

# PROFIT-SHARING CONTRACTS IN HOLLYWOOD: EVOLUTION AND ANALYSIS

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## ABSTRACT

This article examines the development of profit- or revenue-sharing contracts in the motion picture industry. Contrary to much popular belief, such contracts have been in use since the start of the studio era. However, early contracts differed from those seen today. The evolution of the current contract is traced, and evidence regarding the increased use of sharing contracts after 1948 is examined. I examine competing theories of the economic function served by these contracts. I suggest that it is unlikely that these contracts are the result of a standard principal-agent problem.

## I. INTRODUCTION

ONE of my colleagues has suggested that the second-easiest way to start a fight at a pool party on the west side of Los Angeles is to argue in favor of the two propositions presented in this article: (1) “net-profits” contracts as used in Hollywood have been in use for more than 60 years, and (2) these contracts are reasonable responses to contracting problems that arise in the motion picture industry. Litigation about employment contracts in

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Hollywood is widely reported.<sup>1</sup> These suits are usually brought by people who had contracted for a share of the “net profits” from a movie. After the movie is, arguably, successful, the individual discovers that the “net profits” are small and perhaps zero. The common perception is that the studios use strange and arcane accounting practices to eliminate any profit. A contrast is often drawn between those who have little bargaining power—such as Art Buchwald—and sign contracts with “net-profit” shares and big stars—such as Tom Hanks—who are able to sign for shares of the “gross.” The latter are believed to be unaffected by studio chicanery. Indeed, the fact that some major stars get a percentage of the gross is considered one of the reasons the “net profits” are reduced.<sup>2</sup> These claims are appealing to the public. The plaintiff is usually an individual who had profit participation in a movie that has turned out to have large box office. How can *Batman*, or *Forest Gump*, not be profitable? In reality, however, the term “net profits,” as used in Hollywood to define a contingent compensation contract, is unrelated to “net profits” as defined by Generally Accepted Accounting Principles. “Net profits” is a contractually defined term, the meaning of which is well understood in the industry as this contractual form has been common within it since at least the mid-1950s.<sup>3</sup> Moreover, it is similar to contractual forms in use since the 1920s as the integrated production-distribution-exhibition corporation that epitomized the “studio system” developed. It is difficult to see how a one-sided contractual form would survive such a long period.

This article examines the evolution of profit- or revenue-sharing contracts in the movies. There has been virtually no analysis of the economics of the motion picture industry or the contract forms used in the industry. Most who have written about the contracts used in the motion picture industry have either been reporters, film historians, or legal professionals.<sup>4</sup> Thus, one

<sup>1</sup> Among the more widely known recent cases are *Buchwald v Paramount Pictures Corp (second phase)* C706083 (Cal Super Ct, LA Cty 1990); *Batfilm Productions v Warner Bros, Inc*, No BC 051653 (Cal Super Ct, Los Angeles Cty, March 14, 1994); and *Estate of Jim Garrison v Warner Brothers, et al* (USDC, Cent Dist Cal 1996). Further, it was widely reported that Winston Groom, the author of the book on which the movie *Forest Gump* was based, felt that he was not getting payments to which he was entitled (Nina Munk, *Now You See It, Now You Don't*, *Forbes* 42 (June 5, 1995)).

<sup>2</sup> Reed Abelson, *The Shell Game of Hollywood “Net Profits,”* *NY Times* (March 4, 1996), at C1.

<sup>3</sup> See Leon Brachman and David Nochimson, *Contingent Compensation for Theatrical Motion Pictures* (paper presented at the 31st annual program on Legal Aspects of the Entertainment Industry, Univ Southern California Law Center (Los Angeles, April 20, 1985), at 1 (“[N]et profit participations . . . are negotiated contractual definitions which have evolved within the motion picture industry and have little to do the real profit of a picture as measured by generally accepted accounting principles”).

<sup>4</sup> The economic analyses of the motion picture industry that have been done either have been of the form of an industry study tabulating the size and influence of various facets of the entertainment industry (for example, Harold Vogel, *Entertainment Industry Economics*

of the objectives of this article is to present an analysis of the evolution of various sharing contracts used in Hollywood. I argue that the evolution is, in part, the result of changes in the economic and regulatory environment in which the studios do business. That is, as the underlying economics and industrial organization of the industry changed, the contract that best balanced the costs and benefits changed.

I proceed in the following manner. First, I present an overview of the motion picture industry and some evidence on the historic performance of the studios. The third section describes current sharing contracts in motion pictures and their historical development. I also point out that some aspects of the contract that were ruled unconscionable in the *Buchwald* decision in fact make it possible for participants to audit reasonably the payments they receive, thereby ensuring that the studio is keeping its side of the bargain.

The fourth section examines the potential economic rationales for these contracts. In fact, there are two issues that call for the application of economic reasoning. First, there is the question why sharing contracts are used at all. That is, why does a presumably risk-averse individual take a contract that involves an uncertain payoff? There is, then, a second question, which is why a particular contract form is used. There are a number of competing hypotheses regarding these contracts. First, there is what I term the “rip-off” theory, to which I have already alluded. I argue that this is not an attractive rationale. In contrast to this view are a variety of analyses in which the contracts are the result of rational behavior. While others<sup>5</sup> have analyzed the contract using a fairly standard principal-agent framework, I am dubious about that view. Rather, I propose that these contracts serve two potential roles.

First, the contracts may represent a risk-sharing device in which some of the risk of a movie is borne by those who sign these sharing contracts. This

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(Cambridge University Press, 3d ed 1986)) or have concerned themselves with the *Paramount* decision and its fallout (for example, Arthur DeVany & Ross Eckert, *Motion Picture Antitrust: The Paramount Cases Revisited*, 14 Res L & Econ 51 (1991); Roy Kenney and Benjamn Klein, *The Economics of Block Booking*, 26 J Law & Econ 497 (1983); George Stigler, *A Note on Block Booking*, in *The Organization of Industry* 165 (1968)). The only economic analyses that focus on these contracts are the work of Darlene Chisholm (Darlene Chisholm, *Asset Specificity and Long-Term Contracts: The Case of the Motion-Pictures Industry*, 19 E Econ J 143 (1993); Darlene Chisholm, *The Risk-Premium Hypothesis and Two-Part Tariff Contract Design: Some Empirical Evidence* (Working Paper No 94-28, Massachusetts Inst Technology, Dept Economics 1994); Darlene Chisholm, *Profit-Sharing versus Fixed-Payment Contracts: Evidence from the Motion-Pictures Industry*, 13 J L Econ & Org 169 (1997)). After this article was substantially complete, I became aware of Victor Goldberg, *The Net Profits Puzzle* 97 Colum L Rev 524 (1997). The only economic analysis of the unpredictability of box office of which I am aware is Arthur DeVany and W. David Walls, *Bose-Einstein Dynamics and Adaptive Contracting in the Motion Picture Industry*, 106 Econ J (1996).

<sup>5</sup> Notably Chisholm, *Profit-Sharing versus Fixed-Payment Contracts* (cited in note 4).

risk sharing may be optimal if the studio executive who signs the contract is risk-averse (either because of risk aversion or because of a problem in the contract between the executive and the firm) or if it goes hand in glove with a reduced fixed payment to the “talent.” In a studio, as in any large business, executives are often given a fixed budget with which to work and so often have an incentive to convert fixed costs (salaries) to variable costs (shares of receipts). That is, there are two reasons that behavior that appears to be due to risk aversion may arise. First, studio executives may actually be risk-averse in a way that affects the contracts they write. Alternatively, as a result of the costs of monitoring studio executives, a system of fixed budgets for motion picture production may provide an incentive for studio executives to reduce the fixed component of compensation by offering contingent compensation that, by definition, is risky.

Second, these contracts may serve to solve an asymmetric information problem between the studio and the actor. The actor may have private information about how interested he is in making this particular movie, and the studio may have private information about the likely success of the movie. In this case, a sharing contract may provide protection against the informationally advantaged party. These two hypotheses have not been previously developed in the literature concerning movie contracts. While these explanations are more relevant for those with more bargaining power, most of the litigation has been about those with relatively little bargaining power who sign what are called “net-profits” contracts. I present some analysis of their situation in the fourth section.

In summary, this article (1) documents the long history of this contract form and presents evidence on its evolution, (2) suggests that the most common theories why these contracts exist are probably not valid, and (3) suggests some alternative hypotheses that are more consistent with industry practice.

## II. THE MOTION PICTURE INDUSTRY

There are three well-defined stages in the motion picture business: production, distribution, and exhibition. *Production* involves making a completed master of the motion picture that is to be distributed and exhibited. This is a complicated process requiring the input of a myriad of talented people and fairly large sums of money.<sup>6</sup> The production of a movie is or-

<sup>6</sup> The Motion Picture Association of America (MPAA) reports that in 1995 the average film released through an MPAA member (which includes virtually all firms of any stature in the industry) had a “negative cost”—the cost of making the master negative—of \$36.3 million. The average cost for prints, promotion, and advertising was about \$17.7 million, for a total expense of \$54 million. Motion Picture Association members released 234 of the 419 films in that year and virtually all films with sizable box office. The aggregate box office for

chestrated by a “producer” who may or may not be the person with the “Produced by” credit on the film.

*Distribution* takes as input the completed motion picture master from the producer. The distributor makes positive prints from the master and places them in the hands of the exhibitors. The distributor manages the physical flow of potentially thousands of copies of the movie, arranges promotional activities, and collects the moneys due from the exhibitors. The distributor also forwards some of the moneys collected to individuals associated with the movie.

*Exhibition* refers to showing the movie to patrons. An exhibitor firm takes as inputs a copy of a completed motion picture, a movie theater that it builds or leases, and the various labor inputs (ticket takers, ushers, projectionists, etc.) to produce seats at a showing of a movie. These seats are then sold to the public. As the structure of the industry has changed over time, some historical perspective is useful for readers who are not familiar with it.

The industry has gone through three main phases. Prior to about 1915, the industry was dominated by a large number of production companies that, for the most part, paid royalties to the trust that controlled all of the essential patents associated with moviemaking. At the same time, there was a set of smaller, independent production companies that operated outside of the trust. During the period from about 1915 to 1930 the industry became organized around a small number of vertically integrated firms that provided production, distribution, and exhibition. While many of the major stars had their own production companies before the rise of the “studio system,” by the 1930s most, though not all, stars were salaried employees of the studios. The studio system ended with the *Paramount* decision in the late 1940s,<sup>7</sup> which forced the separation of exhibition from production and distribution. During the 1950s the studios evolved into what they are today, essentially distribution companies that provide financing to some producers (“studio productions”), provide distribution services for independent producers under long-term contract, and pick up partly or fully completed movies for distribution.

One way to get a feel for how the industry has performed over time is to examine the output and revenues of the industry. In Table 1 I present the number of movies released by the major studios during the sound era up to 1980. During the period 1930–42 the major studios released an average of

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all films was \$5.5 billion. Even if I assume that all box office went to MPAA films, the average domestic box office was only \$23.5 million. Because the exhibitor returns roughly 50 percent of the box office to the studio, average *studio* gross from domestic theatrical distribution is less than \$12 million per picture.

<sup>7</sup> *United States v Paramount Pictures, Inc. et al*, 334 US 131 (1948).

TABLE 1  
 NUMBER OF MOTION PICTURES RELEASED BY EACH MAJOR STUDIO, 1930-80

Year	Columbia	MGM	Paramount	RKO	Fox	UA	Universal	Warners	Disney	Orion	Total
1930	29	47	64	32	48	16	36	39			311
1931	31	46	62	33	48	13	23	24			280
1932	29	39	65	46	40	14	39	55			327
1933	32	42	58	48	50	16	37	55			338
1934	43	43	55	46	52	20	44	58			361
1935	49	47	63	40	52	19	37	49			356
1936	52	45	68	39	57	17	28	56			362
1937	52	51	61	53	61	25	37	68			408
1938	53	46	50	43	56	16	46	52			362
1939	55	50	58	49	59	18	46	53			388
1940	51	48	48	53	49	20	49	45			363
1941	61	47	45	44	50	26	58	48			379
1942	59	49	44	39	51	26	56	34			358
1943	47	33	30	44	33	28	53	21			289
1944	56	30	32	31	26	20	53	19			267
1945	38	33	23	33	27	17	46	19			236
1946	51	25	22	40	32	20	42	20			252
1947	49	29	29	36	27	26	33	20			249
1948	39	24	25	31	45	26	35	23			248
1949	52	30	21	25	31	21	29	25			234
1950	59	38	23	32	32	18	33	28			263
1951	63	41	29	36	39	46	39	27			320
1952	48	38	26	32	37	34	39	26			280
1953	47	44	26	25	39	49	43	28			301

1954	35	24	17	16	29	52	32	20	2	227
1955	38	23	20	13	29	35	34	23	4	219
1956	40	24	17	20	32	48	33	23	5	242
1957	46	29	20	21	50	54	39	29	4	292
1958	38	29	25		42	44	35	24	7	244
1959	36	25	18		34	40	18	18	5	194
1960	35	18	22		49	23	20	17	7	191
1961	28	21	15		35	33	19	16	7	174
1962	30	21	17		25	36	18	15	6	168
1963	19	35	17		18	23	17	13	6	148
1964	19	30	16		18	18	25	18	6	150
1965	29	28	24		26	19	26	15	3	170
1966	29	24	22		21	18	23	12	4	153
1967	22	21	30		19	19	25	21	5	162
1968	20	27	33		21	23	30	23	6	183
1969	21	16	21		18	31	26	21	3	157
1970	29	23	15		15	39	16	16	5	158
1971	32	18	21		13	25	17	17	6	149
1972	26	24	14		25	22	16	18	9	154
1973	19	15	27		15	19	16	21	7	139
1974	19	5	25		20	26	12	22	6	135
1975	17	4	12		17	23	9	15	6	103
1976	15	4	19		20	23	12	15	5	113
1977	10.5	3.5	14.5		14	10	14.5	11	7	85
1978	12	5	14		8	13	22	17	3	94
1979	20	3	14		13	18	15	10	5	102
1980	14	6	15		16	16	18	17	3	113

SOURCES.—Joel Finler, *The Hollywood Story* (1988); Academy of Motion Picture Arts and Science, *Annual Index to Motion Picture Credits* (various issues); Richard Hollis and Brian Sibley, *The Disney Studio Story* (1988).

