

2009

Opportunism, Uncertainty, and Relational Contracting - Antitrust in the Film Industry

Ryan M. Riegg
false

Follow this and additional works at: <https://digitalcommons.du.edu/selj>

Recommended Citation

Ryan M. Riegg, Opportunism, Uncertainty, and Relational Contracting - Antitrust in the Film Industry, 6 U. Denv. Sports & Ent. L.J. 107 (2009).

This Article is brought to you for free and open access by Digital Commons @ DU. It has been accepted for inclusion in Denver Sports & Entertainment Law Journal by an authorized editor of Digital Commons @ DU. For more information, please contact jennifer.cox@du.edu, dig-commons@du.edu.

Opportunism, Uncertainty, and Relational Contracting - Antitrust in the Film Industry

OPPORTUNISM, UNCERTAINTY, AND RELATIONAL CONTRACTING – ANTITRUST IN THE FILM INDUSTRY

*Ryan M. Riegg**

In 1938, the Department of Justice (“DOJ”) brought charges against the eight major Hollywood movie Studios for violating the Sherman antitrust act.¹ According to the DOJ, the Studios were a cartel engaged in a practice of bid-rigging, where movies would go exclusively to those theaters that the Studios controlled in order to eliminate the small, independent theaters and exhibitors that they did not. The allegation was that Studios controlled theaters through a variety of implicit and explicit agreements that involved the establishment of either 1) long-term, or multi-transaction, contracts, whereby Studios would “force” a given theater to take movies it did not want in order to get the movies that it did want or 2) vertically integrative contracts, whereby the Studio owned an interest in the theater. By the end of the litigation, known as *Paramount*, in 1948, three new legal rules governed the industry: (i) no direct or indirect intervention in admission price setting by producers and distributors; (ii) no licensing negotiations except on “theater-by-theater, movie-by-movie” basis; and (iii) no vertical integration between the Studios and exhibitors.²

* Ryan Riegg is a member of the California Bar. Since graduating from the University of California at Los Angeles School of Law in 2008, he has had two other articles accepted for publication: *Clitoridectomy and the Economics of Islamic Marriage & Divorce Law*; and *Behavioral Economic Issues in American and Islamic Marriage & Divorce Law*. Both are scheduled to be published in the fall 2009 editions of *The Journal of Islamic and Near Eastern Law* (UCLA School of Law) and *The International Journal of Legal Information* (International Association of Law Libraries), respectively. He can be contacted at ryan.riegg@gmail.com.

¹ *United States v. Paramount Pictures*, 334 U.S. 131, 140 (1948).

² While *Paramount* itself was a Federal case, these rules stated here are in fact a function of a variety of judicial decrees, consent decrees, state statutes, and state and Federal common law that emerged during and out of the litigation. However, this interpretation of the body of law, emerging out of *Paramount*, as establishing these three legal rules is widely accepted. See ARTHUR S. DE VANY, *HOLLYWOOD ECONOMICS* (2004); Kraig G. Fox, *Paramount Revisited: The Resurgence of Vertical Integration in the Motion Picture Industry*, 21 *HOFSTRA L. REV.* 505 (1992); F. Andrew Hanssen, *The Block Booking of Films Reexamined*, 43 *J.L. & ECON.* 395 (2000).

In the period prior to *Paramount* (1915-1938), movie budgets were fairly small and “blockbusters” (i.e. movies with huge budgets) were relatively rare. Even then, the budget for a “blockbuster” sized movie was a fraction of what it is now. In today’s dollars, a big-budget movie in 1938 would have cost less than \$10 million – less than a one-twentieth of what some blockbusters cost to produce now.

The period immediately after *Paramount* marked the beginning of the type of truly blockbuster-sized budgets. Specifically, the 1950’s saw the beginning of the “historical epic”, huge-budget productions based on historical events that the Studios produced despite declining demand for movies.³ The movies continued to be produced until *Cleopatra* (1963), whose \$300 million production cost (adjusted for inflation), nearly bankrupted its Studio when it became the most expensive box-office flop of all time.⁴ The brief period that followed, frequently referred to as “New Hollywood” (1964-1970), was characterized by minimal domestic movie production – particularly by the Studios – and lowest reported box-office revenues of all time.⁵ Consequently, the market became dominated by independently produced movies and movies imported from Europe. The Studios, facing ever-dwindling revenues, began to decline rapidly and two collapsed.⁶ In short, the Studios seemed to be in danger of disappearing. And then something odd happened. Even though the demand for movies was the lowest it had ever been, a man named Stanley Durwood (the founder of AMC) started building giant multiplexes. A few years

³ KRISTIN THOMPSON & DAVID BORDWELL, *FILM HISTORY*, 373-405 (1994).

⁴ Christopher Null, *Cleopatra (1963)*, *FILMCRTIC.COM* (2001), [http://www.filmcritic.com/misc/emporium.nsf/reviews/Cleopatra-\(1963\)](http://www.filmcritic.com/misc/emporium.nsf/reviews/Cleopatra-(1963)); *See also* GERALD MAST & BRUCE F. KAWIN, *A SHORT HISTORY OF THE MOVIES 287* (7th ed., Allyn & Bacon 1999).

⁵ THOMPSON & BORDWELL, *supra* note 3.

⁶ *Id.*

later, Studios, suddenly bolstered by financing from large diversified corporations such as Seagrams, started producing movies with huge budgets again – movies that became known in the industry as “blockbusters”.

Film historians frequently attribute the comeback of the Studios to, what they presume to be, the inherent high profitability of blockbusters. From this perspective, the creation of the multiplex, and the later creation of the blockbuster, were two happy coincidences, which, when combined, provided a new viewing experience for the public that they could not get from TV and increased the industry’s revenues.⁷

This paper advances the theory that neither the exponential increase in movie budgets, nor the creation of the multiplex, was a coincidence. Rather, this paper will argue that the production of blockbusters and the multiplexes were both consequences of the rules established under *Paramount*. Specifically, this paper will assert that, by effectively blocking all traditional contractual means of dealing with the extreme uncertainty inherent in the Film industry, the creation of blockbusters and multiplexes became the means by which Studios and Major Exhibitors (MEs) were able to survive. In short, the continuous production of multiplexes and blockbusters between the Studios and MEs generated what can be understood as a “relational contract” between the two that protected their interests and ensured the survival of both.

In order to support these claims, this paper will establish 1) that production of blockbusters by Studios is irrational from a traditional economic perspective based on a risk-reward model of production costs and revenues, 2) the extreme uncertainty of the film produces substantial risks of opportunism for Studios by exhibitors, 3) the *Paramount* rules effectively

⁷ *Id.* See also MAST & KAWIN, *supra* note 4.

eliminated the ability of the Studios and exhibitors to constrain that risk of opportunism through traditional “spot” contracts. Consequently, this paper will argue that by building extraordinarily expensive multiplexes that are designed – almost exclusively – for the exhibition of Blockbusters, the MEs provide Studios an assurance that they will not behave opportunistically by placing themselves in a position of extreme financial vulnerability and dependence on the Studios. Specifically, by placing themselves in a position of financial vulnerability towards the Studios, the MEs provide a guarantee that they will not, essentially, steal from the Studios by underreporting their film receipts. Studios, in turn, continue to produce blockbusters in order to maintain this relational contract. In other words, the value of the blockbuster is more than a product of production costs and ticket revenues – the real value of the blockbuster for Studios lays in its ability to constrain exhibitor-opportunism, lower monitoring costs, and allow efficient contracting over film distribution rights to occur between the Studios and the MEs. Consequently, because the purpose of the blockbuster and multiplex is not to constrain opportunism in a single transaction, but throughout the ongoing relationship itself, the “contract” established between the Studios and MEs is relational in nature.

I. THE ECONOMICS OF THE FILM INDUSTRY

Hollywood is an industry driven by its hits. On average, less than five percent of films produced a year account for more than 80% of the Industry’s total annual revenue and the revenue produced by a single hit makes the revenue from most other movies meaningless in comparison.⁸

⁸ DE VANY, *supra* note 2, at 207. *See also id.* 207-66.

When it comes to knowing whether a particular movie will be a hit or a flop before it is released, as the screenwriter William Goldman once famously said; “Nobody knows anything.” In other words, there appears to be no magic formula that has been developed by film executives for determining which types of movies will become hits and which will become flops. Or, at least if there is, it certainly is not in the hands of any Studio; every Studio has produced its fair share of bombs and passed on producing movies that later turned out to be giant hits. In short, every movie is its own unique product and cannot meaningfully be compared to any other movie. Thus, when it comes to predicting the future performance of any *individual* movie, the Film industry is a world of uncertainty.

As will be discussed in greater depth, the degree and type of uncertainty involved in the Film industry increases the probability of exhibitor opportunism and creates a central contracting problem in the formation of distribution contracts. As will be demonstrated, blockbusters provide Studios and MEs a mechanism for eliminating this problem. However, before that assertion can be proven, many of the traditional explanations for why Studios produce blockbusters must first be dispelled.

II. THE PUZZLE OF THE BLOCKBUSTER

While the future of any individual or specific movie may always be highly uncertain, this uncertainty does not extend to groups of movies or to the movie industry as a whole.

Subsequently, Studios can reduce their significant financial risks by increasing the number of movies they invest in. In short, if we imagine that the movie-market is similar to the stock market, in that both deal with goods whose futures are impossible to predict *individually*, fewer movies means more “unsystematic” risk for Studios.

