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The Rise of a Confident Hollywood: Risk and the Capitalization of Cinema

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Nature ceased to be inscrutable, subject to demonic incursions from another world: the very essence of Nature, as freshly conceived by the new scientists, was that its sequences were orderly and therefore predictable: even the path of a comet could be charted through the sky. It was on the model of this external physical order that men began systematically to reorganize their minds and their practical activities: this carried further, *and into every department*, the precepts and practices empirically fostered by bourgeois finance. Like Emerson, men felt that the universe itself was fulfilled and justified, when ships came and went with the regularity of heavenly bodies.

- Lewis Mumford, *Technics and Civilization*

The Rise of a Confident Hollywood: Risk and the Capitalization of Cinema

The Hollywood film business, like any other business enterprise, operates according to the logic of capitalization. Capitalization in an instrumental logic that is forward-looking in its orientation. Capitalization expresses the present value of an expected stream of *future* earnings. And since the earnings of the Hollywood film business depend on cinema and mass culture in general, we can say that the current fortunes of the Hollywood film business hinge on the *future* of cinema and mass culture. The major filmed entertainment firms of Hollywood discount expected future earnings to present prices according to their perception of the social-historical trajectory of pleasure.

Included in the capitalization formula is a risk coefficient (δ). This coefficient denotes a degree of confidence capitalists have in their earnings predictions. This relationship between expected earnings and risk is visible when we write the capitalization equation in a simplified form.¹ Capitalization at any given time (K_t) is equal to the discounted value of expected future earnings (EE). Expected future earnings are discounted by the product of two variables: a rate of return that

¹ For the purposes of the paper, I am temporarily ignoring *hype* (H), which is also in the numerator of the capitalization equation.

capitalists feel they can confidently get (r_c) and the risk coefficient (δ). Put all of these pieces together and you have the following equation:

$$K_t = \frac{EE}{r_c \times \delta}$$

Risk is an important variable in the capitalization of cinema. From the perspective of investment, the future shape of cinema cannot be so uncertain that capitalists are unable to estimate, with even a modicum of confidence, how the earnings of a possible film project will rank in the order of cinema. For capitalists to invest, the risk coefficient has to be finite, which in turn means that, however uncertain, capitalists expect the future of cinema to be bounded. Conversely, confidence in the capitalization of cinema can increase if risk perceptions about the volatility of a film's earnings can be decreased. Thus, capitalists are interested in creating a cultural environment where films have financial trajectories like comets in the sky. If the world of cinema can be made to have 'stable' laws of motion, vested interests can depend on this machine-like regularity when it translates the art of cinema into the quantities of capital.²

This paper investigates the historical development of risk in the Hollywood film business. Using *opening theatres* as a proxy for future expectations, the paper demonstrates how, from 1981 to 2011, Hollywood has improved its ability to predict the financial rankings of its films. More specifically, the Hollywood film business has become better at predicting which films will earn a greater-than-average share of all US box-office gross revenues through a wide release strategy. This greater predictability suggests that confidence in film earnings projections has increased.

² These metaphors are taken from Mumford's *Technics and Civilization* (Mumford 2010).

Risk and the Future Order of Cinema

Capitalization is not a crystal ball in which the future is revealed to vested interests. As Nitzan and Bichler emphasize in their description of capitalization, capitalists are no better at predicting the future than anyone else—“like the rest of us, they can never see [the future]” (Nitzan & Bichler 2009, p.187).³ However, capitalization is, by design, concerned with the future of investment; it is a logic that is obsessed with estimating future earnings and whether they will or will not translate into actual earnings. By following the rituals of capitalization, the Hollywood film business is concerned with the *future* of mass culture. Firms in the film business capitalize cinema by discounting expected future earnings to the present according to their perception of the future dynamics of pleasure in society.