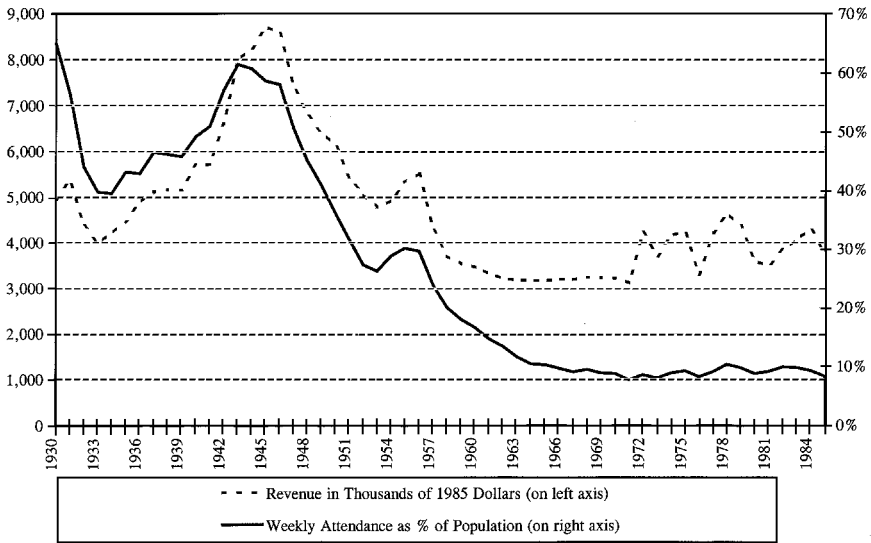


FIGURE 1

353 movies each year. War-related restrictions reduced the average to 264 over the period 1943–45. After the war, output fluctuated in the late 1940s and then declined as the advent of television and changing demographics reduced demand. This is shown by the average output of only 119 movies over the 1971–80 period. Figure 1 presents data on attendance and revenues for the major studios over the same period and tells a similar story with a significant decline in attendance and (real) revenues in the 1950s. I return to this point, and its possible role in the kinds of contracts movie studios write, in Section IVA1.

### III. CONTRACTING IN HOLLYWOOD

Net and gross participation contracts evolved over time. While it is a commonly held view that such participations are a recent development, this is not the case. As long as there have been studios, those with sufficient talent and bargaining power have been participating in the success of their movies. I start with an examination of a typical “net-profits” contract, the one that was the subject of the *Buchwald* litigation. Next, I summarize the most common forms of contingent compensation that currently exist. I then turn to the changes in the form of the participation contracts that occurred as the studio era ended in an effort to trace the development of the contract form.



### A. *The Buchwald Contract*

The Buchwald contract is typical of the net-profits participation contracts that were written by the major studios in the mid-1980s. In 1983, Alain Bernheim contracted with Paramount Pictures Corporation for the possible development of a movie based on an idea of Art Buchwald's. This contract is a standard "net-profits" contract for a major studio production in the early 1980s.<sup>8</sup> A sharing contract in Hollywood defines two things. First, it defines a pool of funds from which a participation is to be paid, and second, it defines the percentage of that pool that will go to the contracting party. Pool definitions generally fall into either of two categories, gross receipts or net profits.

The contract defines the gross receipts of the picture as the amount received by the distributor from various sources. Traditionally, the main source of revenues was that part of the box-office receipts (roughly 50 percent) that the theater rebates to the distributor. Other forms of exhibition (pay TV, network TV) are also accounted for, as is income from videocassette sales, which has come to be as important as theatrical income.<sup>9</sup> Some individuals with sufficient bargaining power contract to share in the movie's gross receipts. While this participation may be from the first dollar of gross receipts ("first-dollar gross"), more often it is triggered by the gross achieving some predetermined dollar level or a multiple of the direct costs of production of the picture.<sup>10</sup>

The transformation of "gross receipts" to "net profits" requires subtracting a number of expense items. These fall into four categories. First, there are the distribution fees and expenses. These include (1) the distribution fee (30 percent United States and Canada, 35 percent the United Kingdom, and 40 percent elsewhere), (2) direct advertising and publicity expenses, (3) the cost of prints, and (4) overhead charges of 10 percent of direct ad and publicity costs. Next are the costs of getting the master print created. These include (1) the direct costs of production (the "negative cost"), which includes all development and production costs, including all

<sup>8</sup> Without commenting on how representative the contracts are, the complaint in *Garrison* (cited in note 1) presents net-profits definitions from each of the major studios and a table comparing their terms.

<sup>9</sup> As with merchandising, the movie's gross is credited with a percentage of the revenues from videocassette sales, rather than crediting all the revenues to the gross and later then deducting all the costs. In effect, the studio contracts to "sell" the videocassette rights for a 20 percent royalty. Often, the "purchaser" of the videocassette rights is the studio, or an affiliate.

<sup>10</sup> There are some small items subtracted from the gross receipts such as trade dues, contributions to the MPAA, and so forth. I have been told that roughly 20 performers and five directors are able to get "first-dollar" gross, although that number appears to be on the rise.

gross participations,<sup>11</sup> (2) the overhead charge, which is specified as 15 percent of the cost of production (including gross participations), and (3) interest expense. Paramount subtracts from the revenues interest on the direct production and overhead at the rate of 125 percent of prime. While the interest is stated last, in fact it is recovered *before* any production costs are credited. That is, if any funds from gross revenues remain in an accounting period after paying of gross participations and the distribution-related expenses, those funds are first used to pay off the outstanding interest bill, and only after the interest is covered do they go to pay down the negative costs.<sup>12</sup> Thus, the “net profit” is zero until the movie has recovered all the costs of distribution, the overhead and the direct negative cost, and interest charges on the negative costs and overhead.<sup>13</sup>

The studio’s revenues, then, come from four sources: (1) the studio receives a distribution fee which is a percentage of the revenues of the movie; (2) the studio recovers its direct expenses for prints and advertising and an overhead on advertising; (3) the studio recovers the direct costs of production, along with an overhead charge and an “interest” charge on the resources advances in making the movie; and, finally, (4) the studio usually maintains a share of the net-profits pool.

Thus a negative net-profits pool does *not* mean that the studio has not made a profit on the movie as computed under Generally Accepted Accounting Principles or even an economic profit. For example, for the purposes of financial reporting, there is no “interest” cost if the studio is financed entirely with equity, though to an economist the opportunity cost of capital is a cost of doing business. Alternatively, the actual expenses for those items that are classified as overhead may differ from that specified in the contract. Moreover, the distribution fee, which is deducted before the computation of “net profit,” is a revenue source to the studio.

One way to understand this contract is to look at it in the light of the services provided by the modern studio. Consider an individual who has an idea for a motion picture. In order to actually make and distribute the

<sup>11</sup> Thus, for the purposes of computing the “net profit,” there is no distinction between compensation paid as salary and compensation paid as a result of “gross” participation. There is also a proviso that no expense can be counted as *both* a distribution and a production expense (“no double deductions”).

<sup>12</sup> This is similar to the amortization of a loan in which the current payment is first applied to the interest and only if there are funds left over after bringing the interest up to date is the remainder applied to principal.

<sup>13</sup> Although contracts written on the gross appear different from contracts written on the net-profits pool, one can always convert a “net-profits” contract into a contract written on the gross receipts. Of course, it will not be written on “first-dollar” gross, but rather the contingent payment will be delayed until some multiple of production and distribution costs are recovered.

movie, she has two choices. On the one hand, she can avoid the studio completely. In that case, she must arrange financing, develop the idea into a script, hire a director, arrange for the actual production of the movie, and, finally, engage a distributor to distribute the motion picture. On the other hand, she can arrange for a studio to provide financing and other services. The producer, if she has little or no track record, might well end up with terms similar to that of Alain Bernheim in this case—an up-front payment and a percentage of the “net profits.” In return, the studio finances all the costs of production, arranges for the resources needed to produce the film, and then distributes it.

If studio’s charges, including the interest rate and the distribution fee, are those that rule in a competitive market, then the producer should not prefer to produce the movie herself. The studio is providing an array of services and charging market rates for them for them. Given the ease of contracting for services, the “one-stop shopping” nature of a studio production may even offer a sufficient benefit such that the studio’s charges need not meet the market rate for each service in order to remain competitive.<sup>14</sup>

In *Buchwald*, some of aspects of the contract that Judge Schneider found unconscionable were charging a fixed, predetermined overhead on production costs and advertising expenses, charging production overhead and interest on payments to gross participants, and charging interest at the rate of 125 percent of prime, rather than at Paramount’s actual cost of funds. I believe that the judge was wrong in all of these cases. In any contract like this, which calls for some sharing of cash flows, there must be some way for the receiving party (in this case the performer or producer) to ensure herself that she is being paid in full. Further, the payer (the studio) may not want to reveal everything about its operations to the payee. The three clauses of the contract described above make it possible to audit the contract to ensure proper compliance without requiring the studio to divulge expenses or revenues for any other movie.

First, the overhead allocation on the both the production cost and on the advertising expense is structured as a *predetermined* function of direct expenses. This is in contrast to normal cost accounting. Under normal cost accounting practices, the overhead for a given picture depends on how costs are allocated across *all* of the pictures in a given year, and the negative cost

<sup>14</sup> Actually, even if the studio simply charges market rates for its services, professionals may be willing to contract on different terms for a production that is backed by a studio than for one without studio backing. A leading star, for example, is more confident that the movie will actually be finished and distributed and hence may not require as much pay. Even those with relatively little bargaining power may work for less on a studio production because they do not bear the risk of noncompletion or difficulties with payment for services. Thus, the backing of a major studio, per se, may reduce costs.

used in computing the contingent compensation would be a function of how many other productions were going on at the time. This means that it would be to the participant's advantage to have many other pictures under production to which overhead can be allocated. Moreover, auditing the contingent payment requires knowing the negative cost, which, in turn, requires knowing the costs of *each* movie produced in a given year. Thus it would be costly for the participant to ensure that she is getting the appropriate payment, and the studio would be required to reveal information on other movies. This means that if contracts did not predetermine an overhead percentage, there might be no effective audit right for the participant. In the modern contract, of which Buchwald's is representative, detailed allocation of common costs is not required. This is in contrast to similar contracts from the 1920s, 1930s, and 1940s, which specified overhead charges as determined by the studio's accounting firm.

Because the gross participation payments are included in the negative cost of the movie, both overhead and interest are charged on them. Charging overhead on gross participation payments serves to provide, *ex ante*, the appropriate amount of overhead. This may seem odd. After all, how can the studio charge 15 percent overhead simply for writing a check? However, to the extent that the gross participation is a substitute for salary, adding the participation to the production costs makes sense. The purpose of the overhead allocation is to capture those costs associated with a given picture that are difficult and/or expensive to track. These are probably related to the "scale" of the movie. If a performer receives a gross participation, the fixed component of his salary understates his total compensation, and this leads to an understatement of the "scale" of the movie.<sup>15</sup> Including the participation in the base on which overhead is calculated offsets this bias. Further, it is reasonable to assume that an actor is more willing to take a participation rather than salary on a movie that has the backing of a major studio (the picture is more likely to actually get made and distributed, and when distributed it will have the support of a major studio distribution system). Then one can easily imagine that, had the producer not had the support of the studio, she would have had to pay the star a larger salary during the cost of production and would have had to raise the funds for those payments. Thus the interest charge on the gross participation is simply a mechanism for the studio to capture the economic benefit that it provides to the producer.

<sup>15</sup> One problem with this view is that it implies that there should also be overhead charged on contingent payments made to "net-profits" participants. This could lead to circularity problems in the definition of net profits, and a similar result can be obtained by changing the percentage overhead charge to take this failure into account.

Finally, there is the fact that the financing charge is a predetermined function of the prime rate and is not related to the studio's cost of funds. However, it does not make economic sense to tie the interest rate to the interest rate the studio pays for borrowed funds. First, what would happen if a studio had no net financing, was flush with cash? That would not mean that the opportunity cost (the relevant economic cost) of the resources tied up in the movie was zero. Moreover, there is a real difference between any loan the studio makes from a lender and this contract. Because a negative net-profits pool does not permit the studio to recover from the participants, the "loan" associated with the movie is actually nonrecourse and is thus different in nature from any borrowings by the studio, which are backed, in the end, by all of the studio's assets.

In fact, these clauses all contribute to an ability to determine separate contingent compensation pools for each picture, which allows the studio to maintain confidentiality from one movie to the other.<sup>16</sup> In effect, each movie is a separate firm, with its own "profit" statement. I examine the potential role of incentive contracts in this situation, after I turn to the evolution of the "net-profits" contract.

