

# Real earnings management in the motion picture industry: strengthening the inferences from academic research

## George Foster<sup>1</sup>

Accepted: 3 July 2023 / Published online: 22 August 2023 © The Author(s) 2023

#### **Abstract**

The Gong, Young, and Zhou (GYZ) (Gong et al. 2023) paper examines potential earnings management by movie studio companies. Using a large sample of 3094 USproduced English-language movies released between 1997 and 2019, they find that movie studio companies, when faced with a below expected US box office revenue yield from their movies in a specific quarter, move up the release dates of movies with high expected revenues. This "move-up" release is an example of what the accounting research literature calls real earnings management. This commentary on GYZ (Gong et al. 2023) adds more structure to the decision-making context in which movie release dates are set, placing greater emphasis on the role of movie screening companies, which have the final say on the release dates for the movies they show on their screens. It also highlights the rich information setting that exists in the motion picture industry, which can be further exploited to probe the reliability of the earnings management findings reported by GYZ (Gong et al. 2023). This rich information includes security analyst reports and screen days available to quarter-end for each movie released. The commentary has relevance for other research in specific industries where the institutional domain has the potential to provide insight into real earnings management.

**Keywords** Earnings management · Revenue acceleration · Movie industry sector · Research design

JEL classification M41 · L82

#### 1 Introduction

Research on earnings management (EM) has a long tradition in the accounting literature. Across many academic studies, there is a diversity of conclusions as to why it might be occurring, the mechanisms by which it might be occurring, if it

Konosuke Matsushita Professor of Management Graduate School of Business, Stanford University, Stanford, CA, USA



George Foster
gfoster@stanford.edu

is occurring, and if so its magnitude and impact. The Gong et al. (2023)—hereafter GYZ (Gong et al. 2023)—paper focuses on a strand of the literature that probes real earnings management (REM) in a specific industry setting. REM is a subset of EM research where the focus is on operating or financing decisions by management to impact the reported financials to achieve one or more EM objectives. The GYZ (Gong et al. 2023) paper focuses on movie studio companies in the motion picture industry. The key finding highlighted in the abstract is that when "faced with pressure to boost quarterly revenues and earnings, public studios are more likely to release movies with high expected revenues in the last month of a fiscal quarter compared to private studios." The GYZ (Gong et al. 2023) paper brings to the forefront multiple issues that, when addressed, have the potential to improve the reliability of inferences drawn from not just this paper but also potential future research on EM.

## 1.1 Linking the GYZ (Gong et al. 2023) paper to the EM literature

The GYZ (Gong et al. 2023) paper links to an extensive literature as regards probing objectives for EM and the mechanisms that management is hypothesized to employ to impact the reported financial series. Ball and Foster (1982) review some of the early research in this area. More recent overviews are in Dechow and Skinner (2000), McNichols (2000), Dechow et al. (2010), and Vladu and Cuzdriorean (2014).

## 1.2 Objectives of EM

EM objectives cited or probed in the literature include executive compensation enhancement and management job security, increasing capital market valuation, meeting security analyst targets, reducing labor compensation demands, reducing taxation exposure, and reducing political costs (such as reducing the likelihood of an excess profits tax). In much of the early literature, these objectives were presented as suggestive without a research design that enabled rejection or confirmation of the proposed objective(s). Over time, the literature has advanced sizably by structuring research designs so that the evidence can either support or not support a proposed EM motive.

The GYZ (Gong et al. 2023) paper focuses on capital market valuation related objectives such as avoiding "reduced credibility with the capital market, decreases in stock price, damage to management reputation, and losses in employee bonuses." It hypothesizes that publicly traded movie studios will have a greater incentive to speed up the release date of movies with high expected revenues when it appears that their next publicly reported earnings report will be negatively affected by current releases that are underperforming relative to expectations. A sample of non-publicly traded movie studios is examined as a benchmark where, it is assumed, capital market factors have minimal impact on release date decisions. GYZ (Gong et al. 2023) report that the "speed up of movie release dates" phenomenon predominantly occurs with the publicly traded movie studio companies and conclude that EM is occurring in these companies but not in the privately held movie studio company sample.