Risk is a variable in the capitalization equation. It is an *ex ante* variable in the valuation of an asset and not an *ex post* explanation for why a capitalist ‘deserved’ a particular rate of return.⁴ Risk is a partly subjective factor that shapes the way a claim on future earnings is assessed. If capitalization discounts the size and pattern of a future stream of earnings, risk is the expression of the “*degree of confidence capitalists have in their own predictions*” (Nitzan & Bichler 2009, p.208). Nitzan and Bichler argue that this degree of confidence appears in the capitalization equation as a risk coefficient (δ). A smaller δ indicates a greater the degree of confidence and a larger capitalization, and vice versa when δ is larger. If, for instance, there is growing uncertainty about the size and pattern of a future stream of earnings, δ will increase and the asset in question will be discounted to a lower present price. This outcome can be derived from the capitalization equation, which can be presented once more:

³ For a concise anthropology of capitalization, see (Nitzan & Bichler 2009, pp.147–166).

⁴ Nitzan and Bichler’s concept of risk is different from the neo-classical theory of risk. For their critique of the ‘risk premium’ and its role in the construction of the capital asset pricing model (CAPM), see (Nitzan & Bichler 2009, pp.198–210).

$$K_t = \frac{EE}{r_c \times \delta}$$

How can we understand the role of risk in the capitalization of cinema? One of the ways is to think of how the world of cinema itself, as a composition of films, is an object of risk perceptions. The shape and order of cinema becomes significant for the rituals of capitalization because, in a sense, every film is in a cohort. For every year, a set of films is released and each film in the set acquires a financial ranking by virtue of being capitalized. To explain how this ranking relates to risk perceptions in the Hollywood film business, let me provide some background about the quantitative language of capital and its application in the art of filmmaking.

The application of capitalization to the qualitative world of cinema implies that the qualities of films have become what Herbert Marcuse would call “quantifiable qualities” (Marcuse 1991, p.136). From the perspective of investment, the industrial art of filmmaking and the social world of mass culture are meant to be controlled in the interest of pecuniary gain. The Hollywood film business may or may not have successful strategies of creating an order of cinema through the control of filmmaking—that is yet to be determined—but it must translate the political, cultural and aesthetic qualities of cinema into the quantitative language of capital. Nitzan and Bichler’s argument about the eye of capitalization explains why a film’s many qualities—e.g., its genre, style, story, cast, director, production quality—and its possible resonance with established cultural and political attitudes would all be “integrated into the numerical architecture of capital”: the many dimensions of cinema could impact “the level and pattern of capitalist earnings” (Nitzan & Bichler 2009, p.166).

A film project is translated into the language of capital in its germinal stages, well before the first day of filming. Expectations about future earnings are being

discounted to present prices when scripts are sold while others are ignored, when some projects are properly developed while others sit idle, and when some projects are produced while others never make it out of “development hell.”⁵ As Janet Wasko points out in contrast to popular belief, “Hollywood films do not begin when the camera starts rolling, but involve a somewhat lengthy and complex development and pre-production phase during which an idea is turned into a script and preparations are made for actual production followed by post-production” (Wasko 2008, p.43). A project begins as a film concept, usually in the form of a full script in its first draft. If approved by management, the project then goes into development (which is far from the production stage), usually under the wing of a development executive (Wasko 2008, p.45). In development, the film concept is polished, the script is edited and re-edited, sometimes even rewritten completely, and producers and agents start talking about the film’s possible “players” (main cast and director).