### B. "Net" and "Gross" Contracts

The contract in *Buchwald* is a "net" contract in that the contingent payment is a portion of the "net profits." This is in contrast with the "gross" contracts that big stars are able to get, which pay a percentage of the gross revenues, sometimes from the first dollar of studio receipts. However, as the description makes clear, the net-profits participant does, in fact, get a percentage of the gross revenues, but only after the gross exceeds the direct and indirect costs of production and distribution and a distribution fee. There are also contracts that pay a percentage of gross revenues once gross revenues exceed a certain fixed-dollar amount or once the gross exceeds a fixed multiple of production costs. Finally, there are some contracts that pay a fixed percentage of the gross after the gross has exceeded an amount equivalent to the point at which the net-profits pool turns positive. This is equivalent to a net contract that, once the net-profits pool has turned positive, has a zero-distribution fee, expenses, and interest rate.

A useful way to look at the distinction between net and gross contracts is to focus on uncertainty about the level of gross receipts required to trigger payment. One can contract for a contingent payment once gross reaches

<sup>16</sup> I am not contending that this is the *only* contract form that allows for determination of the profit or revenue share while maintaining the confidentiality of information about other movies. Also, tying the rate to the readily observable prime rate is a way to avoid a costly "battle of the experts."

a certain fixed-dollar amount. In this case there is no uncertainty about how well the movie must do to generate a contingent payment, but there is, of course, still uncertainty about how well the movie actually *will* do. One could also write a contract in which the payoff is contingent on gross receipts reaching some multiple of production cost. Depending on the relation between box office and production costs, this may lead to different allocations of risk between the participant and the studio. Carrying this further, we see that, in the net-profits contract, the point at which payment will be triggered depends on the cost of production, the period of production (which affects the “interest bill”), and the promotion and advertising expenditures. All of these expenditures are, to a greater or lesser extent, under the control of the studio. Thus, a potentially interesting question, and the focus of Victor Goldberg,<sup>17</sup> is the question why a contract that not only pays off fairly infrequently but also allows one party to, in effect, alter the terms of trade *ex post* continues to survive. I return to this question below.

### C. *Participation Contracts during the Studio Era*<sup>18</sup>

The modern net-profits contract exemplified by the Buchwald contract is the result of years of evolution in contract terms. In order to trace this development I examined a number of contracts found in the Warner Brothers Archives at the University of Southern California Library<sup>19</sup> and at Warner Brothers Studios. I have also found some examples of profit-sharing contracts at other studios. While I have no reason to believe that the Warner Brothers contracts are unrepresentative of the kinds of contracts that were written during the studio era, it does appear that the use of sharing contracts varied from studio to studio. I have found no reference to sharing contracts at MGM, the strongest and most prestigious of the studios. In contrast, the financially weaker, and thus more cash-constrained, studios such as Warner Brothers, RKO, and Universal did employ these contracts.

The contracts discussed below are not a small sample from a vast number

<sup>17</sup> See Goldberg (cited in note 4).

<sup>18</sup> This section summarizes a separate appendix on studio-era sharing contracts with excerpts of contract language and a discussion of the various contracts. That appendix is available from me on request.

<sup>19</sup> These archives contain virtually of the internal documents for Warner Brothers from its founding to 1965, except for employment contracts, which end in 1950. The contracts discussed below were found by tracking down references to sharing contracts in books and articles about Hollywood, references in internal Warner’s documents, or specifically looking at Warner’s biggest stars (Bette Davis, Errol Flynn, James Cagney). In no sense, then, are the contracts presented the result of a systematic search of the Warner Brothers Archives, which is beyond the scope of this article. I do believe that I have seen the majority of the participation contracts that Warner’s wrote prior to 1948. The contracts discussed below, while not representing *all* that I have seen, certainly represent the majority of them.

of participation contracts. These contracts were not common in the studio era, but they were present. Indeed, the increase in these contracts after the studio era is one characteristic that I address in Section IV. For the purpose of this discussion, the major distinction between net and gross contracts is that net contracts subtract distribution fees and/or expenses before determining the contingent compensation.

### 1. Examples of Contracts on Gross Receipts

There are a number of contracts that compute the contingent payment as a percentage of gross receipts. In most cases, the contingent payment does not begin until the movie's gross revenues exceed some threshold, either a fixed-dollar amount or a multiple of production cost.

As early as 1930 both John Barrymore and Al Jolson had contracts that paid a percentage of the gross revenues from their movies. Jolson's was for a percentage of the excess over a fixed amount, while Barrymore's was for 10 percent of the gross from the first dollar. In 1939 James Cagney signed a contract covering 11 movies for \$150,000 per movie plus 10 percent of the gross receipts over \$1.5 million.

In 1941 Hal Wallis, who had been a high executive at Warner's, contracted to produce four movies a year for a salary plus 10 percent of the gross once the gross reached 125 percent of the negative cost. While some expenses were to be deducted, there was no distribution fee nor a charge for prints and advertising. Overhead is specifically included in the negative cost, but it is to be an amount determined by Warner's auditor, Price-Waterhouse. There is no mention of interest expense as a component of negative cost.

Mae West had a contract at Universal in 1939 that provided for her to receive a percentage of the gross once the gross reached a multiple of the negative cost.

### 2. Examples of Contracts that Resemble Net Profits

The earliest contract that resembles the modern "net-profits" contracts is one between Warner's and David Belasco in 1923. This contract gave Belasco a percentage of the "net profits." It had the basic form of the current "net-profits" contract. The gross was defined in a manner similar to current contracts, and Warner Brothers was able to subtract the costs of making and distributing the movie, along with a distribution fee of 5 percent. There was no specific mention of overhead on production cost, but it was specifically excluded from the distribution expenses. While Belasco had audit rights to make sure that the contract, as written, was properly followed, he had no right to examine the relation between the distribution fee



and Warner's actual cost of maintaining the distribution network. Thus he could not determine Warner's true profits on the movie.

In 1942 Errol Flynn's contract specified that on every fourth picture at Warner's he would receive a percentage of the "net gross." This term was defined to be the gross revenues less all negative, advertising, and distribution costs and a 20 percent distribution fee. In June 1942 Bette Davis signed a contract with a similar definition of the profit pool.<sup>20</sup> In 1948 the director Michael Curtiz signed a similar contract, though the distribution fee was higher. In no instance was there any mention of the interest charge that is in the Buchwald contract. In all cases overhead was determined, as in the Cagney contract, by the studio's auditors.

### 3. An Independent Production: Frank Capra—*Meet John Doe*

With the exception of the contract with Belasco, all of the Warner's contracts that I have seen so far have been with Warner's employees. While, during the studio era, some studios financed and/or distributed movies made by nonemployees, as a rule Warner's did not. With the one exception of *Meet John Doe*, Warner's did not finance independent productions until after the *Paramount* decision. In my discussion of the Buchwald contract I compared the structure of the modern net-profits contract with the process that an independent producer would have to go through to get a movie made and distributed.<sup>21</sup> Warner's contract with Frank Capra Productions for *Meet John Doe* in 1940 has the studio providing some financing, providing the soundstage and technicians (at cost), and distributing the movie. This is similar to the relation the studios established with producers after the demise of the studio system. Capra also obtained some financing outside of the studio. Capra was responsible for 20 percent of the promotion and advertising expenses, and there was a 20 percent distribution fee. Capra would not get any proceeds until (1) the bank received principal and interest and (2) Warner's recovered (a) a 20 percent distribution fee, (b) 80 percent of the prints and advertising, and (c) any cash advances it made and the cost of any services or labor provided by Warner's during production. Thus the contract had the features of a net-profits contract. It deals with overhead by expressly setting the overhead rate at 0 percent, and there is no interest charge payable to Warner's for any investment it makes in the movie.

There is another way in which this contract is a forerunner of the Buchwald contract. In any contract in which production costs play a role, one

<sup>20</sup> Although the Davis contract allowed for a distribution fee and expenses to be deducted before her share was determined, it still referred to her having a share in the "gross receipts."

<sup>21</sup> See Section IIIA above.



problem faced is how these costs are determined. In modern contracts the studio has a rate card for renting out soundstages, and this is the charge that is made. At the time of the Capra contract, Warner's did not normally rent out its soundstages, so the contract provides that Capra is not obligated to use Warner's facilities or equipment if he can get them elsewhere for less money.

At the end of the 1940s Warner's financed productions by, among others, United States Productions and Alfred Hitchcock. In these cases the contracts also provided for partial or complete financing and did not provide for interest charges on any advances by Warner's. Unlike the contract for *Meet John Doe*, however, the contracts provided for the normal studio overhead as determined by the studio's accountants.

#### 4. Evidence from Other Studios

I have not found evidence of sharing contracts at the other major studios (Columbia, MGM, and Paramount). I have no view on the likelihood of such contracts at either Columbia or Paramount. However, I feel that it is unlikely that there were any sharing contracts at MGM. For most of the studio era, MGM was the most profitable and the highest regarded of all the studios.<sup>22</sup> For much of this period the biggest star at MGM was Clark Gable, yet King notes that Gable never had a sharing contract until he left MGM in 1954.<sup>23</sup>

#### 5. Summary of Studio Era Contracts

We have seen that even in the studio era some stars were able to negotiate contracts that explicitly gave them a percentage of either revenues or a net-profits pool computed in a manner that is similar to that in the modern contract. There are some differences. In contrast to the modern contract, the point at which participation begins is usually defined as a multiple of the production cost. As we have seen, the modern contract form determines the break-even point, at which the participation begins, in terms of the recovery of a number of specific charges, with no multiplier. Also, in none of these contracts is there any mention of the interest charges that I find in

<sup>22</sup> H. Mark Glancy, *MGM Film Grosses, 1924–1948: The Eddie Mannix Ledger*, 12 Hist J Film, Radio & Television 127 (1992) (presents data on costs and profits of each movie at MGM); H. Mark Glancy, *Warner Bros. Film Grosses, 1921–1951: The William Schaefer Ledger*, 15 Hist J Film, Radio & Television 55 (1995) presents similar data for Warner's.

<sup>23</sup> Barry King, *Stardom as an Occupation*, in Paul Kerr, ed, *The Hollywood Film Industry* (1986), also states that Carol Lombard, who worked as a freelance actress in 1937, did have a percentage, though he does not describe the nature of her participation.

modern contracts. Finally, in all save one of the contracts I have seen, overhead is not a fixed percentage of the negative cost.

#### D. *Modern (Post-1950) Contracts*<sup>24</sup>

The modern “net-profits” contract dates from 1950. Jimmy Stewart’s agent, Lew Wasserman, negotiated a deal for the movie *Winchester ’73* with Universal. At that time Universal was in financial difficulty and could not afford Stewart’s normal salary of \$250,000.<sup>25</sup> Instead, Stewart got no fixed salary but did get 50 percent of the “net profits.” Net profits were contractually defined as gross receipts in excess of twice the negative cost.<sup>26</sup> Mel Sattler, who negotiated the contract on behalf of Universal, put it this way: “Universal accepted the proposal because it permitted the company to put substantially less at risk by reducing its immediate production costs. So-called “net-profit” deals were thus borne [*sic*] of a studio’s desire for risk reduction.”<sup>27</sup>

The break-even point of twice the negative costs was chosen because—given the projected budget for the movie and what was known about the costs of prints, advertising, and distribution—this would be the point at which the studio would actually recover its costs. Thus in this case, as in all the contracts that I cited from the studio era, the break-even point (at which the “net” pool turned positive) was defined as a multiple of the negative costs. Moreover, the overhead portion of the negative cost in this contract was set at a percentage of the direct production costs. Thus Stewart

<sup>24</sup> Much of this section is based on Mel Sattler, *Declaration of Defendant Paramount Pictures Corporation Re: Phase II Hearing on Legal and Contract Issues*, in *Buchwald* (cited in note 1); and Mel Sattler, interview (May 1, 1995). I thank Mel Sattler for the time he spent with me on this subject.

<sup>25</sup> *Winchester ’73* is important for more than Stewart’s contract. It was the first of a series of westerns directed by Anthony Mann, usually starring James Stewart, that reinvigorated the western genre. It also initiated the most successful decade of Jimmy Stewart’s long career. More detail on this collaboration can be found in Jim Kitses, *Horizons West* (1979); and Jon Tusk, *The American West in Film* (1985).

<sup>26</sup> Thus the contract is not really a “net-profits” contract after all but, rather, a type of adjusted gross. This 50-50 split of gross over twice the production costs became a common contract with independent producers in the 1950s.

<sup>27</sup> Sattler, *Declaration*, at 5 (cited in note 24). Note that this reverses the usual risk-sharing motivation. In this case, Sattler argues, the studio was less able to bear risk than the actor. In the next section I present some evidence on why this might be the case. Sattler, in his statement and in an interview with me (cited in note 24), emphasizes one unique aspect of the Stewart contract. As opposed to other contracts during the studio era that I have cited, and as opposed to the norm that followed on this contract, Stewart received no up-front compensation.

did not have to rely on Universal, or on Universal's accountant, to determine the appropriate overhead charge.<sup>28</sup>

This contractual form quickly spread, except that by the mid-1950s stars were getting the percentage as compensation in addition to the fixed salary. However, in general the definition of the break-even point continued to evolve. Again, from Sattler:<sup>29</sup>

So called "Net-Profits" deals soon ceased being a way to share the risk of failure. . . . By the mid-1950's, talent representatives were demanding that "Net Profits" be paid in addition to, and not in lieu of, "up front" fixed compensation. The studios acceded, but soon found themselves bound by deals that called for "up front" cash payments and "back end" compensation that drained the revenues from successful motion pictures that was necessary to finance the studios customary development program and slate of motion pictures.