Given this, many scholars have asked why the Studios produce so many more big-budget movies (i.e. blockbusters) than mid- or low-budget films when doing so means producing fewer movies total and thus increases risk in an already high-risk industry.⁹ In other words, considering that 1) no one knows in advance whether a movie will be a hit and 2) a big-budget flop can bankrupt a Studio, it would seem to make sense for each Studio to try and make as many smaller-budget movies as possible instead of tying the majority of their resources up in a handful of blockbusters.

One ostensible explanation for this behavior is that, by packing a prospective movie with stars, expensive special effects, or a large advertising budget, Studios are able to increase the chances that a given movie will become a hit. However, numerous empirical studies into movie revenues have demonstrated that, in fact, having a large budget does not determine whether a movie will ultimately become the type of hit which dominates the industry.¹⁰

Consequently, as extensive empirical evidence indicates, mid- and low-budget movies are just as likely to become “hits” as blockbusters.¹¹ For instance, the first Star Wars movie, which became one of the largest grossing movies of all time, only cost 11 million to produce (a relatively modest sum even by 1970’s standards). The same story applies to *Jaws* (7 million) the

⁹ See *id.* See also S. Abraham Ravid, *Film Production in the Digital Age*, in A CONCISE HANDBOOK OF MOVIE INDUSTRY ECONOMICS 32 (Charles C. Moul ed., 2005); Harold L. Vogel, *Movie Industry Accounting*, in *supra*, at 59; Charles C. Moul & Steven M. Shugan, *Theatrical Release and Launching of Motion Pictures*, in *supra*, at 80; Jehoshua Eliashberg, *The Film Exhibition Business: Critical Issues, Practice and Research*, in *supra*, at 138.

¹⁰ “You get a similar pattern if you slice up movies according to their production cost. If you group movies into low-, medium- and high-budget categories you still get a Pareto distribution of revenues in each category with the same tail weight. The minimum and average revenues change a bit, but the highest revenues do not. In each category, the average revenue is not the typical outcome; there is no typical outcome because they diverge over all possibilities. The variance of revenue outcomes is [figuratively] infinite in every budget category” DE VANY, *supra* note 2, at 263. Also, “[b]udgets, screens and stars lift the least revenue a film might earn, but have little effect on the most revenue it might earn. In other words, they place a prop under the revenue a film might earn, but do not have much influence on whether it will be a [hit] or not.” *Id.* 69; see also *id.* at 70-98, 208-210.

¹¹ *Id.*

Exorcist and many of the biggest hits of all time. In short, a big-budget has little effect on whether a movie becomes the type of hit that dominates the industry.¹²

A second traditional explanation for producing blockbusters is that, because these movies typically have higher opening weekends, the production of big budget movies is rational as it helps guarantee a certain minimum level of revenue for the Studios who produce them. However, while this explanation would have a great deal of merit in almost any other industry, it disintegrates when tested against the extreme economics of the movie industry.

Unlike most industries – where increasing the minimum revenue a product could expect to make would matter a great deal – the movie industry is a “winner-takes all” industry where 80% of the industry’s total revenue is generated by less than 5% of its product. Thus, hits are so critical to a Studio’s success that the possibility of a movie being a hit dwarfs the assurance of minimal initial revenue in economic significance. Simply put, by dedicating its limited resources towards the production of blockbusters, a Studio will produce fewer movies and, consequently, reduce its number of potential hits. When this opportunity cost is factored in, the higher minimum revenues that a Studio stands to gain from the production of blockbusters becomes

¹² *Id.*

irrelevant. In short, when a single hit can make half-a-billion dollars at the box-office, the only thing that matters is a Studio's chances of having one.¹³

Moreover, even if blockbusters have a higher degree of minimum revenue than lower budget movies – Studios should choose to produce mid- and low-budget movies to blockbusters due to the latter's higher downside risk. In the film industry, not only do hits exist – so do bombs. While blockbusters may, on average, make a higher degree of minimum revenue than low-budget movies – fewer movies still means higher unsystematic risk for Studios. Even if a Studio is somehow “risk averse,” the choice to produce blockbusters instead of low- or mid-budget movies should still be contrary to the Studio's preference structure. To wit, every Studio is likely to make a string of two bombs over a long enough period of time. And just as “nobody knows” in advance what will be a hit, no one knows which movies will end up becoming bombs either. Given this, if a Studio only produces small movies that cost, say, \$10 million each, having two flops in a row isn't likely to be problematic as the total loss to the Studio would be relatively small. However, if a Studio only produces blockbusters, which cost \$150 million each, two

¹³ To illustrate, imagine that Studio A and Studio B represent the entirety of the movie industry. This year, both Studio A and B have \$50 to make movies. Studio A only makes blockbusters. Blockbusters cost \$2 to make, but always make \$3 at the box office. Thus, Studio A makes 25 movies, from which it is guaranteed to make at least \$75, or a \$25 profit.

In comparison, Studio B only makes low-budget “indie” movies, which only cost \$1 to make, but are also only guaranteed to make \$1 at the box office. Thus, Studio B makes 50 movies, from which it is guaranteed to make at least \$50—or no profit at all. However, five percent of movies are hits; i.e. there is a .05 chance of any given movie being a hit. Thus, it can be expected that on average, 5% of the 75 movies produced by Studio A and B, 3.75 movies total, will be hits. Therefore, each hit will make approximately \$130 on average.

When the revenue from these hits are calculated in, Studio A's decision to only make blockbusters turns out to be a terrible idea. Each movie, regardless of its budget, has the same chance of being hit. However, Studio B has made twice as many movies as Studio A. Thus, Studio B will generally have more hits than Studio A. The expected revenue of Studio A can be calculated as follows: for each blockbuster that Studio A makes there is a 95% chance that it will make \$3 and a 5% chance that it will make \$130. Putting these together, the expected revenue from a single blockbuster is $.95 \times 3 + .05 \times 130 = \9.35 per blockbuster. Studio A has made 25 blockbusters so their total expected revenue is \$233.75. Studio A's total costs are \$50 so their total expected profit is \$183.75.

On the other hand, the expected value of an indie film is $.95 \times 1 + .05 \times 130 = \7.45 per indie. Studio B has made 50 indies, so their total expected revenue is \$372.50, and their expected profits are \$322.50—in short, their expected profit is nearly 76% higher than Studio A's.

This shows that, from expected profit perspective, producing indies is a vastly more profitable strategy on average—even when the minimum revenues from blockbusters are three times that of indie movies.

bombs in a row could easily lead to bankruptcy. And, indeed, Studios such as RCA and UA are excellent historical examples of Studios that bankrupted when several of their blockbusters bombed at the box office. In short, in a world in which bombs exist – incidentally, in greater frequency than hits¹⁴ – reducing the number of movies in order to generate higher minimum returns would always seem to be a bad idea.

Given these facts, the rational choice for most Studios would be to dedicate their resources towards the production of mid- and low-budget movies, instead of blockbusters, in order to increase the likelihood of having a hit and reduce the risk of having a bomb. However, this is the exact opposite of what actually happens. Hollywood produces far more blockbusters than what would seem to be economically sensible. Why does this occur? Most scholars have previously assumed that it is just irrationality on the part of studios.¹⁵ However, there may be a third possible explanation for why Studios produce so many blockbusters that may be deduced by looking at who these blockbusters benefit most directly.