Throughout this process, the capitalization of cinema is concerned with how films will rank in the order of cinema. For one thing, the quantitative language of capital makes every film financially comparable. When a film is given an expected theatrical revenues plateau (e.g., \$10 million, \$50 million, \$200 million), the Hollywood film business is making an estimate about the future popularity of the film (Litman 1998, p.44). And how a specific film is capitalized has something to do with its particular political, cultural and aesthetic qualities. Yet, this financial estimate automatically positions a film among other films. An estimate that a film will, for instance, earn \$100 million in theatrical revenues is meaningful in relation to how other contemporary films are capitalized. An expectation of \$100 million means one thing when, at a given time, \$125 million in box-office revenues is the

⁵ A project is in “development hell” when “a script is in development but never receives production funds” (Wasko 2008, p.53). In his “how-to” book about film financing, Michael Wiese estimates that major filmed entertainment produces one film for every fifty projects remain damned in purgatory (Wiese 1991, p.32).

average expectation for most Hollywood films. It means something else when an estimation of \$100 million puts the particular film ahead of the pack. Depending on how other films are capitalized, capitalists could expect that \$100 million in box-office revenues would make this film one of the top grossing films of its year of release.

Knowing how the expectations of one film relates to the expectations of all other films in the same time period is also significant when there is historical evidence that top ranking films have been able to differentially perform. Predicting that a film will be one of the top grossing films of the year matters when, since the late 1940s, the top one percent of films have increased their share of all box-office revenues per year. Mark Weinstein describes this phenomenon: “In the late 1940s, the top 1 percent of films represented 2 percent to 3 percent of studio revenue; by the early 1960s, this had tripled, to an average of about 6 percent. This trend has continued in recent years. In 1993 the world-wide revenues for the top 1 percent (two films) of 163 major-studio released films were 13.8 percent of the total [revenues]” (Weinstein 2005, p.252).

Moreover, a confident prediction about how a film will rank in the order of cinema is also a strong recommendation about distribution strategy. It is common practice for the Hollywood film business to give wide theatrical releases to what it thinks will be ‘blockbusters’ or ‘must-see events.’ This strategy is also known as saturation booking, in which a film is simultaneously shown on many screens in many theatres (Maltby 2003, p.182). While it is a common one, this wide release strategy is relevant for our analysis of risk because it is *not* a universal strategy. Unlike “platform” releases, which open in a small number of theatres, usually in select cities (New York, Los Angeles, etc.), “wide” releases are designed to begin, from their very first week, in thousands of theatres across America. For example, *Star Wars* opened on nearly 3,000 theater screens in the United States (De Vany 2004, p.48). Furthermore, a wide release is meant to pull in the bulk of its revenues in the

first few weeks of its theatrical release—e.g., the 2001 film *The Mummy Returns* earned 90 percent of its total theatrical revenues in the first five weeks. Conversely, a platform release like *O Brother, Where Art Thou?* took four months to earn 90 percent of its total theatrical revenues.⁶

The History of Risk Perceptions in Hollywood

The remainder of this paper traces the historical development of risk in Hollywood cinema.⁷ My method involves using *opening theatres* as a proxy for future expectations. Opening theatres stands as a proxy for future expectations because the decision about the size of opening theatres is made before a stream of box-office revenues actually begins to flow; decisions about what is a good release strategy for each film derive from financial expectations about what will happen to each film on its opening weekend and onwards. Furthermore, as I established above, the Hollywood film business is concerned with the future pecuniary rank of its films, which relates to the strategy of giving some films, but not all, wide theatrical releases. To be sure, in the end, not every high grossing film is the product of a wide release strategy. A platform release can, over time, become popular and consequently earn a relatively high level of gross revenues. For example, *Schindler's List* opened in 25 theatres and was the ninth highest grossing film of 1993. Yet, behind the fact that some films are, from day one, released in 1500, 2000 or even more theatres, is an assumption about expected revenues. In a sense, major filmed entertainment does not wait for its wide releases to *eventually*

⁶ These two examples, *The Mummy Returns* and *O Brother, Where Art Thou?*, are taken from Maltby's *Hollywood Cinema* (Maltby 2003, pp.200, 204).