In the market-driven balancing of risks and rewards the studios began insisting on and receiving terms that increased the amount of revenue necessary to reach "break-even" in the computation of "Net Profits." For example, distribution fees . . . increased. Interest charges were levied on the money both borrowed and advanced for production costs.

At the same time that movie stars were getting participations, there was a change in the nature of film distribution agreements. As Tino Balio points out in his history of United Artists,<sup>30</sup> that firm initially had a policy of not advancing money to producers. However, from the 1930s on, United Artists found it necessary to advance funds to some producers in order to ensure the necessary flow of films to the distribution network. These arrangements were usually with producers who had a proven track record and would sign multipicture deals. United Artists thus became the prototype of the modern studio, providing financing services to a number of independent producers.

Samuel Zagon, looking back on the changes in distribution contracting that occurred during the 1950s, notes that, at the start of the 1950s,<sup>31</sup>

[t]he distribution rates would probably have been 25% United States, Canada and Great Britain, and varying from 30% or 40% in the balance of the world.

Perhaps more importantly, most of the distribution charges, such as for prints,

<sup>28</sup> While I have not seen the contract, this point about the overhead was related to me by Sattler (see the interview, cited in note 24). I am not sure whether the use of the percentage for overhead was initially suggested by him or Wasserman.

<sup>29</sup> Sattler, *Declaration*, at 5 (cited in note 24).

<sup>30</sup> Tino Balio, *United Artists: The Company Built by the Stars* (1976).

<sup>31</sup> Samuel Zagon, *Selected Problems in Theatrical and Film Distribution Contracts* (paper presented at the sixth annual program on Legal Aspects of the Entertainment Industry, Univ Southern California Law School, June 4, 1960), at 1.

advertising, screenings, dubbing charges, etc., would have been “off the top”—that is to say, reimbursed before computation of the distribution fee.<sup>32</sup>

However, the decline in the fortunes of the industry during the 1950s brought changes, as Zagon notes that by the 1960s there was<sup>33</sup>

(a) a much bigger piece of the pie for the distributor at the expense of producer through:

(i) increase in the distribution fees by approximately 25% of the amounts stated above [*the 25 percent and 35–40 percent in the previous quote*]

(ii) (and again, perhaps more importantly than the stated increase in distribution rates) the allocating of all of the charges of distribution . . . that is to say, the distribution fees were measured from the first dollar of gross income, and only out of the remaining 70% to 50% of gross income were the charges for prints, advertising, etc., deducted. . . .

(b) The second development . . . was the virtual elimination for a long time of bank and institutional lending as a source of financing of motion pictures. Thus, to get pictures, United Artists, and then, to a great extent, most of the other major distributors, had to embark upon a program of lending, or obtaining the loans generally with its guarantees—to or for the producers of the pictures. . . .

As a concomitant of this latter development, the distributor uniformly in such cases, has acquired percentages of the profits (this, of course, being in addition to the distribution fees) ranging up to 50%.

During the 1950s the major studios followed the lead of United Artists and housed independent productions along with their studio productions. Robins’s<sup>34</sup> study of Warner Brothers output from 1946 to 1965 yields a sample size of 207 independent productions financed by Warner Brothers and 162 studio productions. As the studios supplanted banks in providing financing for the productions, it was reasonable for them to charge for the funds advanced. Thus, contracts with producers would have included a charge for interest.

The developments referred to by Sattler and Zagon, which led to the modern contract, took time, and other forms continued to survive. For example, in 1961 Warner’s agreed to finance and distribute *The Chapman Report* for Darryl F. Zanuck Productions, Inc.<sup>35</sup> While the contract is not avail-

<sup>32</sup> That is, the distribution fee would be applied, not to the entire income, but to a smaller amount, thus reducing the fee.

<sup>33</sup> Zagon, at 2.

<sup>34</sup> James Robins, *Organization as Strategy: Restructuring Production in the Film Industry*, 14 Strategic Mgmt J 103 (1993).

<sup>35</sup> Zanuck, one of the last of the remaining movie moguls, had been at Warner’s until the early 1930s when he left to run 20th Century. He remained in control of 20th Century-Fox until 1955. Because there is a reference in the internal Warner’s deal summary (P. D. Knecht, preparer, *Summary of Contract with Daryl F. Zanuck Productions*, one page, no date, Warner Bros. Archives at Univ Southern California Cinema Library) stating the fact that Warner’s does “not finance items wasted by reason of move-over from 20th Century Fox,” I assume that this is a pick-up deal.

able, I do have an internal deal summary that sets out how gross was to be split. Except for the items referred to,<sup>36</sup> Warner's provided 100 percent financing of a budget set at \$1,800,000–\$2,000,000. The gross revenues were to be applied as follows:

1. WB—2½ times direct production cost.
2. WB—4 percent interest on advances
3. WB—Foreign dubbing, superimposing costs and TV residuals
4. Balance—50-50 subject to penalty clause.

Note: Irving Wallace, author, receives 5% of gross in excess of \$3,500,000 (\$16.4 million) which comes off the top.<sup>37</sup>

The contract does not provide for either a distribution fee or overhead in determining how much Zanuck will receive. Presumably the extra 1.5 times production cost is designed to cover this.

However, by the mid-1960s Bette Davis was to sign a contract that is, essentially, a modern net-profits contract, which uses that phrase, and has a financing charge.<sup>38</sup> Similarly, an internal Warner's memo in 1964 describes the contract for *Robin and the Seven Hoods* as “a ‘double negative’ deal, with 7½% off the top to Dean Martin.” The fact that it can be referred to this by a standard nomenclature is more evidence that these contracts were commonplace.

Finally, in 1960 Edward Alperson contracted with the Mirsch Company for a net-profits position in *Irma La Duce*: “Mirsch contracted to pay Alperson . . . 25% of 100% of the net profits . . . defined net profits as gross receipts . . . less the aggregate of distribution fees and expenses, interest on production loans, and other expenses.”<sup>39</sup>

Subsequently Mirsch contracted with Billy Wilder's loan-out company for a share of gross receipts over an “artificial break-even” of twice the production cost.<sup>40</sup> So we see that by the early 1960s the modern contracts, in all their particulars, were in use.

#### IV. THE ECONOMICS OF SHARING CONTRACTS IN HOLLYWOOD

We have seen that sharing contracts existed in the movie industry at least since the mid-1920s. While they evolved over time, the main forms of contract, the “net profits” and the “gross participation,” existed by the early

<sup>36</sup> Id.

<sup>37</sup> Id.

<sup>38</sup> Contract for *The Dead Pigeon*, January, 25, 1963. The interest rate was fixed, not floating with the prime rate.

<sup>39</sup> *Alperson v Mirsch Co*, 250 CA2d 84, at 87 (Second Dist 1967).

<sup>40</sup> Id.

1930s. We also know that they were uncommon, being reserved for only the most important talent in the industry. Any examination of these contracts must provide some insight into the increased use of these contracts after the demise of the studio system.

In this section I examine alternative explanations for the use of sharing contracts in Hollywood. The most common economic explanation for sharing contracts in general is they serve to provide the appropriate alignment of incentives between the principal and agent, induce greater effort from the agent, and thus lead to higher total cash flows. I suggest that this is not the most likely explanation for the contracts in this industry. Before proceeding with the analysis, however, I examine some evidence on how the motion picture industry changed after the studio era.

#### *A. Changes in the Industry following the Demise of the Studio System*

##### 1. Fewer Pictures

One result of the demise of the studio system and the reduced demand for motion pictures was a reduction in the number of motion pictures distributed by the major studios. Table 1 shows the number of movies distributed by each “major” studio on an annual basis for the period 1930–80. The number of releases reached a maximum of 408 in 1937. It declined slowly until the war limitations took effect in 1943, when the number of releases fell to 289 from 358 in 1942. The number of releases recovered from the mid-200s to reach the upper 200s, even passing 300 in 1951 and 1953 before beginning a fairly steady decline that bottomed out at 85 releases in 1977. Thus, the number of releases fell from the upper 300s in a typical year, to about 100, a decline of roughly 70 percent. One would expect, then, that studio revenues fell. In fact, Robins<sup>41</sup> reports that not only did revenues drop, but so did box-office revenues as a percentage of consumer spending, dropping to .2 percent in 1965 from 1.2 percent in 1946.

This reduction in the number of movies distributed, and total revenues, had a number of effects. There was an excess supply of physical motion picture studios. The land became more valuable in other uses and often was sold for development. The reduction also meant that it was no longer economical for the studios to employ large numbers of actors on salary as, in effect, a stock company. During the 1950s and 1960s studios stopped placing new talent “under contract” and moved to a system where individual actors, producers, and directors were only hired for one (or a small number)

<sup>41</sup> Robins (cited in note 34).

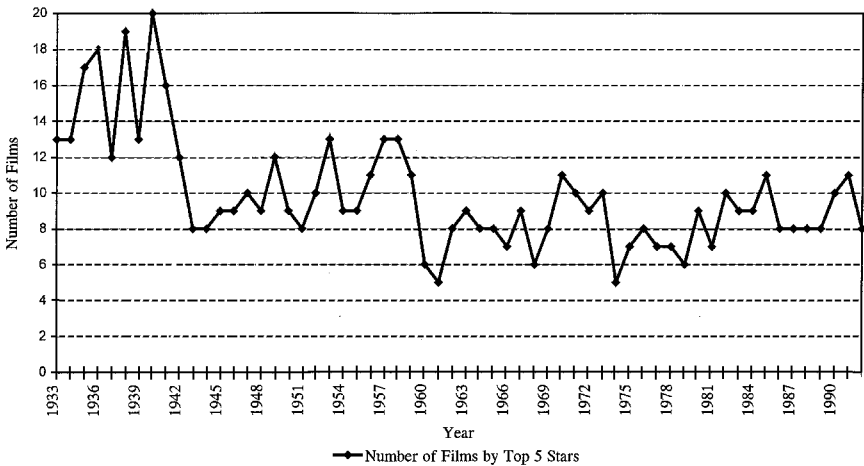


FIGURE 2

of movies.<sup>42</sup> The number of actors under contract to major studios, which had been as high as 804 in 1944, fell to 164 in 1961 from 474 in 1949. Similar declines are also found in the 1949–61 period for directors (to 24 in 1959, the last year available, from 99 in 1949), producers (to 50 from 149), and writers (to 47 from 91). With fewer movies being made it was no longer possible to predict accurately the demand for a given number of roles fit for actors/actresses with given characteristics. It can be argued that this reduced demand for motion pictures, rather than the *Paramount* decision, was the proximate cause of the decline of the studio system. Without the ability to amortize costs over a large number of movies, the ‘production-line’ approach that was one characteristic of the studio system was no longer optimal.

Not only did the major studios produce and/or distribute fewer movies after the demise of the studio system, but performers appeared in fewer movies. Figure 2 presents the number of movies released in each year from

<sup>42</sup> The vestiges of the contract system survived into the mid 1960s when Harrison Ford was one of the last people hired on a contract basis by Columbia. The demise of the contract system was, however, widely recognized as a likely outcome of the *Paramount* decision. In the early 1950s Dore Schary, then head of production at MGM, asserted that, while other studios might abandon the stock company, MGM would not. Of course, MGM eventually did just that. At this time a number of stars also became ‘free agents.’ The prime example of this was Jimmy Stewart, who was not tied to any studio in 1950 when he signed with Universal for *Winchester ’73*. Clark Gable, no longer ‘the King,’ was released from his contract by MGM in 1954.

1933 to 1992 by the top five finishers in the annual exhibitors poll of the top box-office attractions.<sup>43</sup>

Thus we see that, not only were there fewer movies made after the studio system ended, but also nonstars (fewer were under contract) as well as stars made fewer movies.

## 2. Increased Risk

Not only was there a decline in the number of movies produced during this period, but there was also a change in risk in the motion picture business. One can argue from portfolio theory that with many fewer pictures coming out of any studio the risk of the cash flows to a studio will go up. There is less diversification.<sup>44</sup> We have already seen this in Table 1. Moreover, the reduction in the number of releases understates the increased extent to which studio profit depends on a small number of films. Robins<sup>45</sup> reports an increase in the concentration of revenues in a small number of films. In the late 1940s the top 1 percent of films represented 2–3 percent of studio revenues; by the early 1960s, this had tripled to an average of about 6 percent. This trend has continued in recent years. In 1993 the worldwide revenues for the top 1 percent (2 films) of the 163 major-studio-released films were 13.8 percent of the total.<sup>46</sup> Not only is there less diversification at the studio level (fewer movies released by studios), but there is also, as we have seen, less diversification at the talent level. Further,

<sup>43</sup> The poll is taken annually by Quigley Publications and is widely disseminated. Because the ranking of top stars is the result of a poll, these stars are not necessarily the top-dollar earners in a given year, though I suspect the correlation to be high. The films of the stars were taken from a number of sources. Sometimes the high rank is a result of a film that was released at the end of the previous year. In that case, a star may have no films released in the year they were voted one of the top five attractions. As there is no clear bias for my purposes, I ignored this issue.