III. THE MAJOR EXHIBITORS

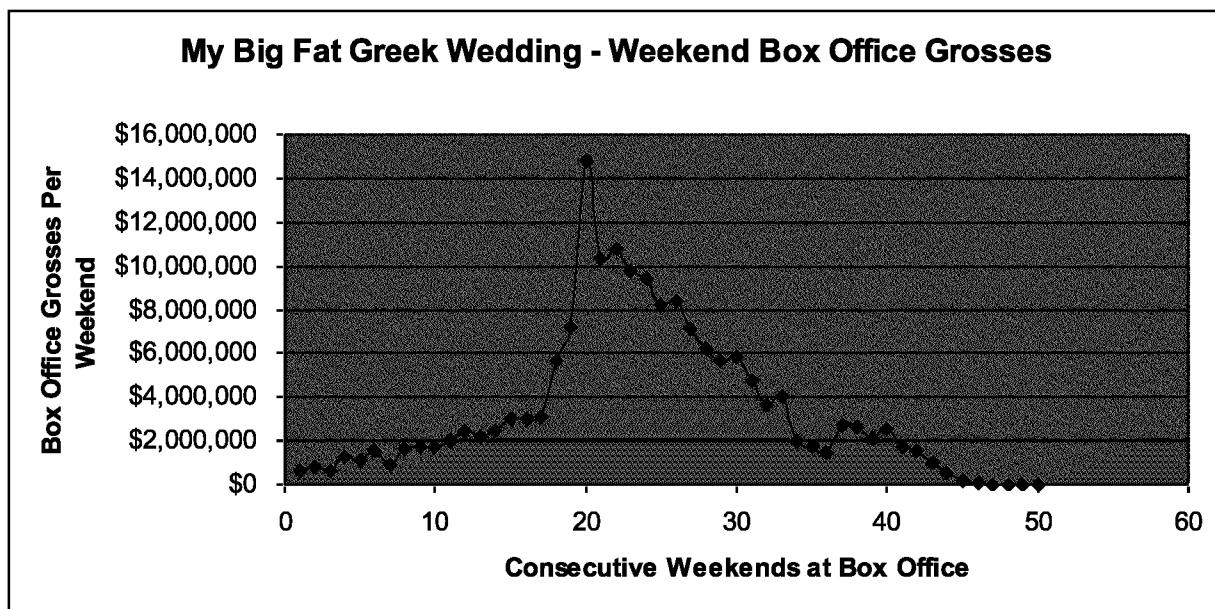
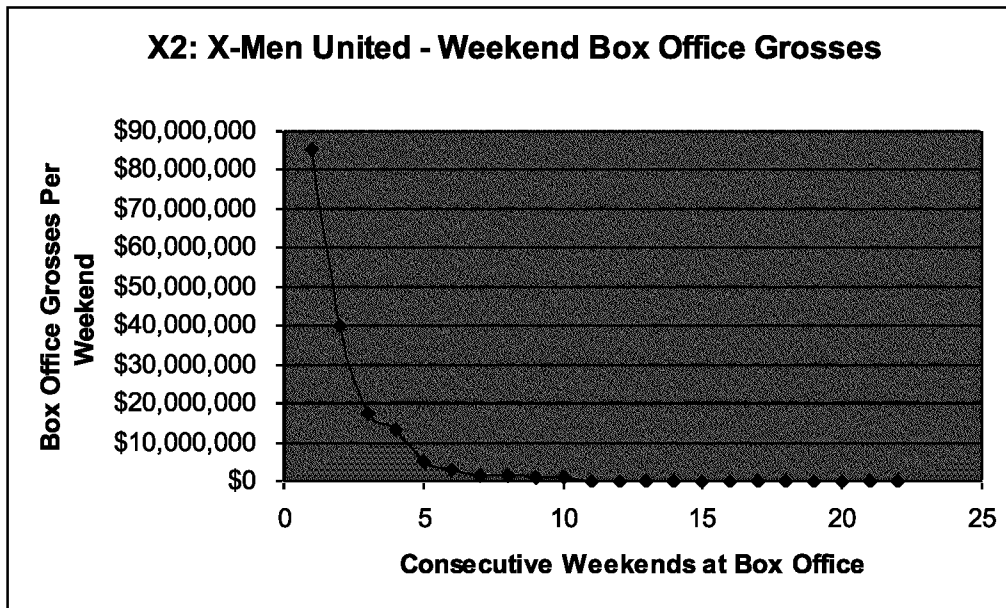
From the perspective of the Studio, a hit is a hit – regardless of whether it is a low-budget movie or a blockbuster. From a revenue perspective, the only difference between a blockbuster that becomes a hit, and a low- or mid-budget movie that becomes a hit, is that blockbusters start off with initially high grosses, while mid- and low-budget movies must grow over time.¹⁶ The graphs below provide an illustration by comparing two movies that were released within a year

¹⁴ “78 percent of movies lose money.” DE VANY, *supra* note 2, at 214; *see generally*, HAROLD L. VOGEL, ENTERTAINMENT INDUSTRY ECONOMICS (2d ed. 1990).

¹⁵ *Id.*

¹⁶ DE VANY, *supra* note 2, at 7-63, 123-138.

of each other and had relatively similar domestic box office grosses: *X2: X-Men United*¹⁷ and *My Big Fat Greek Wedding*.¹⁸



¹⁷ Box Office/Business for X2, <http://www.imdb.com/title/tt0290334/business> (last visited May 22, 2009).

¹⁸ Box Office/Business for My Big Fat Greek Wedding, <http://www.imdb.com/title/tt0259446/business> (last visited May 22, 2009).

With a \$110 million production budget, *X2* is the typical blockbuster. Its highest weekend box office gross is on opening weekend with grosses falling substantially afterwards until, by the 25th week, the movie “plays out” and is removed from the theaters. On the other hand, *My Big Fat Greek Wedding*, with a production budget of less than \$5 million, grows over time and does not play out until its 50th consecutive week.

Regardless of which type of revenue curve is followed, the total domestic box-office from either type of hit is relatively the same.¹⁹ Specifically, *X2* grossed approximately \$215 million domestically and *My Big Fat Greek Wedding* grossed approximately \$240 million domestically. In other words, a hit is a hit regardless of how it becomes one. Given this, from the perspective of the Studio, it should matter relatively little that the majority of a blockbuster’s gains are made early during the first five weeks of its run and that a mid- or low-budget movie makes its gains later on. Considering the short, frequently 6-week,²⁰ life-spans of most movies, any value to the Studio from the time-value of money from having a blockbuster-hit is likely to be overshadowed by the higher profits from having low-budget-hit, which – due to the differences in cost – generate far higher per-dollar returns on investment.²¹

However, that isn’t to say that producing blockbusters over low-budget movies does not generate direct economic benefits, it does, but instead of benefiting the Studio, the production of blockbusters would appear to most directly benefit a specific class of exhibitors who specialize

¹⁹ DE VANY, *supra* note 2, at 7-63, 123-138..

²⁰ *Id.*

²¹ For instance, even though the *Polar Express* and the *Blair Witch Project* were both hits with relatively similar worldwide grosses, *Blair Witch*’s return on investment is nearly 5000 times greater than that of the *Polar Express*. The *Polar Express* (2004), <http://www.boxofficemojo.com/movies/?page=main&id=polarexpress.htm> (last visited May 17, 2009); The *Blair Witch Project* (1999), <http://www.boxofficemojo.com/movies/?page=main&id=blairwitchproject.htm> (last visited May 17, 2009).

in showing these movies during their initial run. Specifically, the most direct beneficiary from the production of blockbusters are the MEs.

Unlike independent exhibitors, who typically own only one or two small theaters at most, the giant-IMAX-&-THX-surround-sound-stadium-style theaters of the MEs are designed for blockbusters and the large crowds they attract. Because the independent exhibitors would not have the capacity to hold the opening weekend crowds for big-budget blockbusters, they would be unable to bid as highly for them. Therefore, by shifting their production mix away from making more numerous smaller budget movies to the big-budget blockbuster for the last several decades, the Studios have pushed independent exhibitors out of the market. Thus, the MEs have gained a great deal from the further production of blockbusters by the Studios.

In order to fully explain the degree to which MEs benefit from the production of blockbusters, it is necessary to explain a few key characteristics of the exhibition market. First, most exhibitors do not make most of their money from ticket-sales. Rather, most exhibitors rely on concession-sales as their primary source of revenue. Exhibitors have an interest in booking movies that attract large crowds, as larger crowds means higher concession sales, but they are not dependant on ticket-sales, per se, as a vital source of revenue.

Second, *Paramount* limits exclusive licensing by Studios to theaters for the first six weeks of a movie's run.²² However, most non-hits do not last much longer than six-weeks.

Because movies become hits based on word-of-mouth, it takes time for a movie to reveal itself as

²² While no bright-line limitation on exclusive licensing exists within Federal common law, state statutes do provide such explicit limitations on exclusive licensing. Section 203-7 of the Pennsylvania Feature Motion Picture Fair Business Practices Law states: "No license agreement shall be entered into between distributor and exhibitor to grant an exclusive first-run or an exclusive multiple first-run for more than 42 days without provision to expand the run to second run or subsequent run theaters." 73 PA. CONS. STAT. § 203-7 (1999). Such statutes were unchallenged until November of 1999, when the 3rd Circuit declared the statute in violation of Federal copyright law. *Orson, Inc. v. Miramax Film Corp.*, 1999 WL 243617 (3rd Cir. 2000). The effect of this "loosening" of *Paramount's* rules will be discussed further in the Conclusion.

a hit. As most industry analysts point out, movies reveal themselves as hits in weeks five and eight by either growing in size or maintaining demand. Blockbusters reveal themselves as hits by maintaining a high-level of demand commensurate with their first few opening weeks. Low-budget movies reveal themselves as hits by growing over time.²³

Consequently, when it comes to blockbusters, MEs are relatively unconstrained in being able to force independent exhibitors from the market. For instance, a given Major Exhibitor (ME) could, as they frequently do, offer 100% of ticket revenue to a Studio in exchange for exclusive licensing for a movie during its first five weeks as the exhibitor will still be able to run a profit from concession-sales. The ME will be willing to do this for a blockbuster since the ME can be relatively assured that, until word-of-mouth about the movie gets out, the blockbuster will have relatively high demand for those five weeks. In short, there is no real downside risk facing the ME. In week five, when the exclusive license expires, the blockbuster will either demonstrate itself as a hit, by maintaining a relatively high level of demand, or as a proverbial “dud” by having its demand begin to rapidly decline. If the blockbuster reveals itself as a potential hit, no other exhibitor is likely to be willing to bid for it as, considering that most MEs have designed their theaters to be large enough to accommodate the typical blockbuster’s opening weekend, demand is likely to have already been fully met. Consequently, independent exhibitors will only stand to receive those blockbusters that turn out to be duds.

While *Paramount’s* allowance of exclusive licenses to be granted for a movie’s first six-weeks creates a substantial opportunity for MEs to force independent exhibitors from the market in regards to blockbusters, it does not provide this same opportunity in regards to mid- and low-

²³ See generally DE VANY, *supra* note 2, at 7-63, 123-38.

budget movies. Because mid- and low-budget movies grow over time, it would matter little if an ME received an exclusive license to show a low-budget movie during its first six-weeks as that is when the movie's potential revenue is likely to be lowest.