⁷ The question of *how* Hollywood has reduced risk is left for a longer paper. A study of how risk is effectively reduced through particular techniques, such as the repetition of genres, sequels and remakes, the cult of movie stars, and the institution of false needs and wants, opens the door to a much larger argument about how one should research the political economy of Hollywood. Much of the academic literature on the risky character of the Hollywood film business, especially the mainstream literature, begins from theoretical presuppositions that are significantly different from the capital-as-power approach (De Vany 2004; Litman 1998; Nelson & Glotfelty 2012; Pokorny 2005).

become popular. A wide release has, in comparison to a platform release, a shorter lifespan because its impact is supposed to be quick but big.

Historical data on opening theatres enables us to approximate the evolution of Hollywood's risk coefficient (δ), which denotes the confidence the Hollywood film business has in its predictions about the future financial performance of cinema. This approach demonstrates that from 1981 to 2011, Hollywood has been able to improve its ability to predict the financial performance of its films. This increased predictability reflects a better understanding of and perhaps a greater ability to shape popular culture. And this greater understanding and ability in turn translates into higher confidence, lower risk perception and higher capitalization.

How can we use opening theatres to approximate the long-term trajectory of Hollywood's risk perceptions? We can use as a means of comparing expected theatrical gross revenues to actual theatrical gross revenues. Take, for example, 1986. To get a sense of Hollywood cinema in 1986, one can go to a website like boxofficemojo.com and reproduce Table 1, which is presented here in abridged format. This table ranks, in descending order, 1986 films in the first column by their domestic box-office gross revenues in the second. In addition, a third column shows the number of opening theatres for each film. Table 1 is interesting for a few reasons. What first stands out is *Platoon*, which opened in six theatres but eventually went on to become the third highest grossing film of 1986. This would be a good example of a highly successful platform release. The second and perhaps more important point is that there is no one-to-one match between revenue rankings and opening theatre rankings. For example, the two top grossing films—*Top Gun* and *Crocodile Dundee*—did not have the two widest releases of that year. Already on this abridged list, we can see five films that had wider releases in 1986.

Film	Box-Office Gross Revenues	Opening Theatres
<i>Top Gun</i>	\$176,786,701	1,028
<i>Crocodile Dundee</i>	\$174,803,506	879
<i>Platoon</i>	\$138,530,565	6
<i>The Karate Kid Part II</i>	\$115,103,979	1,323
<i>Star Trek IV: The Voyage Home</i>	\$109,713,132	1,349
<i>Back to School</i>	\$91,258,000	1,605
<i>Aliens</i>	\$85,160,248	1,437
<i>The Golden Child</i>	\$79,817,937	1,667
...

Table 1 Films Released in 1986: Ranked by Box-Office Gross Revenues

Source: www.boxofficemojo.com for US theatrical gross revenues and opening theatres.

Table 2 offers a different view of the same year. It sorts out all of the films released in 1986 not by box-office revenues, but by opening theatres. Aside from one film, *Back to School*, none of the films in Table 2 appear in Table 1. The films in Table 2 had the widest releases in 1986 but only two of them were able to even reach the \$50 million plateau.

Film	Box-Office Gross Revenues	Opening Theatres
<i>Cobra</i>	\$49,042,224	2,131
<i>Police Academy 3: Back in Training</i>	\$43,579,163	1,788
<i>Raw Deal</i>	\$16,209,459	1,731
<i>The Delta Force</i>	\$17,768,900	1,720
<i>The Golden Child</i>	\$79,817,937	1,667
<i>Friday the 13th Part VI</i>	\$19,472,057	1,610
<i>Back to School</i>	\$91,258,000	1,605
<i>Poltergeist II: The Other Side</i>	\$40,996,665	1,596
...

Table 2 Films Released in 1986: Ranked by Opening Theatres

Source: www.boxofficemojo.com for US theatrical gross revenues and opening theatres.

Taken together, Tables 1 and 2 compare the top performing films (ranked by gross revenues) to what Hollywood expected the top performing films to be (ranked by

opening theatres). Figure 1 extends this comparison over time. The figure contains three time series. Top 10%_{revenues} measures, for each year, the US box-office gross revenues of the top ten percent of all films, ranked by box-office gross revenues (comparable to Table 1). The revenue data are presented as a percent share of *all* US box-office gross revenues for each year. The second series, Top 10%_{theatres}, measures, for each year, the US box-office gross revenues of the top ten percent of all films, ranked by opening theatres (comparable to Table 2). This series is also presented as a percent share of all US box-office gross revenues.