<sup>44</sup> There are factors that offset the effect of fewer movies on studio risk. For example, during the studio era the censorship in place ensured that virtually all movies made would today be rated no worse than “PG-13.” To the extent that studios are able to distribute movies aimed at different market segments, there may be more diversification today. Similarly, since studios no longer have the stock companies of performers under contract, they are less likely to be affected by the decreasing or increasing popularity of an individual performer. Even if these effects moderate the effect of the reduction in movie production on studio risk, evidence presented below suggests that risk has still gone up.

<sup>45</sup> Robins (cited in note 34).

<sup>46</sup> This is derived from data in the April 30, 1994, issue of *Motion Picture Investor*. It is possible that the concentration ratio is affected by the fact that 1993 was the year in which *Jurassic Park* was released. However, even if I reduce *Jurassic Park*'s worldwide revenues of \$953.2 million by 50 percent, the concentration ratio is 9 percent, which is still an increase. If I replace *Jurassic Park*'s revenues with those of *Mrs. Doubtfire*, the next-highest revenue producer, the ratio is still over 8 percent. (At that time, *Jurassic Park*'s revenues were the largest in motion picture history; as this article was being written, its sequel, *The Lost World*, had just opened to record box office.)



the end of the studio era also saw increased turnover in top studio executives.<sup>47</sup>

We can also see the effect of increased risk at the level of the individual studio. Figure 3 presents an analysis of the data from the Schaefer Ledger.<sup>48</sup> For each movie in the ledger I computed a “profit ratio”: the ratio of the total gross to the production cost.<sup>49</sup> For each calendar year I computed the average and the coefficient of variation of that ratio for all Warner Brothers movies released during that year. Figure 3 presents the average ratio by year as well as the coefficient of variation. In order to highlight trends I also present 5-year moving averages of these variables. From this figure we can see the increased profitability of the studio during the years leading up to and including World War II, with the profit ratio increasing by about 40 percent between 1938 and 1944 (to 2.62 from 1.98), before it declines to less than 1.61 in 1947 and recovers to about 2.8 by 1960. More dramatic changes occur in the coefficient of variation.<sup>50</sup> The coefficient of variation more than doubles during the post–World War II period, increasing to .74 in 1960 from .32 in 1946.<sup>51</sup> As we shall see,<sup>52</sup> this coincides with an increase in the use of sharing contracts.<sup>53</sup>

<sup>47</sup> Average tenure in office for executives in charge of production at the most stable studios (Warner’s, Fox, Columbia, Fox, MGM, and Paramount) was around 20 years during the 1940s and had declined to 4 years by the 1970s and 1980s. Moreover, turnover was higher at weaker studios. Thus risk also increased for studio executives as the studio system died. To the extent that executive turnover is associated with financial difficulty, it may be no surprise that Universal was the studio that negotiated the *Winchester ’73* contract because, as one of the parties to the negotiations, they could not afford to pay James Stewart’s normal salary. The studio (or its executives) could not bear the risk and laid it on the actor.

<sup>48</sup> The Schaefer Ledger provides the data underlying H. Mark Glancy’s *Warner Bros. Film Grosses, 1921–1951: The William Schaefer Ledger* (cited in note 16). It contains the gross receipts and the production cost for every Warner Bros. movie from 1921 to 1960.

<sup>49</sup> Of course, this does not capture the studio’s actual profit on each movie. Among other problems with the data, it does not reflect distribution costs, nor does it capture any information regarding the timing of the cash flows.

<sup>50</sup> Because the coefficient of variation is the ratio of the standard deviation to the mean, and as the variable in question is the ratio of total gross to negative cost, simple scale changes should not affect measure of risk that I report. The annual coefficients jump around quite a bit. This year-to-year fluctuation appears to be due to outliers in the ratio. In most years the ratio of the highest profit ratio for any movie that year to the second highest is less than 2. The only exceptions are 1921 (the ratio of highest to second-highest profit ratio is 2.30), 1928 (3.57), 1930 (3.40), and 1959 (3.24). Figure 3 shows an increase in the coefficient of variation in the last 3 of these years.

<sup>51</sup> In 1960 the ratio discussed in note 50 was 1.18, and in 1946 it was 1.01; thus in neither year was the coefficient of variation driven by outliers.

<sup>52</sup> See Section V below.

<sup>53</sup> This may overstate the risk increase. I am really interested in the *conditional* standard deviation. If the mix of movies made by Warner’s changed over time, we could see an increase in the cross-section coefficient of variation even if there were no increase in the uncertainty about the revenues of any *individual* movie.

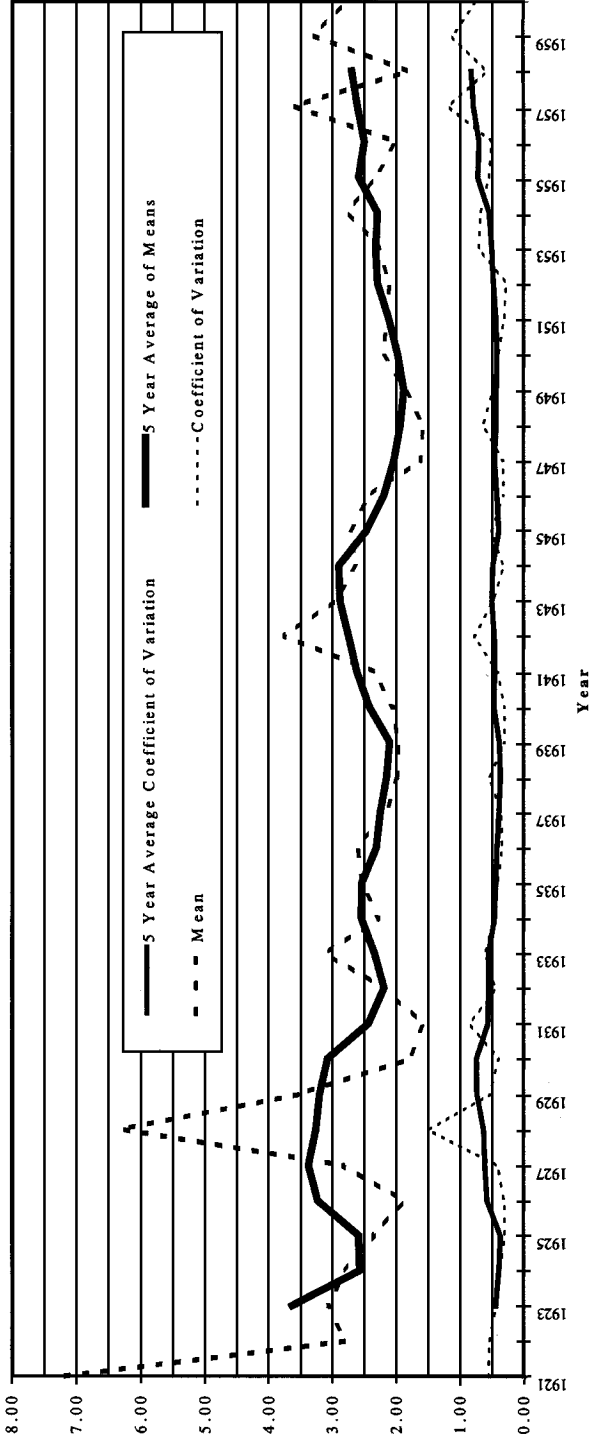


FIGURE 3

### 3. Changed Organization of Production

Thomas Schatz<sup>54</sup> notes that the studio era was characterized, at the most successful studios, by one or more strong central producers, such as Irving Thalberg at MGM. This central producer controlled the production of the movie, playing a very active role in pre- and postproduction and truly shaping the movie. Directors, in this regime, simply shot enough good film for the central producer to work with. By the mid-1940s some directors, notably Alfred Hitchcock,<sup>55</sup> working within the studio but not bound to it, would shoot much less film. This meant that Hitchcock, for example, was delivering a film that could not be significantly altered in the editing process, thus protecting his vision of the film from interference by the producer, in this case David Selznick.<sup>56</sup>

The demise of the studio system also had a more subtle effect on the organization of film production. During the studio era, the strong central producer system of moviemaking was modeled on a production line. In part this was driven by a desire to get 40–60 films made in a given year for exhibition in the studio's, and others', theaters.<sup>57</sup> As the studio system died out, we have seen that there was a dramatic decrease in the number of films produced. David Bordwell, Janet Staiger, and Kristin Thompson<sup>58</sup> note that this removed a great deal of the pressure on film schedules. As studios abandoned the production line as the model, more flexible forms of organization arose. Where once writers were kept away from the production side, by the late 1940s they were able to at least observe what was going on.

<sup>54</sup> Thomas Schatz, *The Genius of the System* (Pantheon, 1988) (providing a history of the studio era, focusing on MGM, Universal, and David Selznick).

<sup>55</sup> Schatz (id) provides details on the relations between Hitchcock and David Selznick. Hitchcock was under contract to Selznick, who would put together packages, including the screenplay, director, and stars under contract to him (such as Ingrid Bergman). The movie would then be shot and distributed by a studio, with Selznick as the producer.

<sup>56</sup> Whether this led to "better" films is an issue for film critics. The "New Wave" critics (see Peter Graham, ed, *The New Wave* (1968)) argued that it did, but Schatz (cited in note 54) is not so sure.

<sup>57</sup> It is tempting to conclude that studio *had* to put out enough films to fill the screens they owned. This is not true. No one studio could produce enough films to meet the demand in an era when double bills might change twice a week. Moreover, because each studio's exhibition arms were strongest in different geographic locations, a studio would often prefer to have another major's theater chain do the exhibition. For example, Paramount had the best theaters (the Balaban and Katz chain) in Chicago, and other studios would want their pictures to play in Paramount's theaters there.

<sup>58</sup> David Bordwell, Janet Staiger, and Kristin Thompson, *The Classical Hollywood Cinema*, at pt 5 (1985). See also Alan Paul and Archie Kleingartner, *Flexible Production and the Transformation of Industrial Relations in the Motion Picture and Television Industry*, 47 *Industrial & Labor Relations Rev* 663 (1994) (the effect of changed production on labor relations in the motion picture industry).

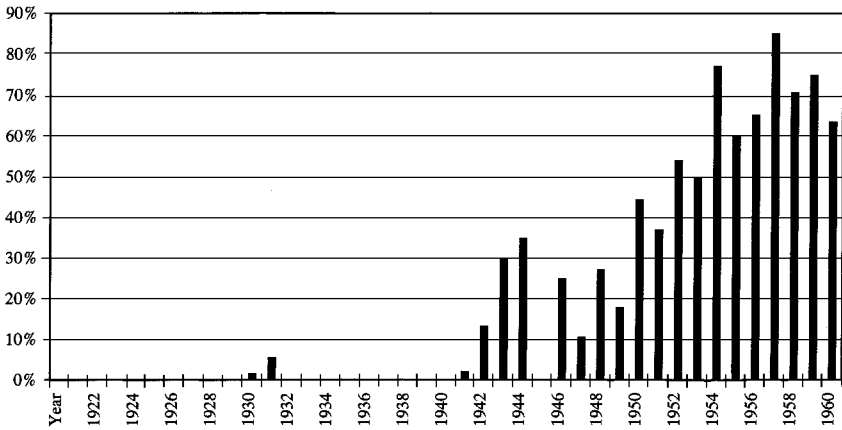


FIGURE 4

This saw the rise of the multirole individual, exemplified by Billy Wilder, who was a writer-director in studio context. This movement was facilitated by a relaxation of the job definition by the labor guilds.

#### 4. Increased Use of Sharing Contracts

We have already seen that there were some sharing contracts as early as the silent era. The Schaefer Ledger indicates whether the movie had a direct participant (such as John Barrymore) or showed advances to independent producers, which implies a share. Figure 4 presents the percentage of Warner Brothers movies, by year of release, that had a sharing contract. It is clear from these data that the frequency of sharing contracts increased dramatically after World War II. It should be noted that the ledger apparently undercounts the number of movies with participants in the early years.<sup>59</sup> I do not believe that such understatement occurs in the later period, as the studio established a separate department to ensure payment of participations. The fact that the studio established a formal department to handle participations is an indication that they had become more common. In any event, it is clear that by the late 1950s most movies had at least one sharing contract.

Although this graph suggests a decline in the use of sharing contracts in

<sup>59</sup> For example, the list omits the Jolson pictures and *Tiger Rose*, which I know from examination of the contracts had participations.

the late 1950s, this dip was apparently temporary.<sup>60</sup> Today the vast majority of movies, especially those financed by a studio, do have participants of either the net or gross variety.

### B. *Alternative Explanations of the Contract Form*

In this section I present the various alternative explanations for the survival of this contract form and evaluate the evidence supporting each explanation.

#### 1. Studios Rip Off Actors and Everyone Else

While this not usually used as an explanation for sharing contracts in general, it is the most popular explanation of the net-profits contract form.<sup>61</sup> However, we have seen evidence that sharing contracts based on concepts similar to the modern “net” and “gross” profits have been around since the dawn of the studio era. Moreover, the motion picture community is rather small, with a limited number of agents and attorneys involved in drafting contracts. It is difficult to imagine that the studios have been able to fool actors and producers for such a long period.<sup>62</sup>

However, there is another way in which the current contract gives the studio a potential opportunity to enrich itself. It has been alleged the contract may provide an incentive for the studio to offer gross contracts to big stars to the detriment of those with net contracts.<sup>63</sup> The reason for this is that in the usual contract the net participant has no control over the studio or producer’s freedom to sign major stars whose gross participations are treated as a negative cost and thus reduce the payoff to the net participant. To the extent that there are payments for major stars signed subsequent to the net participant, and there was some positive probability of a payoff to net participants, the studio or producer does not bear the full cost of the star’s payment.