Thus, while MEs are relatively unconstrained in their ability to use the bidding process to push their competition out of the market when it comes to blockbusters, mid- and low-budget movies are unlikely to provide them the same opportunity. As stated previously, only the MEs have theaters capable of accommodating the high demand that accompanies a blockbuster's opening weekend. Thus, until recently (for reasons that will be dealt with in the Conclusion), the fact that the Studios produced so many blockbusters greatly benefited the MEs and allowed them to push out the vast majority of independent exhibitors from the market.²⁴ However, these theaters also cost a great deal to build. Had the Studios instead decided to produce low-budget movies, then the MEs would have been the ones pushed out of business. In short, when the MEs started building the large multiplexes that have come to dominate the industry, they were placing themselves in a position of extreme vulnerability. Especially considering that, as pointed out earlier in this article's discussion of the economics of the film industry, in terms of gross revenue generated, it would appear to make more sense for Studios to make mid- and low-budget movies and never make blockbusters. Thus, the question that must be asked is what benefit does producing blockbusters provide the Studios?

²⁴ Vivien Kellerman, *Fade Out: Independent Cinemas Declining*, N.Y. TIMES, Dec. 29, 1991, at 12LI; *see also*, Kraig G. Fox, *Paramount Revisited: The Resurgence of Vertical Integration in the Motion Picture Industry*, 21 HOFSTRA L. REV. 505, 530-35 (1992).

IV. OPPORTUNISM AND UNCERTAINTY

While the precise definition of uncertainty is an issue of debate, most economists separate the ideas of uncertainty and risk based on the degree to which mathematical probabilities can be assigned to a given situation:

"By 'uncertain' knowledge, let me explain, I do not mean merely to distinguish what is known for certain from what is only probable. The game of roulette is not subject, in this sense, to uncertainty.... The sense in which I am using the term is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest twenty years hence...About these matters there is no scientific basis on which to form any calculable probability whatever. We simply do not know." –J.M. Keynes²⁵

As a construct, uncertainty is typically separated into issues of volatility and ambiguity. Volatility refers to the rate and unpredictability of change in the environmental state over time. Ambiguity refers to barriers to the accurate perception of conditions and events. Ambiguity differs fundamentally from volatility in that the latter is resolved over time once a change occurs (i.e. volatility creates uncertainty about what will occur but not about what has occurred), whereas the former presents non-trivial issues of measurement that are not resolved simply by the passage of time.²⁶

Uncertainty is important to understand due to its relationship with opportunism. In his seminal work "Market and Hierarchies" (1975), Oliver Williamson first applied the word "opportunism" to its specialized context in Transaction Cost Economics ("TCE"). In that work, Williamson states that: "Opportunism extends the conventional assumption that economic agents are guided by considerations of self-interest to make allowance for *strategic* behavior. This

²⁵ J.M. Keynes, *The General Theory of Employment*, 51 Q.J. ECON. 209, 213-14 (1937).

²⁶ Stephen J. Carson et al., *Uncertainty, Opportunism and Governance: The Effects of Volatility and Ambiguity on Formal and Relational Contracting*, 49 ACAD. MGMT. J. 1058, 1058-69 (2006).

involves self-interest seeking with guile and has profound implications for choosing between alternative contractual relationships.”²⁷ Opportunism can thus be defined as encompassing a range of behaviors, including non-cooperative strategic bargaining, shirking, and failing to honor obligations or share information.²⁸

As Williamson points out, opportunism is driven by a number of specific factors, chief among these being transaction specific assets and, more importantly for the purposes of this paper, uncertainty.²⁹

According to Williamson, volatility increases opportunism primarily by requiring renegotiation of current agreements to avoid maladaptation to the external environment.³⁰ Renegotiations among parties prone to opportunism bring an inherent degree of confrontation and non-cooperative bargaining and a greater incentive for non-cooperative behavior. Parties invested in specific assets prior to renegotiations are at a disadvantage due to their desire to maintain the relationship and are thus vulnerable to more extensive opportunism.³¹

In comparison, ambiguity in the perception of partner behavior reduces sanctions against opportunistic behavior on an expected basis since some opportunism will not be perceived and sanctioned, resulting in weaker disincentives against opportunism. In short, the presence of

²⁷ OLIVER E. WILLIAMSON, *MARKETS AND HIERARCHIES: ANALYSIS AND ANTITRUST IMPLICATIONS* 234, 255 (1975).

²⁸ *Id.*; see also Carson et al., *supra* note 26.

²⁹ While specific assets play an essential role in generating opportunism, in the interests of clarity and concision, I have decided to avoid addressing the issue of specific assets here. Suffice to say that movies become specific assets once shown by an exhibitor. At that point, the cost for distributors to take away the movie and go through the contracting process with another exhibitor is unlikely, as the cost of doing so would be extremely high. Simply put, most movies don't play for very long, the contracting process takes time as movie contracts are created on a screen-specific basis, and how a movie performs in a given theater can have as much to do with the properties of the theater, including the demographics of specific neighborhood that the theater is in, as it does with the movie itself.

³⁰ WILLIAMSON, *supra* note 27.

³¹ Carson et al., *supra* note 26.

ambiguity gives noncooperative actors the ability to shirk, cheat, or otherwise engage in opportunism without being caught.³²

While ambiguity and volatility can serve as useful constructs in demonstrating how different situations of uncertainty can lead to different types of opportunism, from a deeper, or more general, economic perspective; uncertainty is uncertainty is uncertainty – and uncertainty is simply an issue of time and information costs.³³ Simply put, as time and information costs increase, risk transforms into uncertainty as the cost of assigning probabilities becomes prohibitively high. Thus, so long as actors to an exchange are unable to obtain relevant information to produce a rational choice about a set of future events, then they will operate under uncertainty and, as Williamson and other TCE and Bounded Rationality theorists have demonstrated, opportunism will increase as a result.

Assuming that Williamson's model is accurate, and that opportunism can be attributed to the presence of uncertainty and, therefore, information costs, then it is logical to presume that formal contracting methods for constraining opportunism do so by lowering the cost of essential information (i.e. information that is critical for the assignment of meaningful probabilities) for the party at risk of exploitation.³⁴ For instance, vertical integration, the focus of Williamson's groundbreaking work, reduces information costs by lowering the barriers to information between firms by placing them into a single integrated structure. Similarly, contingent contracting delays finalizing terms into the future when the cost of obtaining essential information for finalizing

³² *Id.*

³³ See in general, G.L.S. SHACKLE, DECISION, ORDER AND TIME IN HUMAN AFFAIRS (1961).

³⁴ And, in fact, in the context of most TCE literature, the lowering of information costs is the central purpose of all contracting. Similarly, Williamson's major assertion in *Markets and Hierarchies* is that the desire to reduce uncertainty is the primary cause behind the creation of the firm.

those terms has dropped. Both of these options promote efficient exchange, as both operate to decrease uncertainty and, thus, reduce opportunism.

Unlike formal contracting, which involves discrete, self-contained, or “spot” exchanges and can be seen as reducing opportunism by decreasing information costs, relational contracting emphasizes the embeddedness of individual transactions within a larger system of economic and social interactions which create safeguards against opportunism by generating externalities that “spillover” from one exchange to another.³⁵ Under a relational contracting model, exchanges are therefore purposefully left incomplete, thereby transforming what would be a series of discrete transactions into a “repeat-player” relationship that is frequently indefinite, or infinite, in length. So long as future gains from this relationship are greater than the gains either party could expect from acting opportunistically in the present, then potential noncooperators will have an incentive to act cooperatively and not “defect”.

From the perspective of Transaction Cost Economics (“TCE”), the question of which approach is more efficient is simply a question of relative cost. As this paper asserts, when formal contracting cannot produce efficient results because the cost of obtaining essential information is prohibitively high, then relational contracting can act as an effective transactional substitute. As will be demonstrated, when rational individuals are unable to access essential information, then they simply will not engage in formal contracting as a means of exchange. From a behavioral economic perspective, this can be attributed to the phenomenon of “ambiguity aversion”. However, from a TCE perspective, the preference for relational contracting over

³⁵ Carson et al., *supra* note 26, 1058-61; *see generally*, Ian R. Macneil, *Contracts: Adjustment of Long-Term Economic Relations Under Classical, Neoclassical, and Relational Contract Law*, 72 NW. U. L. REV. 854 (1978).

formal contracting in the face of uncertainty can be seen as a rational response to the danger of opportunism. George Akerlof's work on the used-car market is illustrative.³⁶

In his study, "The Market for Lemons," Akerlof points out that because the cost of information about a used car's quality is prohibitively high for buyers, they will only be willing to pay, at most, the average price for a used car in the formal market. Consequently, sellers of high-quality cars will cease to offer their cars through the formal market, the average will drop, buyers will discount further and the market will cycle downwards further and further as more and more individuals drop out of the market over time.³⁷ While Akerlof's analysis focuses on information asymmetry, i.e. the degree of difference in information, it is also a study of uncertainty, albeit unilateral in nature, in that buyers are faced with a high degree of both ambiguity and volatility when purchasing a used-car on the formal market and that they incorporate the effects of this uncertainty in determining what they are willing to pay.

Individuals faced with uncertainty in an exchange must rationally discount for the possibility of opportunism; in the case of used-cars, buyers will discount for the possibility that the car will turn out to be a "lemon". The degree of discounting involved depends heavily on the degree of uncertainty involved in the exchange. Simply put, the less assured an individual can be of a good's quality, the less the individual is likely be willing to pay for that good. The question of how assured an individual can be of a good's quality is, ultimately, a question of uncertainty. Goods with a high-degree of variance in terms of value (i.e. goods which are volatile) and resistant to inspection by prospective buyers (i.e. goods which are ambiguous), such as used cars,

³⁶ George Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970).

³⁷ *Id.*

must be discounted more than goods which are not. This is because the degree of uncertainty is greater and, thus, so is the possibility of opportunism.