Similar to Weinstein's observations, Top 10%_{revenues} demonstrates how the top tier of films has, over a thirty-year period, increased its share of all US box-office gross revenues. The top ten percent of films in 1981 grabbed approximately 41 percent of all US box-office gross revenues for that year. In 2007 the top ten percent grabbed a 75 percent share of all US box-office revenues.

What is more interesting for our purpose, however, is the relationship between Top 10%_{revenues} and Top 10%_{theatres}. From the mid-1990s onwards, the fluctuations of the two series grow increasingly correlated.⁸ Additionally, over time the two series converge. This second observation is expressed with the third series of Figure 1, Top 10%_{predictability}. Top 10%_{predictability} presents, from 1981 to 2011, the ratio of Top 10%_{revenues} to Top 10%_{theatres}.

⁸ The correlation coefficient between Top 10%_{revenues} and Top 10%_{theatres} can be broken down into five periods: 1981-1987 (-0.49), 1988-1993 (+0.22), 1994-1999 (+0.86), 2000-2005 (+0.94) and 2006-2011 (+0.89).

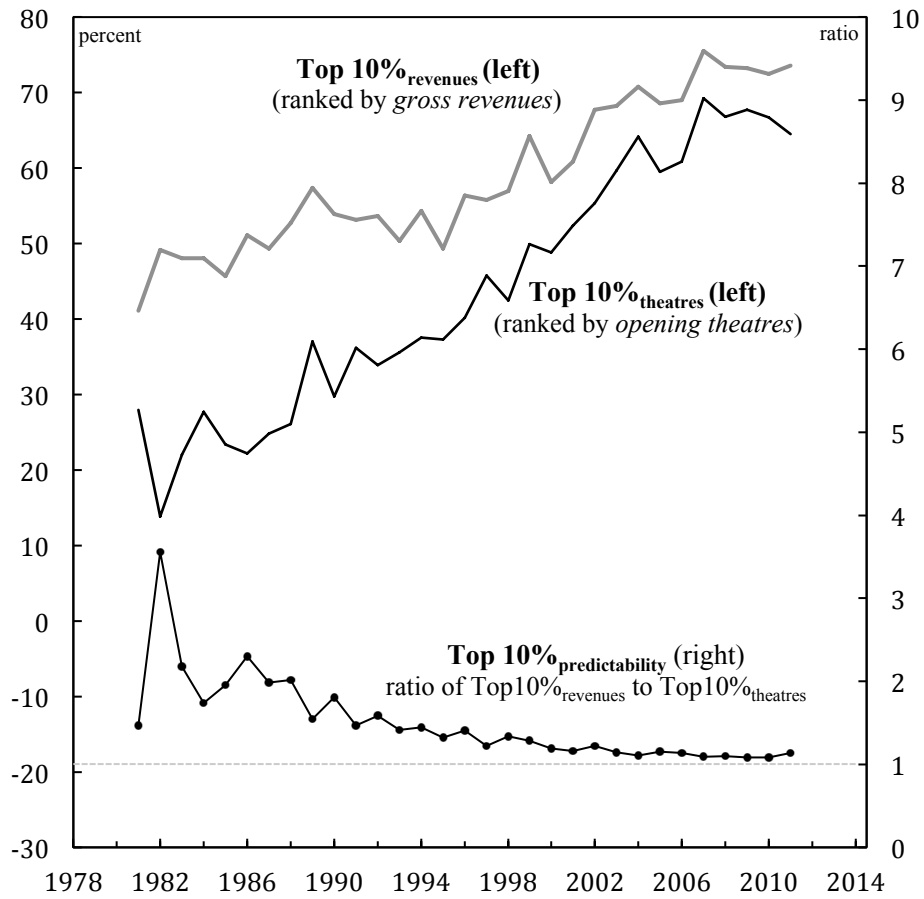


Figure 1 US Gross Theatre Revenues: The Share of the Top 10% of All Films

Note: Boxofficemojo.com provides, from 1981 to 2011, data for each film released in the United States. After grouping every film from 1981 to 2011 by their year of release, I sort each year twice: once to rank all films by their *gross revenues*, and another time by their *opening theatres*. Both times I measure the Top 10% share of the yearly total of US gross revenues. Each year, the measure of Top 10% is adjusted by the annual total of films released in the United States.

Note: The series that is sorted by opening theatres is not simply measuring opening weekend revenues. It measures total theatrical gross of each relevant film.

Source: www.boxofficemojo.com for number of films released per year, US theatrical gross revenues and opening theatres for each film, and the sum of all US theatrical gross revenues.

We can see that, over time, (1) the size of the ratio has decreased, getting closer and closer to 1, and (2) that the fluctuations in this ratio have lessened. What does it mean when Top 10%_{predictability} is close to 1? Technically, it means that Top 10%_{revenues} and Top 10%_{theatres} are counting more of the same films. In other words, in a year when Top 10%_{predictability} is