#### 1.3 Mechanisms for EM

Multiple EM mechanisms have been reported in a diverse set of sources, including anecdotes by management or security analysts; single case studies, such as legal cases and audit board reports; and structured research papers. One distinction is between (i) actions that relate to one or more reported financial series (such as revenues or expenses) without any change in management operating or financial decisions, and (ii) changes in management operating or financing decisions linked to impacting one or more reported financial series. An example of (i) would be a reduction in a bad debt allowance that increases net revenues without any additional actions by management or new information from third parties about likely debt recovery. An example of (ii) relating to the reported revenue series would be incentivizing customers to place orders before the end of a quarter via higher price discounts to increase the current quarter's revenues. An example of (ii) relating to the reported expense series would be delaying the start of an advertising program initially planned for the current quarter to the next quarter to reduce reported expenses for this quarter. Category (ii) has been labelled real earnings management (REM) in the research literature.

While single company case studies lack generalizability, they can provide insight into the existence and possible magnitude of EM, as well as ways to strengthen the design of a large sample EM research project. While published legal cases and audit board reports are not a random sample, they do reinforce managers' generally held notion that EM is pervasive (see Dechow and Skinner (2000)). An early classic UK legal case is the Royal Mail case in 1931 (see Brooks (1933)). A forensic analysis of the accounting records of the Royal Mail Company (a British shipping company) found that it had been using access to financial reserves to reduce variation in its reported financials without disclosure to its investors. Appendix A provides an overview of a 1980 audit board report of H. J. Heinz that has strong empirical support for its conclusion that divisional managers across multiple divisions and in many countries were engaged in systematic EM activities driven by a short-run bonus system that only paid off if a benchmark was achieved (with minimal higher bonus payments for exceeding that benchmark). One aspect of relevance to the GYZ (Gong et al. 2023) study is how the Heinz audit showcased that the direction of the divisional managers' EM activities varied depending on the context. For some Heinz product divisions in some countries, there was documented systematic front-ending of revenues to the current period from the next period, and systematic back-ending of current period expenses to a future period, with the aim of meeting a current period bonus hurdle. However, where managers had already met their bonus hurdle numbers, the reverse was systematically found to occur, with the revenue series being back-ended to a future period and the expense series being front-ended to the current period. This variation in EM activities depending on the bonus attainment/ non-attainment context added to the reliability of the finding that the H. J. Heinz divisional managers had been engaging in systematic EM activities to increase their bonus payments. As noted below, the GYZ (Gong et al. 2023) conclusions would have been strengthened had GYZ adopted a two-quarter focus that examined (i) whether there was shifting of movie release dates to a subsequent quarter when



the first month of the current quarter was above box-office expectation, and (ii) the release dates of movies in the current quarter when the box office results in the first month were below expectations.

## 1.4 Research design issues

This section outlines areas where the GYZ (Gong et al. 2023) analysis could be further enriched and probes their conclusions in a more rigorous way. Key aspects of the movie picture context are as follows:

- Movie cinema theatre chains (such as AMC and Cinemark in the US, Wanda Cinemas in China, Cineworld in the UK, and Cinepolis in Mexico) ultimately greenlight what is shown on their screens. The movie studio companies examined in GYZ (Gong et al. 2023) do not have the final say in what is shown on the theatre chain screens. Using the AMC Entertainment 10Ks over the 2014 to 2018 period, the movie studios on average capture approximately 52% of AMC's box office revenues.
- Movie studios often announce the planned release dates of movies they have in production months or even years in advance. GYZ (Gong et al. 2023) report that 2042 movies in their sample of 3094 movies have at least one planned release date as well as the actual US domestic release date. For these 2042 movies, the actual release date is "on average 115 days (21 days is the median) *later* than the initially announced release date." The premise of the GYZ (Gong et al. 2023) EM "speed up" hypothesis is that multiple movies have actual release dates before their preannounced release date when box office results in the first month of a quarter are below expectations. Clearly, factors in addition to EM objectives are at play when GYZ's sample of 2042 movies has both the mean and median release date occurring *after* and not before the preannounced release date of movies examined with both dates available. Ideally, more analysis could have been made as to the multiple factors that explain this key aspect of the sample examined.
- Movie studios, in their own movie release analyses, recognize the potential drawing power of the movies being released by competing studies as well as their own releases. Security analysts' reports of both movie studio companies and movie screening companies highlight how box office revenues are very dependent on the full set of movies being simultaneously shown on movie screens and not just on a single movie. Daily reports of box-office revenues will list multiple movies by a wide range of movie studio companies.