To illustrate this point, imagine that that a “good” used-car is worth \$1001 dollars and a lemon is worth \$1. The incentive for a dealer to act opportunistically by misrepresenting a lemon as a good car is \$1000, because the degree of variance is \$1000. If the degree of variance is lower, i.e. \$1 dollar for lemons and \$2 for good used-cars, then the incentive to the dealer to act opportunistically is significantly smaller as the dealer will stand to gain less from an act of misrepresentation.

In this example, the increase in product variance increases volatility. Consequently, the incentive for opportunism is also increased. However, increasing ambiguity can also increase the incentive for opportunism. For instance, if it were extremely costly for buyers to detect misrepresentation ex post, then a further increase in the incentive for a seller to behave opportunistically would be the result.

While Akerlof’s study is frequently cited as a study of markets “racing to the bottom,” it can also be seen as a study of how uncertainty affects transactional choices. To wit, even though high-quality used-cars are pushed out of the formal market, those cars still get “sold” – albeit to relatives and friends or handed down to children. The exchange of goods still takes place – all that has changed is the means of contracting. In short, what has changed is that used-cars end up being allocated through relational, rather than formal, contracts. The reason for this shift can be understood as a function of the degree to which each type of contract requires the elimination of uncertainty in order to prevent opportunism, weighed against the cost of eliminating that uncertainty. In other words, if the cost of eliminating uncertainty is high, because the cost of

essential information is high, then formal contracts will be less efficient than relational contracts in effecting transactions.

In sum, before a discrete, formal exchange can take place, parties to an exchange will need a certain level of information in order to protect against opportunism. Formal contracting mechanisms designed to reduce opportunism can therefore be seen as lowering the cost of information in order to promote discrete exchange. However, when information costs cannot be lowered efficiently – i.e. when uncertainty cannot be reduced – relational contracting can be used as a substitute for formal contracts. Relational contracts do not require the same degree of information to be held by the parties to an exchange, because no exchange is discrete. Thus, under a relational contract, the danger of opportunism is decreased, since neither party will wish to jeopardize their future gains by acting uncooperatively, regardless of the relative presence of uncertainty.

The relative gains and weakness of each contractual model, and their relationship to opportunism and uncertainty, are important to understand, as they will together provide the conceptual center of this paper's explanation for presence of blockbusters in the Film industry.

V. UNCERTAINTY AND OPPORTUNISM IN THE FILM INDUSTRY

Much like buying and selling a used-car on a “car-by-car” basis, when it comes to contracting between Studios and exhibitors on a “theater by theater” basis, a high-level of uncertainty is involved that cannot be reduced except at great cost. There are three primary factors which generate this uncertainty: 1) the extreme degree of variance between movies that are “hits” and those that are not, in that movies can make anywhere between \$30 to \$600 million

at the box-office,³⁸ and movie performance can differ vastly depending on the market where the film is being shown; 2) less than five percent of movies become hits, but the box-office revenue from those hits dwarfs the revenue generated by non-hits;³⁹ and 3) the fact that, as the screenwriter William Goldman put it, “nobody knows anything” about what makes a movie a hit or a bomb.⁴⁰ Together, these factors produce both volatility and ambiguity, making formal contracting highly inefficient when compared to relational contracting as a means of exchange.

The high degree of variance between movies produces volatility. Volatility makes it costly, if not impossible, for Studios to engage in the creation of upfront pricing mechanisms on a movie-by-movie basis. Prior to a movie being shown, exhibitors will discount the value of the movie according to the degree of volatility in the market as they will be likely to assume either the worst or most likely possible outcome in regards to the future of that movie. To wit, if there is a 95% chance a movie won't be a hit, then exhibitors will be unlikely to wish to pay much more than the average known revenue for non-hits to obtain the rights to show a prospective movie. However, because of the extreme degree of variance between non-hits and hits, the resulting reservation price of exhibitors is likely to fall well below the average per-movie revenue of the Film industry as a whole. Consequently, if Studios can contract contingently instead, i.e. determine the “price” of a movie once the movie has revealed itself as either a hit or a non-hit, then that result will be preferable for Studios as, on average, the price that Studios receive from exhibitors will be closer to the industry's per movie average (which is relatively high) rather than

³⁸ Lowest box-office gross of all time: “Zyzzyx” at \$30. Dade Hayes, “Zyzzyx” *Earns Lowest All-time Box Office*, VARIETY, Jan. 3, 2007, <http://www.variety.com/article/VR1117956635.html?categoryid=13&cs=1>. Highest domestic gross of all time: TITANIC at 600 million (or 800 million when adjusted for inflation). Titanic, <http://www.boxofficemojo.com/movies/?id=titanic.htm> (last visited May 19, 2009).

³⁹ DE VANY, *supra* note 2, at 207.

⁴⁰ WILLIAM GOLDMAN, ADVENTURES IN THE SCREEN TRADE 39 (1983).

just the per movie average for non-hits (which is extremely low). In short, a Studio will receive a far higher price for the movies it produces if it waits until information about that movie has been revealed to the exhibitor, as the exhibitor will no longer have to discount against the possibility of receiving a “lemon.”

Thus, contingent contracting is the most common method that firms in volatile markets cope with issues of extreme variance through formal contracting. Potentially, vertical integration could also be used. However, vertical integration was barred under Paramount. Thus, contingent contracting would seem to be the rational, or perhaps only, choice for Studios wishing to maximize their profits.

However, even though contingent contracting would be heavily preferable to contracting with an upfront price due to volatility, the exhibition of movies not only involves volatility, it also involves ambiguity, which would appear to make contingent contracting on a formal basis extremely costly for Studios. Because “nobody knows anything” about whether a movie will be a hit or not, and the performance variance between movies is so extreme – both in terms of geographic markets and in general – once a movie has been given to an exhibitor, Studios face substantial ambiguity both in regards to that exhibitor’s behavior and in regards to the film’s performance. Consequently, the risks of opportunism when distribution contracts are formed on a contingent basis are substantially increased. Specifically, exhibitors pay out on their reported receipts, but retain their true receipts. Thus, a substantial incentive exists for exhibitors to act opportunistically and claim, for instance, that a hit movie only performed averagely or that it bombed.

The cost of detecting for this misrepresentation is likely to be extremely high as 95% of all movies do not turn out to be hits, nobody knows what makes a hit or a bomb in the first place, and the possible range of performance could be anywhere between 30 dollars and 600 million dollars. Absent the possibility of vertical integration between Studios and exhibitors, Studios would conceivably have to send an agent to every single screening, at every single theater, for every movie it had distributed, in order to verify theater grosses and prevent this type of opportunistic behavior from occurring – a costly endeavor by any stretch of the imagination.⁴¹

Given this problem of essential information costs, contingent contracts enforced by formal mechanisms are likely to be costly for Studios. Thus, whether a better relational contract can be formed between Studios and exhibitors is a question of what possible mechanisms exist and their relative costs.

VI. PROTECTING AGAINST OPPORTUNISM

All contracts require a means of enforcement to prevent wasted reliance and opportunistic behavior. However, in order for a contract to be enforced by the State, evidence of opportunism must first be observable by the courts according to a given legal standard. Given this, a central contracting problem of the exhibitor-distributor relationship lies in the fact that, because “nobody

⁴¹ One could claim that a Studio could find out that a movie is a hit and detect for opportunism at a given theater by comparing the movie’s performance to its performance at other theaters. However, since every theater has an incentive to act opportunistically—inter-theater comparisons are unlikely to work. Moreover, significant performance variations exist not only on a movie-by-movie basis, but also on a theater-by-theater and market-by-market basis, which, again, prevents inter-theater comparison. To illustrate, it is easy to imagine that *The Passion of the Christ*, or *Fahrenheit 9/11*, both of which were huge hits, would vary considerably in performance depending on whether theater was in a Liberal or Christian-Conservative district. Politics is just one factor that can lead to a high-degree of variation between movies. Family movies obviously do better in districts with more families. Additionally, measures of affluence can have a significant effect on how successful a movie will be at a given theater, as can age, gender, ethnic-makeup, etc. None of these factors are trivial, but it is impossible to know exactly which one will emerge as the dominant factor for any given movie in any given theater. Put another way, because so many factors can have a significant effect on how a movie performs in any given theater, the range of possibilities falls outside of what can be ascertained by Studios at any type of reasonable cost. Thus, uncertainty is generated.

knows anything” about a movie’s potential for success, opportunistic behavior by exhibitors is resistant to observation. Nowhere is this fact better exemplified than in the issue of box-office revenues.

Box office revenues can be directly observed by the exhibitor, but not by the Studio. The theater pays the Studio based on its represented receipts, but retains revenue from its true receipts. Thus, every time a movie is shown in a theater, an opportunity exists for exhibitors to misrepresent their receipts and keep the surplus for themselves. In short, steal from the Studio distributing the film. Monitoring for this type of behavior is costly for Studios, as a film’s performance can vary wildly from theater to theater and a movie’s success is always highly uncertain.⁴² In other words, because every film is a unique product, and Studios therefore lack any historical background about how a film should perform in any given theater, they cannot simply “eyeball” the incoming receipts regarding a movie’s performance to determine whether a theater is underreporting a specific film’s revenue. Courts are no better at being able to observe this behavior since, in order for Courts to be able to take action against an exhibitor for breach of contract or fraud, the Studio must first be able to discover the breach in the first place and then bring sufficient evidence to Court to gain a ruling in their favor. In short, so long as monitoring costs are high for distributors then they are also likely to be high for any third parties who could enforce the transaction (i.e. the Courts). Consequently, in order for Studios and Exhibitors to create *formal* contracts that can be enforced by the State, Studios must develop methods for lowering their monitoring costs over exhibitors to a point at which such enforcement becomes feasible. In short, Studios must lower essential information costs.