close to 1, the highest grossing films were also, more or less, given the widest releases. Conceptually, the declining ratio and fluctuations of Top 10%_{predictability} suggest that Hollywood is getting better at predicting which movies will differentially perform. As the ratio approaches 1, the top 10% of the films put up for wide release end up also being the top 10% in terms of gross revenues, which is significant if the top tier of films are grabbing larger shares of all box-office revenues.

For instance, in 2007, the value of the ratio was 1.089. Out of a possible 63 films, 46 films are included in both Top 10%_{revenues} and Top 10%_{theatres} of that year. We can catch a glimpse of this fact by examining the top films of 2007 in Table 3. Table 3 reproduces for 2007, in abbreviated form, the two perspectives of Tables 1 and 2. In 1986 only one film appeared in both Table 1 and Table 2—*Back To School*. As Table 3 demonstrates, five films appear in both rankings for 2007. Furthermore, the same five films of 2007 occupy, although in different order, both top five spots.

Ranked by Box-Office Gross Revenues	Ranked by Opening Theatres
<i>Spider-Man 3</i> <i>Shrek the Third</i> <i>Transformers</i> <i>Pirates of the Caribbean: At World's...</i> <i>Harry Potter and the Order...</i> <i>I Am Legend</i> <i>The Bourne Ultimatum</i> <i>National Treasure: Book of Secrets</i> ...	<i>Pirates of the Caribbean: At World's...</i> <i>Harry Potter and the Order...</i> <i>Spider-Man 3</i> <i>Shrek the Third</i> <i>Transformers</i> <i>Fantastic Four: Rise of the Silver Surfer</i> <i>Ratatouille</i> <i>Bee Movie</i> ...

Table 3 Rankings in 2007

Source: www.boxofficemojo.com for US theatrical gross revenues and opening theatres.

Future Research on the Hollywood Film Business

Figure 1 demonstrates how, from 1981 to 2011, the Hollywood film business has been able to improve its predictions about what films will be in the top ten percent of each calendar year, ranked by box-office gross revenues. This improvement is a product of predicting, with greater confidence, which films will earn a greater share of all revenues through a wide release strategy. If the example of 2007 is any indication of risk perceptions about the contemporary order of Hollywood cinema, we can infer that major filmed entertainment has been able to predict the shape of this order with a greater degree of confidence.