With this backdrop, there are at least three areas where the GYZ (Gong et al. 2023) research design could be strengthened.

## 1.4.1 Research design issue #1

Decisions about EM are typically made in (i) a multiperson setting, (ii) potentially with a multiperiod perspective, and (iii) with uncertainty about the desired outcome of EM activities occurring.



Multiperson setting: Management asserted to be engaging in EM will have one or more parties on the other side, depending on the context. In the H. J. Heinz case described in Appendix A, the other side was Heinz headquarters management and later the Heinz audit board, who were probing allegations that division managers were engaging in EM to boost their bonuses. The GYZ (Gong et al. 2023) setting is a publicly traded movie studio company that is attempting to reduce a potential reduction in stock price by accelerating the release of movies with high expected revenues. There are at least two other sides (and likely more) to a movie studio which attempts to change a planned release date. There is the non-capital market side, which includes at least the movie theatre chains and the movie talent (both onscreen talent and off-screen talent such as producers and directors). Security analysts and other investors are also a key part of the multiperson setting being examined in the GYZ (Gong et al. 2023) setting. The GYZ (Gong et al. 2023) paper gives limited attention to the very rich information environment available to analysts and investors in the movie studio sector to assess whether actions by a movie studio to shift revenue from a future quarter to a current quarter through early releases of expected high revenue movies will be easily detectable by the capital market participants. Security analyst reports of movie chains provide a lens into the revenues that show up as revenues of movie studios. Security analysts of both movie studios and movie chains very much adopt a "view from the bottom"/grass-roots level when analyzing actual reported revenues and when forecasting future quarter-by-quarter revenues. For example, a January 12, 2023, Credit Suisse analyst report (2023, pages 9–10) on AMC Entertainment (over 10,000 screens in over 900 theatre complexes in 2022) outlines the quarter-by-quarter box office revenues of over 80 movies and their studios when analyzing 2022 quarterly revenues. Analysts can observe changes from planned release dates and comment on them when changing their revenue forecasts for forthcoming quarters. For example, a February 24, 2023, J.P. Morgan (2023, page 1) analyst report on Cinemark (over 5000 screens in over 500 theatres in 2022) noted that it was forecasting a "more even performance in 2023" due to the "shift" of The Marvels movie to the fourth quarter of 2023. Another aspect of the rich information environment available to security analysts and investors is the daily reporting of box office revenues for each movie. There are very few industries where such a key item of information for security price evaluation is updated on a day-by-day basis during a quarter. Researchers in this setting could do a word search on analyst reports issued at the time that movie release dates are changed, to probe whether it is reasonable for movie studio executives to assume that analysts will take the reported financials at face value rather than drill down to the underlying drivers of those reported financials when analyzing the stock price implications.

Multiperiod setting: The so-called front-ending of revenues and back-ending of expenses in EM initiatives create a potential shortfall in subsequent periods. This has financial reporting elements of the challenges of managing a Ponzi scheme, where attempts to cover up such shortfalls in subsequent reporting periods require even larger front-ending of revenues and back-ending of expenses. A related dimension here is the reputation of the movie studio management with security analysts. Reputational integrity and trust in multiperiod relationships are important. Analysts who observe what they believe to be multiple short-run revenue-pumping behaviors



by movie studio executives have their own reputations to protect and enhance, with an incentive to highlight such short-run behavior by studio executives (especially if there is the very systematic pattern that is implicitly assumed in the GYZ (Gong et al. 2023) paper). This multiperiod-aspect EM research is generic to much of the EM research literature. For example, it also shows up in studies that examine whether executives of companies going IPO enhance the financials released just prior to the going-public date. Security analysts of such companies will be tracking these companies post their IPO date. Attempts to front-end revenues prior to an IPO or to back-end expenses to a quarter or year post the IPO date can have multiyear negative consequences for the post-IPO reported financials when the reversal of this front-ending impacts the reported financials.