⁴² See previous note.

Prior to *Paramount*, one method Studios had for lowering their monitoring costs was through the purchase of ownership interests in theaters. While this was not a complete solution, it did reduce the monitoring costs on Studios as it lowered the barriers to information regarding a theater's true receipts by merging two firms, with otherwise contrary incentives, into a single integrated structure. Consequently, by becoming co-owners in theaters, monitoring became feasible for Studios and, thus, so did enforcement of their contracts through the courts. However, due to the "no vertical integration" rule under *Paramount*, the Studios were barred from being able to purchase ownership interests in theaters and, thus, limited in the type of agreements they could form.

That said, not all agreements require the degree of monitoring typically involved with direct enforcement by the State. When behavior is not easily observable to third parties, parties to an exchange may devise methods to prevent opportunism that does not require the same level of monitoring that a contract relying exclusively on enforcement by the State would. In short, in the absence of easily observable opportunistic behavior, parties must devise methods by which their contracts are able to enforce themselves.

As noted by a number of scholars, there are a number of ways that contracts can be enforced without relying on third-party observation or enforcement. Some involve formal mechanisms (i.e. upfront pricing), which allow for discrete transactions to take place. Some involve relational mechanisms, whereby the means of enforcement spans several transactions at once. However, as addressed previously, in order to be efficient, all formal contracting mechanisms require a degree of certainty be created, while the informational requirements involved with relational contracts are likely to be considerably lower. Consequently, as will be

demonstrated, because the distribution of movies involves ambiguity and volatility, formal mechanisms are unlikely to be efficient when weighed against the limitations established by *Paramount*.

Formal Contracting

Under a formal contracting model, one common method that buyers and sellers use in other industries ensure contractual reliance without relying on the State is by pricing the risk of non-performance into their exchange – which effectively removes the problems of monitoring future performance through the payment of an upfront fee. In other words, the costs of monitoring are reduced because compensation is no longer contingent on a series of unobservable future events. In short, upfront pricing removes the issues created by ambiguity. However, upfront pricing cannot reduce issues of volatility. Thus, when it comes to forming a contract for any individual movie, the potential success for any one movie is always so wide-ranging that upfront pricing either becomes highly inefficient, or extremely costly, for Studios and thus unlikely to occur.⁴³

As stated previously, if Studios can contract contingently instead of relying on an ex ante pricing model, i.e. determine the “price” of a movie once the movie has revealed itself as either a hit or a non-hit, then that result will be preferable for Studios as, on average, the price that Studios receive from exhibitors will be closer to the industry’s per movie average (relatively

⁴³ To illustrate this point, imagine that Hollywood produces 52 movies. The non-hits earn between \$140 and \$150 per movie. 95% of all movies (50 movies total) fall into that range. Thus, the two remaining movies each make \$9,000 and \$20,000 respectively—representing the remaining 80% of the industry’s revenue. If we add the revenue for these two hits to the non-hits, then the average revenue of the film industry is \$697 per movie. However, if a Studio attempts to charge \$697 for a given movie, no exhibitor is likely to be willing to purchase it, as there is a 95% chance that the movie will make one-fifth of that amount. Conversely, if the Studio has the option of contracting contingently instead, it would be irrational for Studios to sell a movie for between \$140 and \$150, when the opportunity cost from giving up a potential hit is ten-times that amount; i.e. $(\$20,000 \times .05) + (\$9,000 \times .05) = \$1450$. In short, non-contingent fees would be extremely costly for Studios to employ on the type of a movie-by-movie basis required under *Paramount*.

high) rather than just the per movie average for non-hits (relatively low). Thus, Studios have a great deal to gain from avoiding upfront pricing.

Put another way, even assuming an up-front pricing model were possible; i.e. a potential bargaining zone exists and the costs of negotiating that zone are not prohibitively high; it would still be unlikely that Studios would choose to engage in up-front pricing contracts unless they had no other option. Specifically, it would be unlikely that Studios would wish to enter into such a contract, as doing so would entail the Studio sacrificing most of the potential gains generated by any hit it sells to an exhibitor. A substantial problem for Studios, since hits drive the industry and being able to capture the revenue from a hit is, thus, worth a great deal. In short, at best, Studios would only engage in upfront pricing as a last resort.

The problem with upfront pricing for a single movie is the same problem of formal contracting in the Film industry generally that will continually emerge throughout this paper: while formal contracts can operate under either ambiguity or volatility, they cannot operate efficiently under both – and *Paramount* prevents the reduction of either.

To wit, one either has to know what's going to happen or what did happen, before discrete exchange is possible. Put another way, a rational actor wouldn't give their house key to a complete stranger before leaving to go to work. A rational actor would not do that as the actor has no way of knowing either what the stranger will do in the future (volatility) and it may be quite some time before the actor is able to discover what the stranger did do after that actor left for work (ambiguity). In short, discrete exchange under uncertainty involves trust and rational actors don't trust anyone. Consequently, discrete exchanges do not take place unless there is a presence of one type of information or another that can serve as the basis of the contract. The

problem is that *Paramount*'s restrictions create transactional costs preventing Studios from inexpensively decreasing either form of uncertainty through transactional means. Specifically, when movies can only be sold on a "movie-by-movie" basis, variance (and, thus, volatility) cannot be reduced inexpensively through transactional means. Similarly, when vertical integration is barred, ambiguity cannot be reduced inexpensively through transactional means. Consequently, as will be demonstrated through out this paper, formal contracting cannot provide efficient mechanisms for preventing opportunism.

Relational Contracting:

In deciding whether to act opportunistically, a rational actor will weigh her potential costs (i.e. the magnitude of the penalty if caught, combined with probability of detection), against her potential gains. If the potential gains outweigh the potential costs, then the actor will act opportunistically and "defect". If the converse is true, then the actor will not act opportunistically and cooperation will occur.

Given this, a second common constraint on opportunistic behavior that does not rely on third-party observation is "simple reputation". As a constraint, simple reputation is established when two parties are engaged in a repeat-player relationship, whereby the ability of either party to engage in future dealings with the other is dependant on their present good behavior. Given this, simple reputation will constrain opportunistic behavior in a given transaction, where the value of future transactions put at risk outweighs the possible benefits gained from acting opportunistically in the present. In short, if a future transaction with Party B is worth \$10 to Party A, then Party A will not steal \$5 from Party B in the present if doing so means Party B will not continue to do business with Party A in the future. Thus, so long as parties can form valuable

long-term relationships, whereby each can threaten not to do business with the other in the future, contracts can enforce themselves with far lower monitoring costs than those contracts that depend on enforcement by the State.

The ability of simple reputation to constrain opportunism is primarily a function of raising the potential penalty involved with defection. Simply put, by lengthening the relationship to encompass a larger (though, in the previous example, finite) number of transactions, simple reputation increases the potential cost of acting opportunistically. Simple reputation is, therefore, a relational constraint as the means of enforcement spills-over from one transaction into another. However, simple reputation is not just a synonym for relational contracting, but is, rather, just one of many types of relational mechanisms that can be included as part of a larger relational contract.

While all relational contracts operate under a similar premise of connecting more than one transaction as a means of preventing opportunism, most go further than simple reputation in constraining opportunism by increasing the degree of embeddedness between individuals and spillover between transactions. For instance, most simple relational contracts increase the costs of defection by both increasing the number of transactions involved to an infinite or indefinite quantity and by leaving every transaction in the present relatively incomplete. In cases of bilateral uncertainty, increasing the number of transactions to an infinite or indefinite quantity has the effect of eliminating the “Nash Equilibrium” problem involved with simple reputation.⁴⁴

⁴⁴ Simply put, the Nash Equilibrium problem is that, if the number of transactions is known to the parties, then each party will rationally wish to defect before the other in a case of bilateral uncertainty as to the other’s potential behavior (i.e. neither knows what the other will do). Consequently, because each transaction is dependant on the transaction occurring before it, the point of defection will cycle downwards to the point where no cooperation is possible. See, in general, John Nash, *Equilibrium points in n-person games*, 36(1) PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES: 48. (1950); see also John Nash, *Non-Cooperative Games*, 54(2) THE ANNALS OF MATHEMATICS 286 (1951).

However, taken against the decision-making model presented in this article, which is only concerned with opportunism and uncertainty from the unilateral perspective of a potential defector, the effect of increasing the number of transactions involved to infinite or indefinite number can be more easily understood as simply raising the magnitude of the potential penalty past what it would be if the number of transactions were known or finite in amount.⁴⁵

Leaving contracts relatively incomplete also has the effect increasing the potential cost of opportunism by increasing the magnitude of the potential penalty involved with defection. By transferring a portion of the cooperative surplus created in a present transaction into future transactions, the potential loss from defection is increased on both parties. Simply put, when present contracts are left incomplete, and their gains are never fully realized, part of the cooperative surplus is transferred into the future transactions making defection that much more difficult.⁴⁶

As alluded to previously, regardless of whether the relational mechanism is simple reputation, incomplete contract formation, or increasing the number of transactions to an infinite or indefinite quantity – all primarily deter opportunism by increasing the magnitude of the penalty involved with defection. None of the aforementioned mechanisms increase the cost of opportunism by directly increasing the probability of detection. The reason for this is simply that,

⁴⁵ While, mathematically, the loss facing a potential opportunist should theoretically be infinite (since the number of potentially lost transactions is infinite), when time and “bounded rationality” are taken into account, the expected loss will be finite for most individuals. Simply put, the further into the future the loss is, the more it will be discounted. Consequently, boundedly-rational individuals will simply cease to take into account potential losses occurring in the future past a certain point. Thus, all economic actors will assign some finite value to the loss, even when number of lost future transactions is infinite.

