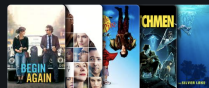
★★★★



★★★★★

WATCHLIST

96



DIARY

437

- 30 APR Avengers: Age of Ultron
- 29 The Town
- 28 Patriots Day
- 27 Guardians of the Galaxy
- 26 Avengers: Infinity War
- 25 La La Land
- 25 The Avengers

PINNED REVIEWS

MORE





Chris Haydon

📍 Kent 📧 filmoria.co.uk 🐦 Haydonsmovies

FOLLOWING

4,505

Films

216

This year

58

Lists

269

Following

424

Followers

Profile

Activity

Films

Diary

Watchlist

Lists

Likes

Tags

Network



FAVORITE FILMS



BIO

Sub-Editor, **Filmoria**

Cinephile with BA (Hons) degree in Film Studies

Adores Michael Haneke, Woody Allen, French Film, Pixar Animation Studios, American Indie, and Period Drama

Dwayne Johnson's No.1 fan

RECENT ACTIVITY

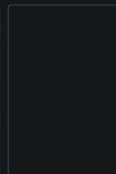
ALL



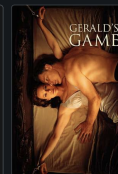
★★★



★★★★★



★★★



★★★

WATCHLIST

104



DIARY

2,175

- NOV 11 Paddington 2
- 9 Murder on the Orient Express

- OCT 7 Blade Runner 2049
- 4 Gerald's Game

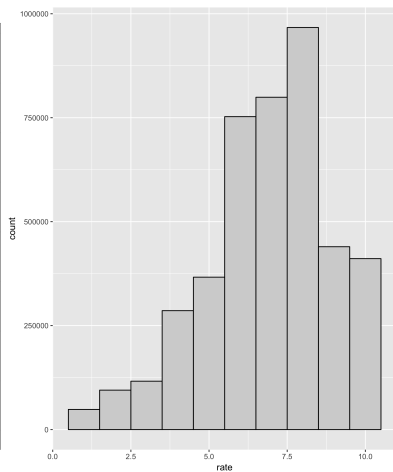
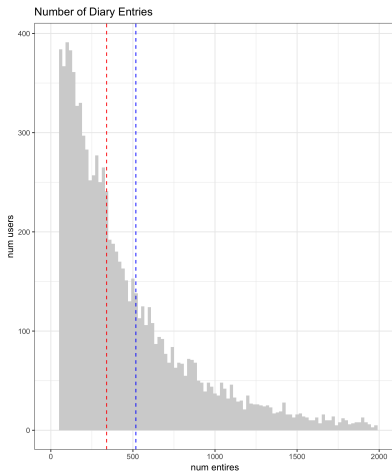
- SEP 17 Victoria & Abdul
- 16 mother!

RECENT REVIEWS

MORE

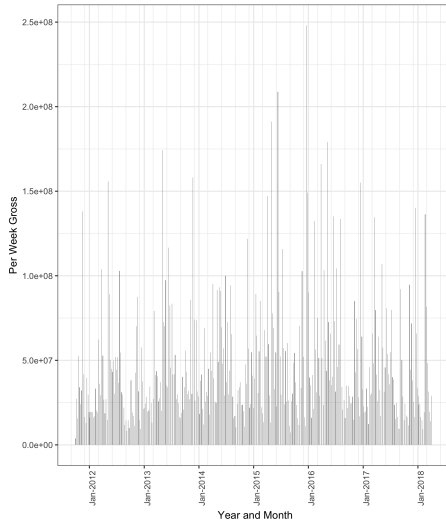
What Data I Have

- 9,000 users scraped from letterboxd.com with ≥ 50 diary entries. 1080 films from 2011-2018.
 - User time-stamped diary entries, user information, etc.
 - Average film rating, number watched, etc.
- Box Office data scraped from BoxOfficeMojo.com, industry standard.
 - Daily gross, cumulative gross, days in run, number of theaters showing, etc.
 - String matching between sites, end up with 212 films with "Opening Weekend" behavior.





Box Office Per Week Gross



Social Model of Film Consumption

$$Pr(Watch_{ij})_{t+1} = \alpha_i + \beta_1 * s(friend)_{k,t} + \beta_2 * (residual)_{j,t=1} \\ + \beta_3 * user_i + \beta_4 * Z_j + \epsilon_{ijt}$$

j films, i individuals. Each i individual is in a network of k 'friends'. With user fixed effects and some film controls.

$s(friend) \in [0, 1]$ is the share of friends in your private network that liked the film above the film's average. This is "private information" connected by taste, the social information.