Uncertainty of desired outcome: This third aspect arises from uncertainty as to the actual outcome of attempts to engage in EM. Not all attempts by managers to affect change of any kind will have the desired outcomes. There are four possible outcomes here as regards a research project, assuming the hypothesized effect is a first-order one: (i) EM attempted and research reports EM successful, (ii) EM attempted and research reports EM unsuccessful, (iii) EM not attempted but research reports that EM occurred, and (iv) EM not attempted and research reports that EM did not occur. Where the research results fall into (i), inferences from them will be affected by the likely magnitude of the hypothesized effect and by the strength of the research design to minimize the impact of other explanations for the findings. GYZ (Gong et al. 2023) adopt the event study approach, which has built-in controls for factors that may be simultaneously occurring in some but not all of the time periods examined. As noted above, the reliability of the EM conclusions would have been enhanced by having a two-quarter period analysis that further analyzed the impact of month one overperformance in box office revenues in a current period and whether the release dates of planned high-revenue movies in that quarter were subsequently pushed back to the next quarter. Of relevance here is that the majority of movies in the GYZ (Gong et al. 2023) sample are released after their preannounced release dates. It may well be that a two-period research design would identify that a subset of these delayed releases to the next quarter or year are associated with movie studios already having an above-expected revenue yield in the current quarter or year and seeking to bank some revenues to the next quarter or year through a delayed release of movies with expected high box-office revenues.

#### 1.4.2 Research design issue #2

EM research probing specific industries or specific contexts should make extensive efforts to exploit institutional aspects of the research setting. Institutional knowledge ideally should be triangulated from multiple sources, with a mix of quantitative and qualitative information. The movie industry has multiple participants that should be analyzed, especially when forming expectations as to whether the hypotheses are likely to be first-order effects, lesser-order effects, or of limited economic significance. Conversations with multiple executives in the movie industry highlighted that movie studios do not dictate, to the movie chains, when those chains release a movie, especially when they want to move up the release date of a movie that was already built into



the movie chain's scheduled allocation of dates, screens, and timeslots. Major movie screening companies—such as AMC and Cinemax in the US, Cineworld in the UK, Cinepolis in Mexico, Cineplex in Canada, and Wanda in China—have much leverage in negotiations over the movie release dates and the screens allocated in their theatres. The relationship between movie studios and such screening companies is best viewed as a long-term one, with each having important power in the negotiations. Factors that will impact the release dates for specific movies in these biparty negotiations include (i) when a movie is available to be released (delays in production can lead to later-thanplanned release dates), (ii) the expected competitive landscape at the time of the release (a movie studio may propose an accelerated release date but be made aware that its new preferred date already has a mega-release by a competing studio, with major screen commitments by the movie chains), (iii) target audience and industry norms, such as Memorial Day weekend and July Fourth in the US and Valentine's Day and Christmas in many countries, and (iv) the preferences of key talent, including on-screen talent as well as directors and producers. Efforts by a studio to shift a movie from a planned release day are but one factor in the studio-movie chain negotiations over the eventual release date. Movie screening companies are allocating a scarce resource (screens), and a potential blockbuster release can result in short-run shifts in the screens available for new releases. Several examples from the time period of the GYZ (Gong et al. 2023) study illustrate how screen availability for a new movie can shift due to factors not related to the changed EM preferences of one or more movie studies. Avatar (December 18, 2009, release date) dramatically exceeded industry expectations, leading to its being allocated more screens and better time slots for much longer than was initially planned (see Caballero (2023)). In contrast, Warner Bros.' Fantastic Beasts: The Crimes of Grindelwald (November 16, 2018, release date) opened with "the lowest opening weekend of any Harry Potter franchise movie," which resulted in movie screening companies looking to accelerate the planned release dates of forthcoming new movies (see Reilly (2018)). In short, there are multiple reasons for planned release dates shifting, only one of which is possible EM efforts by a movie studio.