⁴⁶ For instance, suppose X and Y are engaged in a repeat-relationship, in which they have the option of completely contracting. However, the cost of completely contracting each transaction is \$2. They leave their contract incomplete. They have to spend less on transaction costs, so the cost of each transaction is \$1. The gains from each transaction are \$2. So long as the relationship continues, there will be a cooperative surplus of \$1 from every transaction. If the relationship ends, then they will have to complete their transactions ex post, in which case, the cooperative surplus will be reduced to \$0 if not a negative quantity.

while formal contracting mechanisms are heavily reliant on reducing uncertainty by lowering the cost of essential information – such as information regarding the presence of opportunistic behavior – relational mechanisms increase the magnitude of the potential penalty in order to be effective. Thus, relational contracts are likely to be more efficient than formal contracts when, for instance, the cost of increasing the rate of detection is high.

There are a number of relational mechanisms that individuals can use to prevent opportunism. However, all operate to increase the magnitude of the penalty involved with breach as a mode of deterrence. For instance, one commonly cited relational mechanism involves increasing the degree of “connectivity” (i.e. the degree of spillover) between transactions; i.e. not just increasing the number of transactions, but their relative connection to each other. Such a mechanism increases the costs of defection in the same manner that forming incomplete contracts does – by simply transferring a portion of the cooperative surplus from a present transaction into other transactions and into the relationship itself. Other mechanisms involve increasing the degree of connectivity (i.e. the degree of embeddedness) between the parties themselves, which deters opportunism in the same way that increasing the number of transactions involved does; but instead of losing out on future transactions, the potential penalty is the loss of the interpersonal relationships.

Much like formal contractual mechanisms, most relational mechanisms can be stacked on top of one another or linked together in order to prevent opportunism. It is possible, for instance, to increase the degree of embeddedness between individuals on top of establishing a simple relational contract. Additionally, many may also be used in tandem with formal mechanisms,

such as contingent contracting, or on top of formal contracts (as, in fact, most are) in order to further deter potential opportunism.

However, much like formal mechanisms, relational contracting mechanisms have costs and limitations. Simple constraints, i.e. simple relational contracts and simple reputation, are inexpensive to establish. They're also flexible, due to the lack of contractual completeness involved in each transaction, and therefore can accommodate change relatively easily. In contrast, increasing embeddedness between individuals can be difficult and costly (e.g. simply because I want to prevent another individual from possibly exploiting me does not mean I want to be that individual's best friend). Given that these mechanisms have costs, the efficiency of any given relational contract depends heavily on the degree of opportunism being deterred.

As stated previously, the greater the degree of variance involved in an industry, the greater the incentive for exhibitors to act opportunistically. Given this, the extreme variance between movies in the film industry generates powerful incentives for exhibitors to act opportunistically that cannot be eliminated by simple reputation or simple relational contracting. Consequently, simple relational constraints (i.e. simple reputation or simple relational contracts) are unlikely to significantly deter opportunism by exhibitors.

To illustrate, imagine that the film industry is composed of a single Studio and 52 exhibitors. Each year the Studio produces 52 movies – one for each exhibitor – 50 non-hits, which make 146 dollars each, one bomb, which makes \$1 and one hit that makes \$29,001. Whichever exhibitor receives the hit therefore has a \$29,000 incentive to act opportunistically and claim that the movie was a bomb. The penalty for acting opportunistically is never being able to do business with the Studio again in the future. Moreover, for the sake of argument, we

will assume that probability of detection is a 100%, even though, as discussed previously, it is unlikely to be that high.

Regardless of the high probability of detection and potentially “infinite” loss, the exhibitor with the hit is still likely to decide to behave opportunistically and keep the revenue for himself. The reason for this decision is that the average expected revenue for an exhibitor is only \$697 per year $[(50 \text{ movies} \times \$146)/52 + (\$1 + \$2901)/52 = \$697 \text{ per exhibitor per year}]$. At that rate, it will take the exhibitor 41 years to make \$29,000. Therefore, it seems likely that exhibitor with the hit will act opportunistically regardless of the threat of losing the Studio’s business. In short, the incentive to act opportunistically is simply too high when the degree of variance between movies is so extreme.⁴⁷

Obviously, there is a chance that the exhibitor may not act defect. A wide number of factors could be added to either increase or decrease the likelihood of opportunism. However, as an illustration, the point here is that greater the degree of variance, the greater the likelihood of opportunism and, thus, in an industry with variance as extreme as the Film industry’s – the danger of opportunism is substantial.

The incentive created by the industry’s extreme variance between movie revenues is only one reason for the danger of opportunism is substantial. Additionally, the threat of withholding all future movies may not always be credible and, thus, may not provide an adequate restraint on exhibitor opportunism. Approximately 24 states require a “movie-by-movie” open bidding process.⁴⁸ Given these statutes, it is unclear whether a Studio could even deprive an

⁴⁷ Granted, one could argue that such an incentive only exists in regards to hit movies, but since hits constitute 80% of the industry’s revenue, being deprived of that revenue on a continual basis would be extremely problematic for Studios.

⁴⁸ See Kraig G. Fox, *Paramount Revisited: The Resurgence of Vertical Integration in the Motion Picture Industry*, 21 HOFSTRA L. REV. 505, 532-33 (1992).

opportunistic exhibitor from access to its movies in these states. Simply put, if an exhibitor places a bid for a movie that is higher than any other exhibitor's, and the Studio denies the exhibitor that movie because of previous opportunism, the exhibitor could retaliate by claiming violation of the state's bidding laws (if not antitrust violations). Subsequently, the Studio could face having to pay fines to the state, damages to the exhibitor, and possible injunction(s). Thus, the costs involved with retaliation are likely to be high. In particular, the possibility of an injunction preventing the movie's release until the end of a prospective trial would be devastating on Studios considering the importance of release dates (e.g. a preliminary injunction on a Christmas movie that delays its release until Spring) and the specific investments Studios make in their movies through pre-release advertising.

Further, even if the threat were credible, the decision to withhold ALL of its future movies (i.e. terminate the relationship) may generate significant costs for a Studio considering the degree of ambiguity involved in the Studio-exhibitor relationship. Conceivably, considering the high degree of variance between movies, the threat to withhold a finite number of future movies would be unlikely to deter an exhibitor with, for instance, a hit from acting opportunistically and keeping the revenue. Thus, a Studio detecting opportunism by an exhibitor would need to terminate its relationship with that exhibitor and withhold *all* future movies to constrain such behavior. However, if the Studio makes a mistake – i.e. the exhibitor in question did not behave opportunistically – and withholds all of its future movies as a result, it will have no method for realizing this mistake and will be depriving itself of potentially valuable future revenue. Moreover, since Studios face a great deal of ambiguity in regards to any given movie's performance, this issue of mistaken-opportunism is particularly problematic as it will be difficult

to detect when a movie, say, performs badly in a given theater due to the demographics of the surrounding market, and when an exhibitor is stealing.

Given these issues, it would appear that stronger relational mechanisms for constraining opportunism would be required that would, at the same time, be relatively adjustable and not involve complete termination of the relationship in order to be credible. As will be demonstrated, the blockbuster and the multiplex provide such a constraint.

VII. THE BLOCKBUSTER AND THE MULTIPLEX

As stated previously, because only MEs have the theaters and multiplexes large enough to accommodate the typical blockbuster's opening weekend, MEs have received a tremendous benefit from Studios who, by shifting their production mix from mid- and low-budget movies to blockbusters, have created the opportunity for MEs to successfully force independent exhibitors from the market. However, by building these large multiplexes, the MEs have also placed themselves in a position of vulnerability where, if Studios were to cease producing blockbusters, the MEs would be forced out of business. This phenomenon would seem, at first, all the more perplexing since, in terms of box-office grosses, it would appear irrational for Studios to produce blockbusters at all.

Under a relational contracting model, the behavior of both parties can be explained. Specifically, the combination of multiplexes and blockbusters can be viewed as a relational mechanism that Studios and MEs use to prevent potential opportunism. The result is efficient as, without it, exchange (i.e. the distribution and licensing of movies) would otherwise be unlikely to occur as frequently.

As previously discussed, uncertainty gives rise to opportunism and the Film industry is a highly uncertain industry. Thus, the danger of opportunism is equally as high. Specifically, the high degree of variance between movies creates the possibility of substantial gains for exhibitors that act opportunistically. Moreover, the high degree of variance between movies, combined with the facts that every movie is its own unique product and “nobody knows” which movies will be hits, reduces the probability of detection facing potentially opportunistic exhibitors. Consequently, exhibitors have both a high positive incentive to act opportunistically (i.e. large potential gains) combined with a low probability of detection. In short, the high degree of uncertainty, created by the unique economics of the Film industry, gives rise to a significant risk of opportunism.

Prior to Paramount, Studios could constrain potentially opportunistic exhibitors through formal contracting mechanisms designed to reduce uncertainty. Studios could increase the probability of detecting exhibitor opportunism through vertical integration; i.e. by combining two firms into a single integrated structure, Studios could lower their observation costs and increase their ability to detect opportunistic behavior. Additionally, Studios could reduce the degree of variance involved in their transactions (i.e. volatility) through formal contracting by simply bundling movies together into a group – a practice known as “block-booking” – which would then be licensed to exhibitors for a simple upfront fee. By bundling movies together, variance was reduced, upfront pricing became possible, and thus the risk of opportunism decreased.