Consider the following, simplified view of the issue. Let  $S$  be the amount of “star power” used in the movie and  $P$  the other production costs, and ignore the role of distribution expense. Let  $R(S, P)$  be the studio’s revenues from the movie. I assume the revenue function has the normal properties,

<sup>60</sup> Chisholm, *Profit-Sharing versus Fixed-Payment Contracts* (cited in note 4), provides evidence that the trend continued to recent times.

<sup>61</sup> Goldberg (cited in note 4) focuses on this issue.

<sup>62</sup> The plaintiffs in *Garrison* (cited in note 1) alleged collusion to get around the question of why studios do not compete by offering “fairer” contracts.

<sup>63</sup> Abelson (cited in note 2).

$\partial R/\partial X > 0$ ,  $\partial^2 R/\partial X^2 < 0$ ;  $X = S, P$ . Ignoring the interest charge,  $NP$ , the net-profit pool, is defined by

$$NP(R, S, P; \delta, \omega) = (1 - \delta)R(S, P) - (1 + \omega)(S + P), \quad (1)$$

where  $\delta$  is the distribution fee and  $\omega$  is the overhead percentage on direct expenses allowed in the contract. Then the studio's profit on the movie is

$$\Pi(R, S, P) = R(S, P) - S - P - \phi NP(R, S, P), \quad (2)$$

where  $\phi$  is the portion of the net-profit pool going to the participant. First, consider the case where there are no net-profit participants ( $\phi = 0$ ); the profit-maximizing studio will invest in star power and production expense to the point where the marginal effect of an incremental dollar spent in either factor of production is one. That is,  $S^*$  and  $P^*$ , the optimal values of  $S$  and  $P$  for the case where there are no net-profits participants, are defined by

$$\begin{aligned} \frac{\partial \Pi}{\partial X} = 0 &= \frac{\partial R}{\partial X} - 1 \\ &\Rightarrow \frac{\partial R}{\partial X^*} = 1, \quad X = S, P. \end{aligned} \quad (3)$$

Now, consider the situation where payments on net profits are (expected to be) positive. Substituting (1) into (2) we get

$$\begin{aligned} \Pi(R, S, P) &= R(S, P) - S - P - \phi NP(R, S, P) \\ &= R(S, P) - S - P - \phi[(1 - \delta)R(S, P) - (1 + \omega)(S + P)]. \end{aligned} \quad (4)$$

Differentiating with respect to  $S$  and  $P$ , and setting the derivative equal to zero, we get

$$\begin{aligned} \frac{\partial \Pi}{\partial X} = 0 &= \frac{\partial R}{\partial X} [1 - \phi(1 - \delta)] + \phi(1 + \omega) - 1 \\ &\Rightarrow \frac{\partial R}{\partial \hat{X}} = \frac{1 - \phi(1 + \omega)}{1 - \phi(1 - \delta)} < 1, \quad X = S, P. \end{aligned} \quad (5)$$

Because  $\partial^2 R/\partial X^2 < 0$  for  $X = S, P$ ,  $\hat{S} \geq S^*$  and  $\hat{P} \geq P^*$ . That is, the optimal value of  $S$  or  $P$  is greater if there are net participants than if there are no net participants. If there are no net participants, the optimal level of star or production expense is lower than it is if there are net participants, and the effect is more pronounced as the overhead percentage, distribution fee,

or percentage of the pool paid to participants increases.<sup>64</sup> Absent net participants, the studio bears all the expense of increased spending on any factor of production; if there are net participants, the participants bear some of the cost. Thus, the presence of net-profits participants means that the studio does not internalize all of the cost and thus overinvests in certain aspects of movie production. From this simple example we see that this effect has nothing to do with gross participants. The same incentive exists if the star's salary is fixed and also applies to the production budget.

Interestingly, it turns out that there is a countervailing effect if the big stars are paid a percentage of gross rather than a flat salary. If there are no gross participants, the studio keeps all of the incremental revenues from increased expenditures on, say, special effects (less any share paid to net participants). However, if there are gross participants, the studio does not get all of the incremental revenues but does bear all of the costs associated with increased production expense (again, less any effect on payments to net participants). Thus the studio will tend to cut back on these expenses, which will tend to ameliorate the overinvestment problem noted above.

This analysis also helps to explain why the percentage of net-profits contracts that pay off is fairly small. To the extent that a risk-neutral studio takes these effects into account, and there is no repetition of the game, it will reduce the anticipated net profits to a level below that which would be the case if there were no net-profits participants. However, if the studio wants to contract with the same people again, it might well choose not to go all the way to a zero-expected net-profits pool. Moreover, even if it did, we would expect the studio to be wrong some of the time. Because the distribution of revenues is positively skewed, a given expected payoff will imply fewer (though larger) positive net-profits pools than would be the case if the distribution were symmetric. These arguments all suggest that what we should see is a situation where there are some positive net-profits pools, though they are not the norm.

The fundamental problem is that *someone* has to be given the right to choose the final cast and have decision-making authority during and after production. The studio is the ultimate residual claimant on the film, and as

<sup>64</sup> The incentive for the studio remains as long as there is any anticipated payment to net-profits participants. Of course this analysis is, in many ways, too simplistic and is designed for only a limited purpose. I assume, for example, that the studio knows what the revenues from the movie will be. I also omit the participation constraint that, after adjusting for risk and monitoring costs, the compensation received by net participants must be the same as what they would receive if they were paid a fixed salary. However, note that the studio gets to choose the level of production expenses *after* the net participant has signed on (see Goldberg, cited in note 4). Also, I am dealing only with incremental changes in the movie budget. A big star's association with the movie might increase the likelihood that the movie will, in fact, be made and thus actually make the net participant *better* off.

such it should not be surprising that the studio has the ultimate power to sign the star. This is similar to equity holders being given the right to manage the firm. The potential conflict arises because the studio, through its distribution function, collects a distribution fee that the net-profits participant never sees. To continue with the corporate finance analogy, this is akin to having the controlling shareholder also own most of the firm's outstanding debt. That shareholder may have an incentive to choose low-risk projects that benefit bondholders rather than stockholders. The distribution fee is like a prior claim on the cash flows from the movie, like debt service.

In the corporate law area, the conduct of shareholders in such a position is governed by the corporate law of the state of incorporation.<sup>65</sup> The issue here, however, is a matter of contract. A plaintiff could allege a violation of the implied covenant of good faith and fair dealing, or covenant of best efforts.<sup>66</sup> At issue here is how the court will fill in the missing blanks in the contract.<sup>67</sup> What would be the reasonable expectation of the contracting parties regarding the studios freedom to sign a major star? The person who signs a net-profits contract knows full well, at the time the contract is signed, what the distribution fee is and who has, traditionally, had control over casting the movie. Any *ex ante* benefit the studio might anticipate from later signing a big star would be expected to be reflected in the fixed component of the contract.<sup>68</sup> The only two alternatives to giving the studio power over casting are (1) a complete ban on subsequent budget changes or (2) required consent of the net participant.<sup>69</sup> A complete ban on budget changes is almost certainly not value-maximizing because budget increases may actually serve to increase the size of the net-profits pool. While in principle the studio could give veto rights over subsequent third-party gross participations, or other changes, to *every* net participant, the contracting costs

<sup>65</sup> In *Buchwald* (cited in note 1), the plaintiffs alleged that Paramount and the plaintiffs were joint venturers in the film *Coming to America*, which gave rise to a fiduciary obligation on Paramount. The judge rejected that claim.

<sup>66</sup> The judge in *Buchwald* rejected these claims. A discussion of these concepts can be found in virtually any contracts book. See *Wood v Lucy, Lady Duff-Gordon*, 222 New York 88 (NY 1917). *Parev Products Co v I. Rokeach & Sons*, 124 F2d 147 (2d Cir 1941), in which the defendant introduced a new product that allegedly had the effect of reducing sales of a product licensed by, and hence royalties payable to, the plaintiff, may be closer to this situation. Moreover, the treatment of third-party gross participations as a component of negative cost was dealt with in *Alperson* (cited in note 39), where it was expressly permitted.

<sup>67</sup> For a discussion of default rules, see Ian Ayres and Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 Yale L J 87 (1989).

<sup>68</sup> Holding variable costs constant.

<sup>69</sup> It might be argued that a third alternative would forbid subsequent third-party gross participations unless a fixed payment is made to the net participant. However, this does not alleviate the problem. Any fixed payment would still provide an opportunity for the studio to exploit the net participant.



would be large. It is certainly impractical to give every net participant, from the author of the novel on which the movie is based, to the composer of the score, and beyond, this kind of control. Moreover, it would be impossible for the studio to convey to each previously signed net participant the information that it has regarding the benefits from hiring a new star without revealing to the industry at large, and perhaps more importantly to the star with whom it is negotiating, the benefit it expects to receive from the contract. Nor is it likely that the star would like to have the detailed terms of her contract appear on the front page of *Variety*. Thus is it reasonable to believe that both parties intended the studio to control casting.<sup>70</sup>

However, it is easy to overstate the importance of this possibility. Studios are notoriously unable to predict the success of a movie. To the extent that studio executives are reluctant to report losses, they will not offer big stars compensation sufficient to capture *all* of their incremental contribution to the movie. This reduces the likelihood that the big stars' compensation will, *ex ante*, reduce the net-profits pool. But, to the extent that this incentive to hire big stars is a problem, it appears to be a problem inherent in the nature of the business. The net participants want some promise of a back-end payment, which experience tells them will be small. The studio is not likely to provide a participation in the true economic profits of the movie because these cannot be determined without revealing everything about itself. The net-profits contract is a compromise.

These arguments are related to Goldberg's analysis.<sup>71</sup> He focuses on the question of why a net participant would sign a contract that provides opportunities for the studio to reduce her claim on the movie's proceeds. He argues that, in fact, such an arrangement serves both the studio and the participant. Goldberg starts by suggesting that net participants are usually people whose creative contribution comes early in the process of making the movie. He argues that it is in the studio's interest to keep these individuals

<sup>70</sup> Moreover, even if it were found that the studio had violated its implied covenant of good faith and fair dealing, establishing damages would be difficult. The plaintiff would have to establish that the *ex ante* increase in box office from having a big star was not sufficient to lead to a larger net-profits pool. An interesting variant might occur if the big star changed the nature of the film. Consider the following hypothetical situation: suppose the author of the play *Driving Miss Daisy* contracts with a studio to make a movie of the play. He might have an interest beside monetary gain, such as protecting his artistic concept. By the time the movie is made, however, Morgan Freeman has been replaced by Sylvester Stallone, Jessica Tandy has been replaced by Pam Grier, and a new subplot involves avoiding Chechen terrorists by various bits of derring-do. Would the author have a cause of action? *Parker v Twentieth Century-Fox Film Corporation*, 3 Cal3d 176 (1970), dealt in part with the question of whether a musical was sufficiently like a western that Shirley MacLaine Parker should have taken a proffered role in a western to mitigate damages arising from the studio's decision not to make the musical that she had contracted to do.

<sup>71</sup> See Goldberg (cited in note 4).

motivated. However, after their contribution has been made, it is not optimal to keep them motivated, and value maximization is served by the giving the studio the ability to, in effect, recontract with them by changing the scale of production or including some gross participants. Of course, the studio cannot go too far in this direction and must maintain some reputation for “fair dealing,” in the sense that it only adds gross participants to the extent that it increases the total revenues enough to offset the effects described earlier. If the studios always engaged in actions that eliminated any possibility of a positive net-profits pool, early signers would understand that there will not be any net profits and the studios would lose their ability to motivate. This is related to the point made above on studio incentives.<sup>72</sup>

It is unlikely, however, that this is the complete story. First, it turns out that many people—for example, the composers who score the music for the movie, screenwriters doing rewrites, and many performers—sign on for at best a net-profits participation, *after* the star who will get a gross participation has already signed and the probability of reaching net has been diminished. Some of these people perform their function after the movie has finished production. This is inconsistent with the temporal ordering of net and gross participants that Goldberg postulates. Moreover, it turns out that many performers who get gross have a contract that may well be affected by the presence of other gross-compensation contracts. Only a few performers get a percentage of the gross from the first dollar of revenues. Many gross contracts call for payment of a percentage of gross after a break-even point that is a function of the production budget, including the guarantee portion of any gross contract, and any gross payments made prior to the trigger point—the “cash break even.” Thus, it turns out that many whose participation in the movie temporally *follows* that of most net participants can be affected by other gross participations, though not to the extent that net participants can be affected.

## 2. Incentives in a Principal-Agent Model

*The Theory.* While we may imagine that the contracts we see in the movie industry are the solution to a more-or-less standard incentive contracting problem as described in Oliver Hart and Bengt Holmström,<sup>73</sup> the industry has some interesting features that make it difficult to fit it into this framework. First is the fact that, while the basic technology of motion picture production did not change from the 1930s to the 1970s, the sharing

<sup>72</sup> See note 64 and related text above.