## 1.4.3 Research design issue #3

Use the available financial and other information to the fullest extent to probe the research hypotheses in a demanding way. There are several areas where the extensive available information could have been further analyzed. The Nash Information Services database used in GYZ (Gong et al. 2023) includes the domestic and international revenues as well as the production cost for each of the movies in their sample. A key assumption of GYZ (Gong et al. 2023) is that the production cost of a movie is a good proxy for the expected revenues of each movie; an earlier Gong et al. (2011) paper is cited to support this assumption. Given the pivotal nature of this assumption, evidence related to the strength of the correlation between production cost and box office revenues (domestic and international, separately and combined) for the aggregate sample of 3094 movies in GYZ (Gong et al. 2023) study (and for subsamples of the 3094 movies) would have helped increase confidence in the validity of this assumption for the period and sample of companies they examined.



The release date speed-up EM analysis in GYZ (Gong et al. 2023) uses monthly information about when movies are released. A more granular analysis is possible than that presented by GYZ (Gong et al. 2023). Movies with high expected revenues typically will have extended weeks and sometimes months of screening in the theatres. Table 1 shows that for the highest grossing movie in each year in the 2009 to 2018 period, the first calendar quarter of the release captures only 68.2% of the total US domestic revenues. The earlier in the quarter a movie is released, the more screen days available to the end of the quarter and the higher the percentage of the total box office that will be shown as revenues in that quarter. For example, *Skyfall* (November 8, 2012, release date—44 days before the quarter-end) has 95.7% of its US domestic box office in its release quarter. In contrast, *Transformers: Age of Extinction* (June 26, 2014, release date—five days before the quarter-end) has only 45.3% of its US domestic box office in its release quarter.

A more granular probing of the "release date speed-up" hypothesis would undertake what I would call a "screen days available to the end of the quarter" (SDA) analysis for each movie—this is the number of calendar days from the release date of a movie to the end of that quarter. Then, it would assign the movies to different groups (say, five groups) depending on the magnitude of the box-office revenues of their studio in the first month of the quarter, based on it being below or above revenue expectations for that studio—Group 1 would be the most negative below expectations and Group 5 the most positive above expectations. For each group, the distribution of the SDA data points could be built and plotted. Movie studios in quarters with well below average (well above average) box office expectations in the first month of a quarter would be predicted to more aggressively move forward (move back) the release dates of high expected revenue movies. Each distribution could be plotted using a horizontal range of one to approximately 60 for the remaining days in the two months post the end of the first month of each quarter. The SDA distribution for Group 1 (Group 5) would be predicted to have a higher (lower) number of movies in the higher SDA range. One upside of this more granular distribution approach is that the daily release time to quarter-end distribution figures for groups with different expected EM behavior would provide visual insight into the magnitude of the EM activities being probed. Accounting research often presents multiple tables, when a better way to highlight key findings is figures and distribution plots. For example, one important paper in the EM literature, Burgstahler and Dichev (1997), used distribution figures to provide visually compelling evidence that EM activities explained the relative underrepresentation of companies with small decreases in earnings or small losses.

#### 2 Overview

The GYZ (Gong et al. 2023) paper is an important contribution in building a richer institutional lens into both the EM objectives and the mechanisms by which managers can use their operating decisions to impact the financials they report to the capital market. The motion picture context has institutional richness, part of which the authors build into their research design in a creative way. This commentary makes multiple suggestions about where this richness can be further extended in two ways. One way is



	Movie	Studio	US Domestic Release Date	Total Domestic Box Office (\$M)	Revenues by End of First Quarter	First-Quarter Box Office
	(1)	(2)	(3)	(4)	(5)	(9)
2009:	Avatar	Twentieth Century Fox	12/18/2009	\$785	\$284	36.2%
2010:	Toy Story 3	Disney	6/17/2010	\$415	\$251	60.5%
2011:	Harry Potter Hallows (II)	Warner Bros.	7/14/2011	\$381	\$379	99.5%
2012:	Skyfall	Sony	11/8/2012	\$304	\$291	95.7%
2013:	Frozen	Disney	11/22/2013	\$401	\$263	65.6%
2014:	Transformers: Age of Extinction	Paramount	6/26/2014	\$245	\$111	45.3%
2015:	Star Wars: Force Awakens	Disney	12/17/2015	\$937	\$652	%9.69
2016:	Finding Dory	Disney	6/16/2016	\$486	\$330	%6'.29
2017:	Beauty and the Beast	Disney	3/16/2017	\$504	\$361	71.6%
2018:	Incredibles 2	Disney	6/14/2018	609\$	\$426	70.0%
AVERAGE				\$507	\$335	68.2%