$(residual) \in [0, 1]$ is the residual from regression of number of screen on opening gross. This is the week 1 "surprise" defined in Moretti. This is the aggregate shock, the unexpected difference in attendance, the channel of unexpected social utility.

Aggregate Film "Surprise" Residuals

Table: RES term calculation from OW

<i>Moretti Res Regression:</i>	
OW Total Gross	
Theaters Opening	1.278*** (0.039)
Observations	956
R ²	0.841
Adjusted R ²	0.816
Residual Std. Error	0.654 (df = 824)

Note:

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

269	The Jungle Book	0.914122990855952
152	Teenage Mutant Ninja Turtles	0.921263934579721
38	Think Like a Man	0.935865289576509
173	The Hunger Games: Mockingja...	0.944826832288224
222	Straight Outta Compton	0.98159730000955
326	The Fate of the Furious	1.01747763171513
265	Batman v Superman: Dawn of ...	1.18129007390399
61	Arbitrage	1.18537827982556
208	Jurassic World	1.29852549088655
76	The Hobbit: An Unexpected J...	1.36178034988977
251	Deadpool	1.40606940493808
4	Margin Call	1.43952481889234
367	Black Panther	1.80489706655424

'Deadpool's \$152.2M Opening: Why The Town Didn't See It Coming Until It Happened – Final



by Anthony D'Alessandro

February 15, 2016 9:22am



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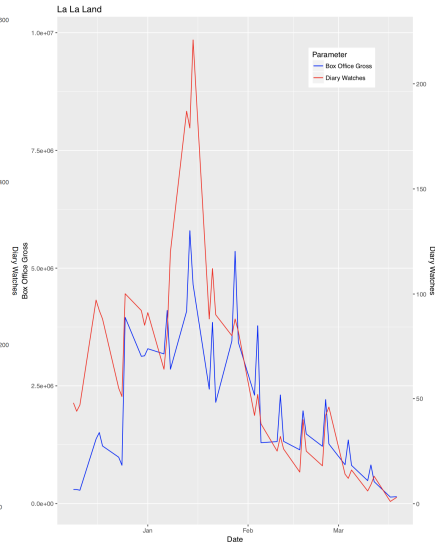
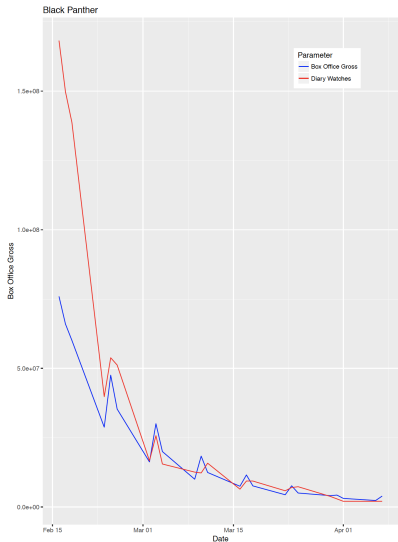
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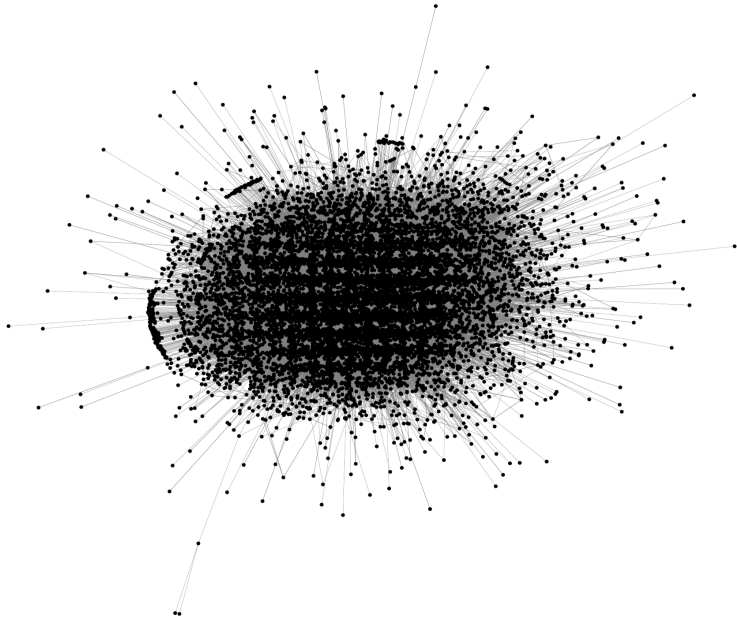