<sup>73</sup> Oliver Hart and Bengt Holmström, *The Theory of Contracts*, in Truman Bewley ed., *Advances in Economic Theory* (1987).

contract became much more common.<sup>74</sup> If optimal contract form is related to the technology of the industry, we would not have expected contract form to change over time. Moreover, to the extent that these contracts involve a contingent payment to offset a desire for shirking on the part of the agent, it is not clear what one means by shirking in the case of a motion picture star. For example, consider the star who does not like the movie he is working on. While, in principle, a performer could shirk, the effect of this shirking would presumably simply be to make the star spend more time redoing scenes until he gets it right. Thus, the quickest way out of a bad situation may actually be to do it right the first time. Moreover, the motion picture community is a rather small one, and it would be costly for a star to get a reputation as being difficult to work with. Recall that in the absence of the long-term contracts of the studio era, stars must recontract for each new movie. In that case, the labor market for stars may serve to provide a discipline through reputation effects.<sup>75</sup>

It is difficult to imagine that the “net-profits” pool provides much incentive to the performer. While it is certainly true that the studios pay out millions of dollars to individuals with net-profits contracts, it is also true that only a fairly small fraction of movies, between 10 percent and 20 percent, ever have a positive net-profits pool.<sup>76</sup> Consider the argument that the effort expended by a performer is not observable.<sup>77</sup> There is little evidence that this is the case. Directors are highly skilled, as are producers. Their success depends, in large part, on an ability to make the kind of subtle judgments about nuances of performance that make a movie a success and can turn a performer into a star.<sup>78</sup>

<sup>74</sup> Technological change in other industries could affect the motion picture industry by changing, for example, demand for movies.

<sup>75</sup> This point was made to me with some force by a number of people in the industry. The same argument was made in the context of managerial effort in Eugene Fama, *Agency Problems and the Theory of the Firm*, 88 J Pol Econ 288 (1980), and was further analyzed by Hart and Holmström (cited in note 73).

<sup>76</sup> We can think of the net-profits share as an option that is far out of the money. Ronald Gilson and Bernard Black, *The Law and Finance of Corporate Acquisitions* 356 (2d ed 1995), note that the vast majority of executive options have a striking price equal to the stock price when the option was granted. Deep out-of-the-money options are rarely used in executive compensation packages, though this may be driven by tax considerations. It is also possible that, at least in that context, options with a low probability of actually paying off have little incentive effect.

<sup>77</sup> It is unlikely that the sharing rule is needed to induce effort in promoting the motion picture. Promotional tours are observable and can easily be contracted for and monitored. Thus the nonobservable effort is likely to be in the actual movie production.

<sup>78</sup> However, shirking may still be possible if the star knows more than the director about what he or she is capable of. Sidney Lumet, *Making Movies* 64 (1995), writes that Marlon Brando will test a director early in a course of making a movie by presenting a deep and shallow performance on two takes of a scene. If the director cannot distinguish between the

Another problem with viewing the participations as incentive devices is that they often go to individuals who are not direct contributors to the motion picture. For example, both Alice Walker and William Groom recently have raised concerns about their shares in the profits from the movies based on their novels *The Color Purple* and *Forrest Gump*, respectively. However, in neither case was the screenplay used actually the product of the novel's author.<sup>79</sup>

In recent work Darlene Chisholm<sup>80</sup> presents an analysis of profit-sharing in the motion picture industry in the context of a standard principal-agent framework. She concludes that the contracts are consistent with an incentive contracting model in the presence of hidden action or hidden information. Her basic argument is that the contract is a solution to a moral hazard problem caused by the inability of the producer to actually observe the effort that the actor is expending in the motion picture. Her main empirical findings are that sharing contracts are more likely<sup>81</sup> for movies that (1) take longer to make, (2) open at holiday time, or (3) were made later in her time period. Actors are more likely to get a sharing contract in a movie if they (1) are male, (2) have worked with the producer before, (3) have been in more films, or (4) have had high revenues in their most recent film.

Chisholm's results can support this article's hypotheses as well as her principal-agent theory. In effect she is asking the hypothetical question "What determines whether a given employee is paid a fixed salary or a profit share?" Her analysis omits the key variable that, according to our theory, determines whether someone is paid in cash or by a percentage of the revenues or profits—the *anticipated* total compensation. The omitted variable, anticipated compensation in a fixed-salary contract, is likely to be correlated with all of the variables that Chisholm shows determine whether the star gets a sharing contract. The reason is simple. As long as the star's compensation is increasing with her experience and track record (as it almost certainly is), budget-constrained (or risk-averse) studio executives will find it most advantageous to give sharing contracts to the most expensive (most experienced) performers. The more highly paid the performer, the

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two, Brando effectively shirks for the rest of the movie. Of course, he is also pointing out that a skilled director can tell what kind of performance Brando is capable of.

<sup>79</sup> Both movies were nominated for the Academy Award for Best Screenplay Adapted from Another Medium. In neither case was the novel's author credited with the screenplay.

<sup>80</sup> Darlene Chisholm, *Profit-Sharing versus Fixed-Payment Contracts* (cited in note 4).

<sup>81</sup> Her sample size is limited to, at most, 43 contracts. While her data set appears to be the best one in use, some important information is not there. For example, she is unable to distinguish between net-profits and gross proceeds participations. Moreover, she excludes contracts where the star is also the producer—even though it is well known that in many cases the producer credit given the star does not mean that the star served the traditional producer function. If such stars are atypical, and they almost certainly are, this biases her results.

greater the incentive to turn a large fixed cost into a variable cost. This will induce a positive correlation between experience and the likelihood of a sharing contract. When one looks at Chisholm's results, each of the variables that she finds positively related to the likelihood of a sharing contract is also likely to be positively related to either the star's required compensation or the size of the movie's budget. Thus, Chisholm's main finding, which she interprets as evidence in favor of an incentive explanation that requires increased explicit incentives in the contract as performers age, is clearly also consistent with a risk-sharing or budget constraints explanation. Indeed, when she includes variables designed to measure the financial state of the studio (a stronger studio should be less likely to grant a sharing contract) and the size of the production budget for the particular film (the more expensive the film, the more likely is a sharing contract), she finds results that are consistent in sign with the explanations I provide below.<sup>82</sup>

*Frequent Contracting.* In order to understand why it is unlikely that the incentives provided by the "net-profits" pool are the main driving force in the contract form, it is important to recognize the role that frequent recontracting can play in providing incentives by an agent to perform to the best of his or her ability. As Eugene Fama<sup>83</sup> pointed out in the context of the market for managerial labor, the ex post settling up that occurs on a return to the labor market may provide sufficient incentive for agents to avoid shirking. With the demise of the long-term contracts that prevailed during the studio era, stars (and others) are signed for limited deals, often a single picture. In that case, an actor must perform at a sufficient level to convince producers and directors to hire him. These are highly skilled professionals who are aware of how the various elements (script, direction, production values, performance) of a film work together and who can parse out the contribution that the performer makes. Moreover, by judging the actor's work against those of other similar performers and against the actor's previous work, they can judge the extent to which he has been "walking through" a part. Finally, the motion picture community is a fairly small one in which information travels quickly. Performers quickly develop a reputation, and this reputation is reflected in the wage they can earn.<sup>84</sup>

Grover notes that, when the newly installed team of Michael Eisner, Frank Wells, and Jeffrey Katzenberg at Disney were casting *Down and Out*

<sup>82</sup> See id, table 3.

<sup>83</sup> See Fama (cited in note 75).

<sup>84</sup> *Welch v Metro-Goldwyn-Mayer Film Co*, 254 Cal Rptr 645, at 652 (Cal App 2d 1989) (actress was awarded punitive damages of \$8 million for wrongful termination: "The evidence established that an accusation of breaking a contract would be very damaging to an actress's [sic] reputation, as people in the industry would assume that she was undependable").

in *Beverly Hills*, they took the opportunity to save on up-front expenses by hiring stars whose star had, so to speak, fallen. Bette Midler, who had been involved in series of unsuccessful movies, was signed for \$600,000, exactly what her salary had been for her *first* movie. Richard Dreyfus, who had won an Oscar in 1979, was also signed for \$600,000, half of his asking price of \$1,200,000 at the time.<sup>85</sup> When there are short-term contracts and frequent visits to the labor markets, coupled with evaluation by skilled professionals and a small professional community so that the intangible aspects of working with a particular individual are revealed, there is no reason to view contingent portion of the compensation as being primarily an incentive device.<sup>86</sup>

One might argue that, even if the incentive portion of the compensation is unimportant for actors and actresses, it is important for producers. Again, the importance of reputation in the industry suggests that this alone should be sufficient to induce producers to work hard.

### 3. Apparently Risk-Averse Behavior

In some sense explanations that rely on risk aversion are the least appealing explanations of all. The studios are publicly held and thus would be expected to be risk-neutral. Moreover, risk aversion, like taste, is the last resort of economists because it explains too much. It is easy to use arguments based on one or the other party being risk-averse to explain almost any observation that troubles an economist. Even if managers are risk-averse, we would expect the shareholders to contract with managers so that this risk aversion will not manifest itself. However, such contracts may be difficult to enforce, and thus managers have some freedom to spend shareholder money to avoid bearing risk.

We have already seen<sup>87</sup> that one of the participants in the *Winchester '73* negotiations clearly states that a motivation for the contract was to get the actor, James Stewart, to bear risk with which the studio was not comfortable. To economists brought up in the principal-agent view of employment contracts in which the principal is risk-neutral and the agent is risk-averse,

<sup>85</sup> Ron Grover, *The Disney Touch: How a Daring Management Team Revived an Entertainment Empire* 89 (1991) (Dreyfus's problem stemmed, in part, from cocaine addiction: "Disney became known as the 'Betty Ford Clinic' of Hollywood").

<sup>86</sup> Another way that frequent recontracting serves to foster information revelation is in the effect that it has on the incentives for the *evaluators* to truthfully report on the individuals in question. Because the evaluators will often have ongoing explicit and implicit business relations with those soliciting the evaluation, there is less incentive to lie about what an individual is like.

<sup>87</sup> Sattler, *Declaration* (cited in note 24).

this may seem strange. However, that model is inadequate because it ignores the role of the producer or studio executive.

Neither the actor nor the producer is, in fact, negotiating with a risk-neutral body of shareholders. They negotiate with studio executives. We have already seen evidence that the turnover of one of the most important executives, the head of production, has increased dramatically in the last 40 years. Especially in the case of an established star, it is likely that the star is both wealthier and more secure in his or her position than the studio executive or producer with whom he or she is dealing. In that case, the star may, in fact, be less risk-averse than the studio executive and thus may be willing to bear risk that the studio executive may be interested in laying off. Chisholm<sup>88</sup> discusses, and dismisses, this possibility. However, her dismissal is not convincing.

Evidence from other industries provides support for the view that executives are reluctant to show losses. David Burgstahler and Ilia Dichev<sup>89</sup> examine the cross-sectional distribution of earnings and earnings changes and present compelling evidence that firms report fewer small losses and small reductions in earnings than one would expect. This suggests that managers use what discretionary powers they have to avoid small losses. Larger losses are presumably beyond the range of management to avoid reporting without violating Generally Accepted Accounting Principles. In the motion picture industry, substitution of profit or revenue sharing for fixed salary arguably serves the same purpose.<sup>90</sup>

There is certainly anecdotal evidence that increased risk, coupled with competition for limited studio funds, does play a role in the increased use of risk-sharing contracts, which have the nice (from the studio's point of view) property that they only pay off when there is money to hand out from the picture's revenues. For example, the producers of *Forrest Gump* had

<sup>88</sup> Chisholm, *Profit-Sharing versus Fixed-Payment Contracts* (cited in note 4), presents some evidence consistent with this story. She argues that the evidence is very weak. However, given her small sample size (less than 40), the considerations about the relation between sample size and power raised by Steven Brown (*Model Selection in the Federal Courts: An Application of the Posterior Odds Ratio Criterion*, in Prem Goel and Arnold Zellner, eds, *Bayesian Inference and Decision Techniques* 141 (1986)) suggest that the evidence is stronger than it appears.

<sup>89</sup> David Burgstahler and Ilia Dichev, *Earnings Management to Avoid Losses and Earnings Declines* (working paper, University of Washington, 1995).

<sup>90</sup> Adam Marcus, *Buchwald v. Paramount Pictures Corp. and the Future of Net Profit*, 9 Cardozo Arts & Enter L J 54 (1991) ('There is a general view among studio executives that gross participation deals significantly reduce the risk that a picture will not recover its costs'). Note that the risk to be avoided is that of a loss, as opposed to variance of the payoff. This is consistent with the results of Burgstahler and Dichev (cited in note 89).



great difficulty getting a studio to finance the movie until Tom Hanks and Robert Zemeckis agreed to make the movie for a (first-dollar) share of the gross with no up-front payment.<sup>91</sup> This reduced the amount that the studio would have to put up to make the movie. Moreover, we have already seen<sup>92</sup> that risk in the motion picture business increased after World War II when profit-sharing contracts become common.

More evidence consistent with the argument that risk has changed in the motion picture industry is seen when we contrast the compensation of movie stars with that of stars in episodic television. With the decline in motion picture production since the 1930s and 1940s and rise of television, in a very real sense episodic television is today's version of the run-of-the-mill "A" and "B" movies that the studios cranked out during the studio era. That is, most of the major studio releases today would have been at the high end of studio-era releases, and the weekly television series embodies the more production-line approach that characterized most production during the studio era. When we look at compensation in episodic television, it turns out that stars of weekly series usually work for a fixed compensation per episode, with only the biggest stars getting percentage deals.<sup>93</sup> Thus, when we look at movies today, we are looking at what, in the studio era, would have been the most expensive movies with the biggest stars. The increase in the percentage of movies with sharing contracts in part reflects that change in the mix of movies released today as compared with the studio era. Not only are there fewer movies, implying less diversification, but, on average, each is more expensive than a studio-era production.