to provide more insight into the decision context of movie studio decisions about movie release dates, especially the role of movie screening companies and the other factors that can play a role in movie release decisions. The other way is to provide further analysis using a broader set of data to build more confidence that the concluded EM activities by movie studios are occurring and the extent of their magnitude. This would include analysis of security analyst reports of both movie studios and movie screening companies, undertaking a two-quarter analysis, and taking a more granular analysis of the screen days available to the quarter-end (as opposed to monthly information) when analyzing the potential ability of a shift in a movie release date to sizably impact the reported financials for a quarter.

In multiple conversations with people in the motion picture industry, concerns were expressed about whether EM activities of the kind hypothesized by GYZ (Gong et al. 2023) were first-order effects of a sizable magnitude or a small part of the multiple negotiations that occur before the actual release dates of movies by screening companies are announced. Such industry feedback, while important, puts an extra obligation on researchers. Researchers who focus on a specific industry (such as motion pictures) have the responsibility to build as much richness of industry institutional setting into the research design so that those in that industry cannot quickly dismiss conclusions they may think reflect badly on their industry. There is much to be gained by researchers highlighting, in credible ways, activities in an industry that when brought into the sunlight are likely to be the subject of much criticism or be reputation damaging to those in the industry. An example from finance research highlights the value of academics conducting research in specific industry sectors. For many years, major banks denied allegations that Libor (London Inter-bank Offered Rate) rates were being manipulated via the provision of false information to increase the banks' profits. A research study by Snider and Youle (2010) and others provided extensive evidence that led to an investigation and later multibillion fines to banks such as Barclays Banks, UBS, Rabobank, and Deutsche Bank. The GYZ (Gong et al. 2023) paper places, on the agenda, a caveat that security analysts and investors should recognize when interpreting the reported financials of movie studio companies.

## APPENDIX A: Insights from the H. J. Heinz 1980 Audit Board Report

The audit board of the H. J. Heinz board of directors became aware in early 1980 of allegations of questionable internal control and financial reporting practices at one of its divisions. The audit board engaged an outside law firm and an accounting firm (different from its own audit firm at the time) to investigate the allegations. Later in May 1980, Heinz filed, with the SEC, a "Report of Audit Committee to the Board of Directors: Income Transferal and Other Practices." The report concluded that during the years from 1972 to 1980 multiple Heinz "affiliates" (divisions) "engaged in the practices of improperly accounting for income and expense items and sales, which had the effect of transferring income between fiscal years." Table 2 presents a summary of the restatements to reported sales and net income made by the company in 1980. During the 1972–1980 period the management incentive program (MIP) emphasized the achievement of short-term division earnings results. Several of the



 Table 2
 Summary of Improper Earnings Management Activities at H. J. Heinz from 1972 to 1980

FY	Improper Recognition of Expenses	ition of Improper Recognition Other Practices of Sales	Other Practices	Increase (Decrease) Net Income before Tax	Total Net Income before Tax after Restatement	% Effects of Restate- ment
1972	\$ (513.00)	\$	<del>\$</del>	\$ (513.00)	\$ 75,894.00	(7.)
1973	\$ (1814.00)	\$ (1968.00)	\$	\$ (3782.00)	\$ 84,777.00	(4.5)
1974	\$ (4250.00)	\$ (309.00)	\$ (1364.00)	\$ (5923.00)	\$ 98,173.00	(6.0)
1975	\$ 2476.00	\$ 1527.00	\$ (615.00)	\$ 3388.00	\$ 113,137.00	3.0
1976	\$ (111.00)	\$ (1815.00)	\$ 877.00	\$ (1049.00)	\$ 128,682.00	(8.)
1977	\$ (4139.00)	\$ (1294.00)	\$ 268.00	\$ (5165.00)	\$ 160,101.00	(3.2)
1978	\$ 734.00	\$ (2872.00)	\$ 671.00	\$ (1467.00)	\$ 170,198.00	(6.)
1979	\$ 8888.00	\$ 7085.00	\$ 396.00	\$ 16,369.00	\$ 183,178.00	8.9
1980	\$ 76.00	\$ (354.00)	\$ (233.00)	\$ (511.00)		ı

(Source: "Report of Audit Committee to the Board of Directors: Income Transferal and Other Practices," May 1980). Form 8-K Current Report



income transferal practices were designed to ensure that the divisions met but did not substantially exceed their profit targets, since each year's goals were based on the previous year's results.