However, after Paramount, both types of practices were banned. Thus, opportunism reemerged as a central problem in the ability of Studios and exhibitors to form efficient

contracts. If uncertainty could not be efficiently reduced, then exhibitors would be likely to behave opportunistically and exchange would become unlikely to take place. Thus, Studios and exhibitors needed to find a way to constrain potential opportunism directly by either increasing 1) the likelihood of detection, or 2) the magnitude of the potential penalty, facing opportunistic exhibitors.

As previously discussed, there is little that can be done by Studios to increase the probability of detection, except at great cost (i.e. sending an agent to every showing at every theater for every movie distributed). Therefore, in order for a constraint to be efficient, it must increase the magnitude of the penalty involved with being caught.

Increasing the potential penalty through formal means, i.e. by using liquidated damages, is unlikely to produce efficient results due to, again, the high degree of uncertainty involved with contracting on a movie-by-movie basis, which prevents formal contracting mechanisms from being effective. Specifically, the high degree of variance between films produces the same type of problems of volatility and variance previously addressed in this article's discussion of formal up-front pricing mechanisms. Simply put, because neither party knows, *ex ante*, what a film is going to be worth, each will have such substantially different reservation points that bargaining will be extremely costly – if not impossible.⁴⁹

⁴⁹ To illustrate, imagine that there are 52 movies produced in a year; 51 non-hits making \$145 each and 1 hit that makes \$29,000; for 52 exhibitors, where each exhibitor gets one movie. Subsequently, the average yearly revenue per exhibitor is \$697. Conceivably, to prevent the exhibitor with the hit from breaching, liquidated damages will have to be set many, many times above the yearly per movie average. However, setting damages at this level creates the risk of moral hazard, whereby Studios will have an incentive to accuse every exhibitor of breach. However, to reduce this danger, damages would conceivably have to be set either near the per-movie average, or the average for non-hits. At which point the exhibitor with the hit from would cease being constrained from acting opportunistically. Loosely put, placing damages anywhere near the average doesn't add very much as exhibitors with non-hits probably weren't going to breach their contracts for the meager gain of \$145 anyway, but putting damages much higher than that creates a substantial risk of moral hazard that exhibitors would unlikely be willing to accept.

Most, if not all, relational mechanisms for deterring opportunism operate by increasing the magnitude of the penalty involved with being caught rather than by increasing the probability of detection. Thus, relational mechanisms are relatively unhindered by the presence of uncertainty and high information costs in deterring opportunism. However, as demonstrated in the previous section, simple relational constraints, including simple relational contracts and simple reputation, are unlikely to deter opportunistic behavior when the incentive on exhibitors to act opportunistically is so high and the probability of detection is so low. In short, merely threatening not to provide any movies in the future is unlikely to be sufficient to effectively deter opportunistic behavior by exhibitors. Thus, in order for exchange to take place, a stronger relational mechanism is necessary. However, because of the issue of ambiguity surrounding exhibitor behavior, and the problem of mistaken-opportunism, this mechanism cannot involve terminating the entire relationship. In short, the mechanism must somehow both be credible and scalable at the same time.

Blockbusters and multiplexes provided Studios and the MEs such a mechanism. By building multiplexes, which are uniquely suited for the exhibition of blockbusters, MEs place themselves in a position of unique dependence on Studios. In short, MEs purposefully increase the magnitude of the potential penalty involved with acting opportunistically so as to permit an otherwise efficient exchange to take place. Or, loosely stated, MEs signal their trustworthiness by building multiplexes and, by thus saddling themselves with large amounts of debt, increasing their dependency on the Studios.

Further, blockbusters produce a substantial benefit to MEs by as, due to the unique shape of the typical blockbuster's revenue curve, MEs have been able to push independent exhibitors

from the market through the bidding process and exclusive licensing. Consequently, MEs will not wish to jeopardize receiving this benefit from Studios by acting opportunistically.

Additionally, the blockbuster allows for corrections to occur in cases of mistaken-opportunism, as the Studio does not have to completely terminate the relationship in order to punish possible opportunists – all that needs to be withheld are *blockbusters*. Thus, the Studios will be able to correct for mistaken-opportunism far more easily than they would under a simple relational contract by either withholding blockbusters directly or by simply shifting their production-mix towards smaller budget movies.

In terms of means of constraint, by withholding only blockbusters instead of ALL its movies, the Studio is less likely to face adverse legal consequences as the choice to only withhold *some* movies is less likely to be observable by outside authorities. Moreover, since punished MEs would still have an interest in continuing to receive mid- and low-budget movies from a Studio, those MEs would be less likely to file suit and jeopardize that, albeit partial, relationship. In short, the blockbuster not only provides Studios a powerful threat that can be used to constrain ME behavior, it is also a threat that can be administered at a relatively low-cost.

The constraint that blockbusters provide is relational as it constrains opportunism by exhibitors not only over the course of a single transaction, but throughout relationship itself. In other words, the constraint established by blockbusters and multiplexes prevents opportunism from occurring not just in a single specific transaction between a given Studio and a given ME, but acts as a deterrent in every transaction and spans the entire relationship.

VIII. CONCLUSION: THE PRESENT AND THE UNRAVELING OF PARAMOUNT

In the late 90's, a so-called "indie revolution" began to sweep the film industry.

Declarants of this revolution believed that American audiences had suddenly changed and no longer were content to watch blockbusters. In supporting this assertion, these individuals pointed to two key facts. First, small budget, low-concept (i.e. "character-driven") movies began making hundreds of millions at the box-office. For instance, *American Beauty* (1999), a low-budget (\$15 million) movie about a suburban family and the weird kid next door, made \$130 million to become one of the highest grossing films of the year.⁵⁰ Second, all the Studios were pouring money into the development of "indie-wings". Consequently, proponents of the indie revolution asserted that the tastes of American audiences had suddenly and dramatically changed and that the Studios were scrambling to meet this new demand.

At first glance, these explanations would appear plausible, except that the development of indie-wings by the major Studios had begun almost half-a-decade earlier when Sony established Sony Picture Classics (1992), Miramax and Dimension were bought by Disney (1993), and Fox established Fox Searchlight (1994).⁵¹ Nor, was the success of low-budget movies anything new either. In fact, if one were to make a list of the top-10 highest grossing films (adjusted for inflation) since 1977, and eliminated those movies made after the Studios began first investing in indie-wings (i.e. those movies produced after 1992), mid- and low-budget movies dominate the list.⁵²

Under the model presented here, the real cause behind the Studios' investment in indies was that, beginning in the late 80's, the DOJ had started to significantly relax its restrictions on

⁵⁰ *American Beauty*, <http://www.boxofficemojo.com/movies/?id=americanbeauty.htm> (last visited May 19, 2009).

⁵¹ Internet Movie Database: www.imdb.com.

⁵² Inflation-adjusted Top 20 Movies Released Since 1977, <http://www.the-numbers.com/movies/records/> (last visited May 19, 2009).

the major studios. Specifically, the DOJ had begun to allow some of the Studios to begin purchasing theaters en masse.⁵³ By March of 1992, the second largest movie chain in America was owned by Matsushita, the parent company of distributor Universal; the sixth largest circuit was owned by Paramount and Warner Brothers; the seventh was owned by Columbia's parent, Sony; and the tenth was owned by Paramount.⁵⁴

No longer being barred from the exhibition market, the Studios faced less potential gains from preserving the Studio-ME relationship. As a result, the Studios began to spend less on the production of blockbusters and more on the production of mid- and low-budget movies, which, for the reasons addressed in Part II, provide far more box-office revenue. The supposed “indie revolution” of the late-90’s was the subsequent, and predictable, result of this shift. In short, American tastes had not been transformed overnight – all that had changed was the legal environment.

Having become heavily reliant on Studios for the production of blockbusters by building multiplexes, the MEs suffered a great deal by this change in the market. Subsequently, the Studio-ME relationship fell apart and, by late-2001, only one (AMC) of the 10 largest MEs in North America had not declared bankruptcy and maintained available financing.⁵⁵

Under the model presented here, *Paramount* gave birth to the blockbuster-multiplex relationship, and when its restrictions were relaxed, that relationship became inefficient. Without

⁵³ Michael Stremfel, *Movie Studios Direct More than \$ 1 Billion into Theater Chains*, L.A. BUS. J., Sep. 19, 1988, at 1. During this period, four of the major studios Matsushita (parent company of Universal), Paramount, Sony, and Warner Brothers made significant entries into the exhibition business; see also STANDARD & POOR’S, INDUSTRY SURVEYS—LEISURE TIME BASIC ANALYSIS, 24 (1992).

⁵⁴ *Id.*

⁵⁵ Katie Hollar, *AMC Watches as Top Theater Chain Regal Declares Bankruptcy*, available at <http://kansascity.bizjournals.com/kansascity/stories/2001/10/08/daily63.html>.

Paramount's ban on vertical integration, Studios would have simply reduced ambiguity in the market by integrating with exhibitors. Similarly, without Paramount's ban on "block-booking", the Studios would have simply bundled movies together in order to reduce volatility (i.e. variance) and established upfront pricing. As mechanisms for constraining opportunism, both of these options would have been less costly for Studios than the production of movies with \$100 million budgets. However, when Paramount was in full force, the production of blockbusters became the Studios' only feasible option.