Figure 1 can be extended into future research on the capitalist nature of Hollywood. Its implications can be developed both empirically and theoretically. The next research task at hand is to refine this method of accounting for the future expectations of the Hollywood film business. For instance, the scope of Figure 1 is the top ten percent of each year. This scope can be widened or narrowed with future applications. Figure 2, for example, is the same as Figure 1, except that the former focuses on the top five percent of each year. Not only does Figure 2 corroborate what Figure 1 implies, $\text{Top } 5\%_{\text{predictability}}$ can be compared to $\text{Top } 10\%_{\text{predictability}}$. This comparison is made in Figure 3.

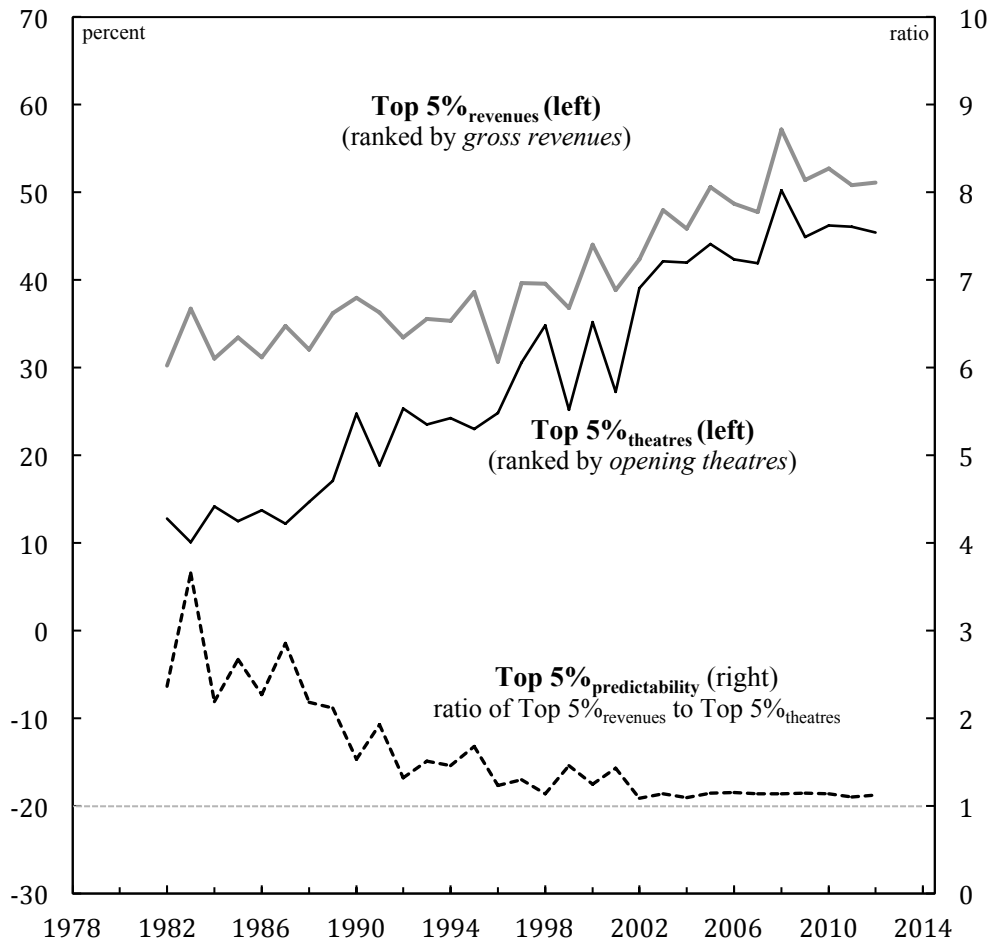


Figure 2 US Gross Theatre Revenues: The Share of the Top 5% of All Films

Note: Boxofficemojo.com provides, from 1981 to 2011, data for each film released in the United States. After grouping every film from 1981 to 2011 by their year of release, I sort each year twice: once to rank all films by their *gross revenues*, and another time by their *opening theatres*. Both times I measure the Top 5% share of the yearly total of US gross revenues. Each year, the measure of Top 5% is adjusted by the annual total of films released in the United States.