Column (2) in Table 2 highlights how in some years expenses were back-ended, whilst in other years they were brought forward. For example, in 1974, Heinz solicited \$2 million of invoices from an advertising agency for services that would be rendered in 1975. Such invoices were recorded as expenses in 1974.

Column (3) in Table 2 highlights how affiliates recorded sales in a fiscal period other than the period in which the sales should have been recorded. In some divisions, sales were front-ended by keeping open the books for a period of time after the fiscal year ended, and in some cases the sales dates were misdated. In other cases, attempts were made to shut off sales by halting shipments in order to limit income in such years.

One strength of the audit board report was that the documented practices varied by the context in terms of whether a product division or a specific country was expected to be below or above the target profit level before the above documented practices. Another strength was that in any one year, some divisions were using these transferal practices to front-end current division profits, whilst other divisions in the same year were seeking to shift division profits to a subsequent year.

**Acknowledgements** Commentary first made at RAST Conference at Stanford University, December 15, 2022. This commentary was strengthened by multiple conversations with James Gong, Mark Young, and Aner Zhou and discussion at the RAST Conference. The commentary benefitted from multiple conversations with executives in the motion picture industry.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <a href="https://creativecommons.org/licenses/by/4.0/">https://creativecommons.org/licenses/by/4.0/</a>.

#### References

Ball, R., and G. Foster. 1982. Corporate financial reporting: A methodological review of empirical research. *Journal of Accounting Research* 20 (Supplement): 161–234.

Brooks, C. (ed.). 1933. The Royal Mail Case: Rex v. Lord Kylsant. Edinburgh, William Hodge.

Burgstahler, D., and I. Dichev. 1997. Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics* 24: 99–126.

Caballero, D. 2023. 'Avatar' & 9 other films that defied box office expectations. Collider. January 9. https://collider.com/surprising-highest-grossing-blockbuster-movies-exceeded-like-avatar/. Accessed 12/10/2022.

Credit Suisse. 2023. AMC entertainment: What does the 4Q22 miss / APEs issuance mean for 2023? January 12. Equity Research Americas, US.

Dechow, P., W. Ge, and C. Schrand. 2010. Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics* 50: 344–401.

Dechow, P., and D.J. Skinner. 2000. Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons*. 14 (2): 235–250.



Gong, J.J., S.M. Young, and W.A. Van derStede. 2011. Real options in the motion picture industry: Evidence from film marketing and sequels. *Contemporary Accounting Research* 28 (5): 1438–1466.

- Gong, J.J., S.M. Young, and A. Zhou. 2023. *Real earnings management and the strategic release of new products: Evidence from the motion picture industry*. Unpublished Working Paper.
- Heinz, H.J. 1980. "Income transferal and other practices." Report of Audit Committee to the Board of Directors. (May) Form 8-K Current Report.
- McNichols, M.F. 2000. Research design issues in earnings management studies. *Journal of Accounting and Public Policy* 19 (4–5): 313–345.
- Reilly, N. 2018. 'Fantastic beasts: The crimes of Grindelwald' scores lowest U.S. box office opening in 'Harry potter' history. NME. November 19. https://www.nme.com/news/fantastic-beasts-crimesgrindelwald-scores-lowest-us-box-office-2403900. Accessed 12/10/2022.
- Snider, C., and T. Youle. 2010. Does the LIBOR reflect banks' borrowing costs? Social Science Research Network 14: 2.235–2.22050 https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1569603. Accessed 12/10/2022.
- Vladu, A.B., and D.D. Cuzdriorean. 2014. Detecting earnings management: Insights from the last decade leading journals publishing research. *Procedia Economics and Finance* 15: 695–703.

**Publisher's note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