20th Century Fox

- ▶ BOX OFFICE
- ▶ BREAKING NEWS
- ▶ 20TH CENTURY FOX
- ▶ DEADPOOL
- ▶ FANDANGO

8TH WRITETHRU, Tuesday update, charts updated: The 3-day revise on *Deadpool* is now **\$132.4M** with 4-day finally clocking **\$152.2M** for the Presidents' Day holiday. Global debut: **\$284.5M** all in. Countless records were broken here. As we saw all along, *Deadpool* easily flogged *Fifty Shades of Grey's* opening figures from last year (\$85.1M FSS, \$93M FSSM). But, *Deadpool* was also the biggest opening ever for an R-rated movie on a 3-day basis beating *Matrix Reloaded's* \$91.8M, but it also tore apart *Hangover 2's* four-day take of \$117.6M. For Fox executives, *Deadpool* is the biggest opening they've ever seen, surpassing *Star Wars: Episode III: Revenge of the Sith* (FSS \$108.4M). In addition, the studio already has \$100M+ grossing 2016 releases under its belt along with *The Revenant* and DreamWorks Animation's *Kung Fu Panda 3*, and February isn't even over yet.





Network Formation on Taste Correlation

Table: Model of Network Formation based on Taste

	<i>Is Friend Binary:</i>
	linked
Cosine Similarity of Taste Vector	0.541 *** (0.0058)
Observations	159913
<i>Note:</i>	* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Regression Results

Table: Social Model of Film Consumption

	<i>Probit Model:</i>			
	Probability of Watching After OW			
	(1)	(2)	(3)	(4)
share of friends above average	0.0138*** (0.0011)		0.0146*** (0.0011)	0.0073*** (0.0004)
residual box office surprise		0.1240 *** (0.0024)	0.1243 *** (0.0024)	0.1143 *** (0.0024)
movie quality				0.0368 *** (0.0004)
Fixed effects?	User	User	User	User
Observations	359983	359983	359983	359983
R ²	0.1516	0.1575	0.1579	0.1721
Residual Std. Error	0.270 (df = 352071)	0.272 (df = 352071)	0.272 (df = 352070)	0.2705 (df = 352069)

Note:

*p<0.1; **p<0.05; ***p<0.01

Motivation

Main Question

Do film consumption decisions during a box office run depend on social information or social utility?

Main Question

How can I convince my friends to watch a movie with me?

Future Plans

- 1 Identity the models using exogenous shocks or IV strategy.
- 2 Test user level heterogeneity and its effect on importance of the social channels.
 - Include "favorites" and watchlist constraint.
 - Do more "snotty" film people react negatively to popularity?
- 3 Examine (theoretically or empirically) the effect of an information shock.
- 4 Get a better understanding of friend network formation using network analysis of polarization.
- 5 Build a stronger collaborative filter using user-film-social information.

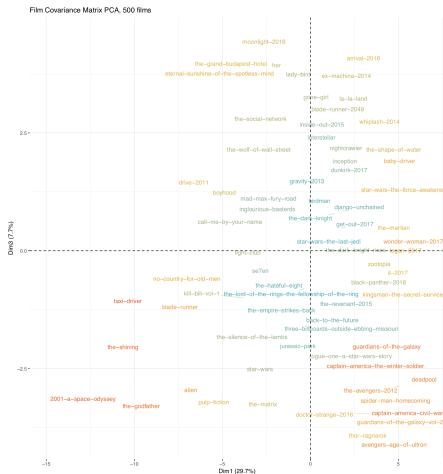
Acknowledgements

Thanks to Professor Bursztyn, Professor Manresa, Professor DellaVigna, Professor Goldberg, and Professor Kamenica. Thanks to Professor Lima and Professor Kotaro for helpful advice.

Thanks to my movie night friends! Special thanks to Paul Beckman, William Jones, Thomas Yu, Richard Liu, Angela Sun, and Lindsey Currier.

Thanks to Letterboxd.com for being nice and not banning my IP. It's an amazing platform and I highly suggest checking it out!

Thanks to you, for listening and being interested!







I miss the old kanye
@dale_fromcali

WHEN YOU LET IN TOO MANY APPLICANTS ONE YEAR AND HAVE TO LET IN HALF AS MANY THE NEX'

When I start a job vs when I've been working there for a couple of weeks



Regression Results

Table:

<i>Favorites on Rating:</i>	
	ratings_vec
fav1_d	0.987*** (0.062)
fav2_d	0.856*** (0.063)
fav3_d	0.731*** (0.065)
fav4_d	0.906*** (0.061)

Regression Results

Table:

<i>Favorites on Rating, Scrambled:</i>	
	ratings_vec
fav1_d	−0.054** (0.028)
fav2_d	−0.002 (0.027)
fav3_d	−0.039 (0.027)
fav4_d	−0.043 (0.028)