It must be understood, however, that, while apparently risk-averse behavior may explain part of the use of sharing contracts, it cannot be the entire story. First, it says nothing about the contract terms that characterize the net-profits contract. Second, it can only be relevant for the few big stars who account for a significant portion of the movie's production budget.

<sup>91</sup> John Lippman, *Star and Director of "Gump" Took Risk, Reaped Millions*, Wall St J (March 6, 1995) at B1. I have been told by executives who were at Paramount at that time that formal contract renegotiation actually took place after production had begun and it became apparent that the movie could not be made within the original production budget. The executives were unclear about whether the likely need for contract modification was foreseen prior to the start of production.

<sup>92</sup> See Section IVA2 above.

<sup>93</sup> See Vogel, ch 4 (cited in note 4). See also Alan Levine and Barry Meyer, *Contingent Compensation in the Television Industry* (paper presented at the 31st annual program on Legal Aspects of the Entertainment Industry, Univ Southern California Law Center (Los Angeles, April 20, 1985), at 12 ("Participations in so-called pure or true gross receipts are rare in the television industry").



#### 4. Other Possible Explanations

*Information Asymmetry.* Another possible explanation for the use of risk-sharing contracts could be an information asymmetry between the star and the studio or producer. At issue is the possibility that the studio (or its executive) is better informed about the likely market for a movie. Consider a case in which a star is negotiating with a producer for a given role. The producer may know, or the star may *think* the producer knows, more about the likely box office for the movie in question than the star. In that case, the star knows that, even if he and the studio could agree on the marginal contribution that the star adds to the movie, fixed-salary contracts put him at a disadvantage. The reason is that the studio has every incentive to understate the anticipated revenues from the film.

A contract calling for a profit share has the effect of protecting the actor or actress against an informationally advantaged studio or producer. The risk that the actor must bear is, in effect, the compensation that the studio or producer earns for being informationally advantaged.

In this situation, the optimal contract between the studio and the actor may well involve both a fixed component and some sort of sharing rule, *even absent any desire to provide incentives to the actor*. Consider two polar cases and the countervailing incentives for truth-telling on the part of the studio. We have seen that, if only a fixed-compensation contract is available, the studio has an incentive to understate the likely market for the movie. In contrast, if the only contracts available included only a profit (or revenue) share, but no fixed component, the studio would have an incentive to *overstate* the potential market for the movie to get the talent to sign for fewer points. Thus, the only contract that could possibly solve the information problem is a mixed contract with both fixed- and variable compensation provisions.

While this story has some appeal, it is easy to overstate the ability of studio executives to predict the success or failure of a movie before it is made. The anecdotal evidence here is quite strong: simply recall *Ishtar*.<sup>94</sup> It is hard even to predict success after the movie is completed. The head of one theater chain, after attending a screening of *Star Wars*, told George Lucas that nobody would want to see the film.<sup>95</sup> Moreover, it is not clear why the studio has an information advantage relative to at least major stars. Presumably the studio, in order to induce a major star to participate in a movie,

<sup>94</sup> *Ishtar*, starring the major stars Warren Beatty and Dustin Hoffman, written by Elaine May, was viewed as a “can’t miss” comedy. It was a disaster at the box office and is the classic example of how hard predicting success can be. See also DeVany and Walls (cited in note 4).

<sup>95</sup> DeVany and Eckert (cited in note 4), at 109.

will allow her and her agents to examine the same marketing data and have the same knowledge of potential cast that the studio does; indeed, it is not uncommon for major stars to get veto power over some other members of the cast and the director.

The information asymmetry may go the other way. In the case of *Forest Gump*, Paramount would not commit to the full budget requested. The budget reduction was achieved by having the star (Tom Hanks) and director (Robert Zemeckis) agree to take no fixed compensation in return for a larger percentage of the gross.<sup>96</sup> In effect, Hanks and Zemeckis agreed to provide some financing in return for a larger senior claim on the movie's cash flows. If we take this view, the question of why Paramount would view Hanks and Zemeckis as the lowest-cost provider of capital is raised. After all, presumably Paramount could have gone to the capital markets. However, one effect of having the contracts structured this way is that, by agreeing to the reduced up-front payment, Hanks and Zemeckis are providing Paramount with information about how they expect the shoot to proceed. From Paramount's point of view it need not be the case that Hanks and Zemeckis know *more* than Paramount but only that their view of the likely success of the movie is based on different information than Paramount has. Structuring the compensation in this way reveals some of Hanks and Zemeckis's private information to Paramount and thus may serve to reduce the risk to the studio. The studio, in effect, pays Hanks and Zemeckis for their information through the larger back-end.

*Long-Term Relationships.* If producers and studios are interested in maintaining good relations with the limited pool of very talented top performers, there is another role for sharing contracts. They bond the executive. We see examples of a related phenomenon, that studios provide expensive, noncontracted for, bonuses when a film is successful. For example, it was widely reported that after the initial success of *The Firm*, the studio gave each of the major stars and the director a new car of a type featured in the movie.<sup>97</sup> Each car had a value of approximately \$100,000. While this was criticized in the press, it seems likely that the studio did have interest in attracting major talent to work on future movies by showing a willingness to go beyond the letter of the contract. The studio has an incentive to remain on good terms with talented people that may lead to payments above and beyond the contract. In effect, the contract form that we see says to the talent: "If this movie does better than we expect, we will share that upside

<sup>96</sup> See Lippman (cited in note 91).

<sup>97</sup> Michael Fleming, *Dish: Studio Offers Mercedes Mementos to "Firm" Folks*, *Daily Variety* (July 8, 1993). He also reports a similar occurrence in connection with *Lethal Weapon III*.

with you.” This leaves, so to speak, a “good taste in the mouth.” Such a good taste may be especially useful in an industry where a star who had signed a fixed-compensation contract for a movie that was ex post highly successful might believe that she had been taken advantage of.

*Economizing on Contracting Costs.* When there is frequent recontracting, the parties have incentives to economize on contracting costs. This will lead to standard-form contracts in the industry.<sup>98</sup> In the motion picture business, this leads to “boilerplate” definitions of the participations.<sup>99</sup>

Moreover, in a world of imperfect and potentially asymmetric information, the contract form can be used as a screening device. For example, consider an actress who attaches a high opportunity cost to her time, perhaps because she is in great demand. A two-part compensation scheme, involving a fixed guarantee against a percentage of the gross or net revenue stream, has a certain appeal. First, it allows her to screen potential roles to ensure that the compensation meets her reservation utility; producers of movies unlikely to make full use of her talents will not find it worthwhile to meet the fixed component of her salary. The profit-sharing part of the contract ensures that she will earn the value of her marginal product if the movie turns out to be unusually successful. The same contract can be offered to all comers, and the actress need not fear that she will not capture the ex post high marginal value of her role in a blockbuster.<sup>100</sup> Thus, a contract that involves a fixed compensation and a percentage, or a fixed compensation against a percentage, means that she can spend less time evaluating the likely market for the movie before deciding which movie to do and can offer the same contract to all producers, thereby reducing contracting costs.

<sup>98</sup> One former studio executive told me that in the 1950s, when these contracts first became common, he found himself constantly making changes of a similar nature in each contract as requested by the various agents. He contacted all of the major agents and worked out a common form of contract, along with a personal pledge that, if he changed any of the terms to be more favorable to the talent of *one* of the agents, he would change the terms of contract for *all* of the major agents. Of course, the viability of this “most-favored agent” clause depended in part on the reputation of the executive.

<sup>99</sup> Evidence in *Buchwald* indicated that Bernheim received the most favorable of a limited set of contract definitions.

<sup>100</sup> I have been told by people in the industry that this is essentially the case with the income that Jack Nicholson received for *Batman*. For that movie Nicholson received a \$5,000,000 guarantee against an increasing percentage of the gross that led to his earning a reported \$55 million dollars for playing “The Joker.” At about the same time Nicholson signed an essentially similar contract for *The Witches of Eastwick*, which only netted him his guarantee.

### C. *Summary of the Evidence*

At this point it is useful to consider the possible explanations for profit-sharing contracts in the movie business. The main possibility that has been presented is that these contracts, like other sharing contracts, lead to equilibria in which agents expend more effort and increase output or profits. I have, however, suggested that this paradigm is unlikely to provide an explanation for the sharing rule in the motion picture industry. If it is not explained by incentives, then what causes it?

Recall that, while we have seen that profit-sharing contracts existed during the studio era, it is clearly the case that they are more common today. Also, we have seen that (1) the structure of the typical “net-profits” contract is that it pays less than 20 percent of the time, depending on the relative expense of the movie; (2) studios have been known to give uncontracted “bonuses” to talented individuals when a picture is unusually successful; and (3) it is notoriously difficult to predict the profitability of a given movie.

The annual schedule of a movie studio is likely to be riskier now than it was during the studio era. This has translated into higher turnover of studio executives. To the extent that there is, in evaluating managers, an asymmetry between losses and forgone profits that leads managers to view losses as worse for their human capital than forgone profits,<sup>101</sup> it is reasonable for studio executives to reduce fixed expenditures in movie budgets. This is reportedly the reason that Tom Hanks’s and Robert Zemeckis’s contracts for *Forest Gump* included no fixed compensation.<sup>102</sup> Thus, in effect, some of the risk associated with the movie is shifted from the studio executive to the star<sup>103</sup>—who may be wealthier and more able to bear risk.

Is there any evidence consistent with this story? Proven stars are likely to have high compensation. One prediction of this view is that bigger stars are more likely to have sharing contracts. When we examine Chisholm’s study in this light, we see that the evidence is consistent with a simple alternative hypothesis to hers—bigger stars have more clout and require higher compensation and take this compensation in the form of a profit or revenue share. Why as contingent compensation? Increased risk and/or the normal budget process of a large corporation conspire to lead executives to reduce fixed costs. Bigger stars’ contracts, if guaranteed, are bigger costs and hence are more likely to be the target of conversion to variable costs. Thus

<sup>101</sup> Burgstahler and Dichev (cited in note 89).

<sup>102</sup> See Lippman (cited in note 91).

<sup>103</sup> I use the term “star” to refer to high-quality directors and producers as well as actors and actresses.

bigger stars are more likely to get sharing contracts. This is Chisholm's main result, and this result is consistent with the story I am telling in this section.

There is another type of evidence that is consistent with the view that sharing contracts in Hollywood are not primarily intended to align the incentives of performers with those of the studios. In none of my research in this area, neither in the studio archives nor in the media, have I seen any discussion of the possibility that a performer who is paid a percentage will work harder. However, in the executive compensation area, where stock options and other incentive plans are also common, the internal documents of the firm and its proxy statements, when discussing these plans, virtually always provide a link between the contingent compensation and aligning managerial and shareholder interests.<sup>104</sup> Thus, if the participant's words in these situations are to be taken at face value, risk rather than incentives is the dominant force.

## V. SUMMARY AND CONCLUSIONS

This article has examined two aspects of contracting in the motion picture industry. By examining the files of a major motion picture studio from the dawn of the studio era, we have seen that the modern contracts that are so much in the news had clear antecedents in contracts that date back to the mid-1920s. Indeed, by 1930 at least one studio had written contracts that provided for shares of the two main varieties used today, net and gross. Thus the fact that these contracts were not in common use until the 1950s and 1960s cannot be attributed to a change in contracting technology. Further, we have seen that some of the aspects of the contract that were ruled unconscionable in *Buchwald* actually make the contracts more, rather than less, amenable to audit by the contracting party. Thus, all else being equal, these clauses are actually more advantageous to the talent than alternative contract terms. We have also seen that the modern contract evolved to the form we see today, influenced by the studio's experience dealing with independent and quasi-independent (studio-sponsored) productions. It is also clear that the frequency of profit-sharing contracts is much higher now than it was at the height of the studio system. Thus any explanation of the economic role of these contracts must be consistent with their increased use after the late 1940s.

When we turn to the motivation for such contracts, we are on shakier ground (a Los Angeles metaphor). Recent developments in optimal con-

<sup>104</sup> This is verified by Kevin J. Murphy, an executive compensation maven (personal conversation, Los Angeles, August 5, 1996).

tracting theory invite economists to view profit-sharing contracts in the context of principal-agent theory, with a risk-averse agent bearing some risk in order to provide the proper incentive if effort is unobservable or to sort out high- from low-quality agents if skill is unobservable. In this framework the principal is usually, though not necessarily, risk-neutral. I argue, however, that incentive issues are unlikely to be the primary explanation of what is going on in the motion picture industry. First, when I apply the model to actors, it is difficult to see what the unobservable characteristic is. Performers are closely monitored on the set by highly skilled directors and producers. Moreover, the prevalence of contracts that cover one or, at most, only a few movies means that actors must return to the labor market with great frequency. An actor who shirks, or presents other problems, will quickly find his or her market value diminished.

Finally, it is difficult to see why the appropriate model is one with risk-averse agent and a risk-neutral principal. The actor is, in fact, not negotiating with a studio but, rather, with a studio executive who is in a highly risky position and may have less personal wealth than the star. This leads to the possibility that the contract forms that are observed result from a desire by studios to maintain good relations with stars and a desire by studio executives to shift some risk to movie stars who may be less risk-averse owing to wealth and life-cycle effects. The empirical evidence is consistent with either or both of these explanations.