Note: The series that is sorted by opening theatres is not simply measuring opening weekend revenues. It measures total theatrical gross of each relevant film.

Source: www.boxofficemojo.com for number of films released per year, US theatrical gross revenues and opening theatres for each film, and the sum of all US theatrical gross revenues.

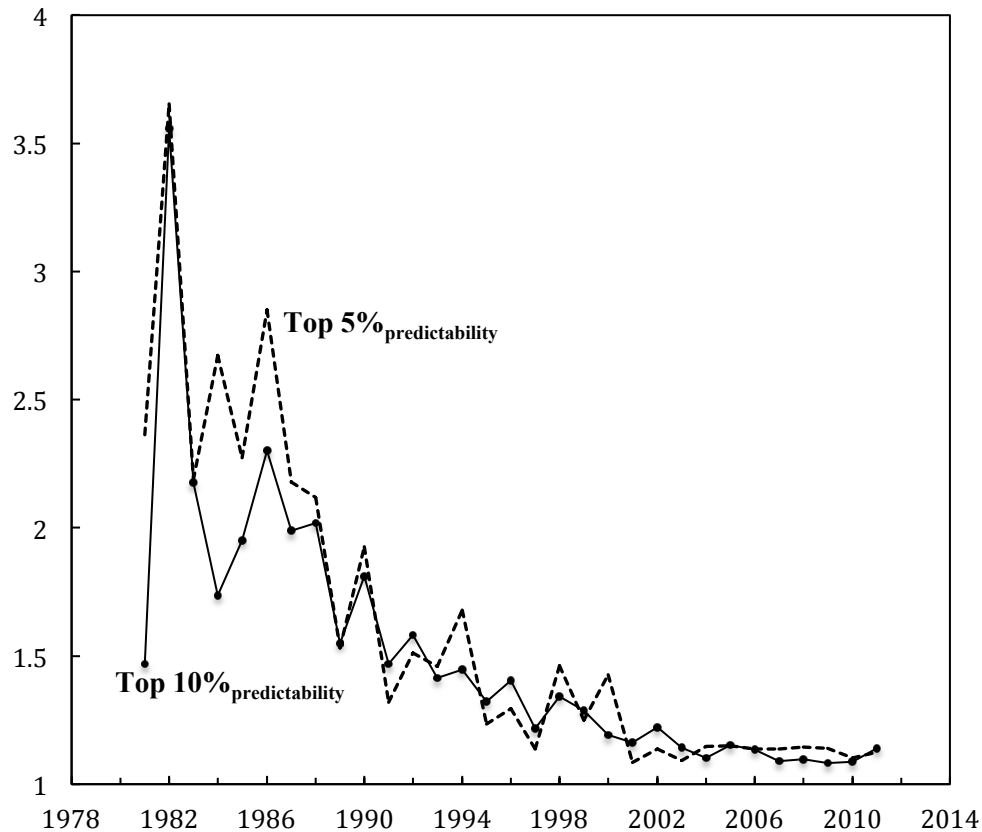


Figure 3 **Two Measures of Declining Risk**

Note: See Figures 1 and 2.

This paper can also be the stepping-stone to a larger investigation of the power underpinnings of Hollywood’s risk perceptions. The rise of a confident Hollywood suggests that its firms have found more effective means of developing, green-lighting and producing the “right” set of films. Using the capital-as-power framework, we can ask bigger questions about the ways in which the art of filmmaking is made to dance to the tune of business enterprise. The capitalization of cinema, like that of every other creative activity, requires that the industrial art of filmmaking be strategically sabotaged. For the Hollywood film business to invest in—and therefore enable the creation of—some films but not all possible types of film, is to strategically sabotage *aspects* of social creativity and imagination. Future

research on strategic sabotage could go a long way in helping us understand how cinema, under the eye of capitalization, is an order of quantifiable qualities, where the hope is that its films develop predictable financial trajectories, just like the paths of comets in the sky.

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