

IN THE COURT OF CHANCERY OF THE STATE OF DELAWARE
IN AND FOR NEW CASTLE COUNTY

CEDE & CO. and)	
CINERAMA, INC.,)	
)	
Petitioners,)	Civil Action No. 7129
)	
v.)	
)	
TECHNICOLOR, INC.,)	
)	
Respondent.)	

MEMORANDUM OPINION

Submitted: July 11, 2003
Decided: December 31, 2003
Revised: July 9, 2004

Robert K. Payson, Arthur L. Dent, and Catherine A. Strickler, of POTTER ANDERSON & CORROON LLP, Wilmington, Delaware; OF COUNSEL: Gary J. Greenberg, New York, New York, Attorneys for Petitioners.

Thomas J. Allingham II, Edward B. Micheletti, James A. Whitney, and T. Victor Clark, of SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP, Wilmington, Delaware, Attorneys for Respondent.

CHANDLER, Chancellor

This case involves the appraisal of 201,200 shares of respondent Technicolor, Inc. owned by petitioner Cinerama, Inc. The litigation began in 1983. There have been five remands by the Supreme Court and two appraisal trials before two different trial judges. The second appraisal trial was completed in May 2003. This is the Court's decision, following the May 2003 trial and post-trial briefing.

For the reasons that follow, I conclude that the per share going concern value of Technicolor at the time of the merger, taking into account the implementation of the so-called Perelman plan, is \$21.98 per share. Petitioner is entitled to \$21.98 per share, or \$4,422,376. In addition, petitioner is entitled to pre-judgment interest of 10.32% from January 24, 1983 to August 2, 1991. Finally, I award post-judgment interest of simple interest (on the principal amount only) at the statutory legal rate of 7.0 percent, from August 3, 1991 until the date the judgment is paid.

I. PROCEDURAL AND FACTUAL BACKGROUND

Only a brief review of the facts will be given since the history of this action is thoroughly recorded in the annals of Chancery litigation. In the early 1980s, MacAndrews and Forbes Group, Inc. ("MAF"), through a wholly-owned subsidiary, sought to purchase Technicolor. On December 31, 1982, MAF closed

a public cash tender offer at \$23.00 per share for up to all of the Technicolor common stock. All but 17.81% of the outstanding stock was tendered. Next, on January 24, 1983, a cash-out merger occurred, converting all common stock not owned by MAF into the right to receive \$23.00 in cash. Petitioner Cinerama, Inc., a beneficial shareholder that owned 201,200 Technicolor shares through its nominee, Cede & Co., dissented from the merger and sought judicial appraisal of its stock under 8 *Del. C.* § 262.

The first appraisal trial was held in 1989 and included a related fiduciary duty case.¹ After the entire fairness action was resolved in Technicolor's favor and affirmed by the Supreme Court, petitioner appealed the Court's first appraisal decision rendered by my predecessor, Chancellor William Allen, and the case was remanded to me (as the successor judge) for a new appraisal.² Following this remand, I entered an order making several decisions concerning the nature and scope of the new appraisal proceeding on remand (the fourth remand from the Supreme Court). Petitioner took an interlocutory appeal from this order and the case was remanded yet again, the Supreme Court directing that I conduct a

¹Petitioners also filed a personal liability action related to the merger. This Court found that the merger met the standard of entire fairness. *Cinerama, Inc. v. Technicolor, Inc.*, 1991 WL 111134 (Del. Ch. June 24, 1991), *aff'd*, 663 A.2d 1156 (Del. 1995). Thus, all that remains is to determine the fair value of petitioners' shares and the appropriate post-judgment interest.

²*Cede & Co. v. Technicolor, Inc.*, 684 A.2d 289 (Del. 1996) (hereinafter "*Technicolor IV*").

completely “new trial” on the valuation of the Technicolor shares.³ The current (fifth) remand requires the Court to value Technicolor as a going concern as of January 24, 1983, taking into account that the Perelman plan⁴ was the operating plan for Technicolor at that time. Before the second trial, the Court decided the issue of pre-judgment interest, concluding that former Chancellor Allen’s ruling regarding prejudgment interest (at the rate of 10.32% per year compounded annually) was the law of the case. All that remains to be decided, therefore, is the value of Technicolor and the applicable post-judgment interest rate. To that end, a nine-day trial was held from May 12th to the 22nd of 2003.

Although 8 *Del. C.* § 262 requires this Court to determine “the fair value” of a share of Technicolor on January 24, 1983, it is one of the conceits of our law that we purport to declare something as elusive as *the* fair value of an entity on a given

³ *Cede & Co. v. Technicolor, Inc.*, 758 A.2d 485 (Del. 2000) (hereinafter “*Technicolor V*”). The Supreme Court reversed my decision to appoint an expert in corporate finance as a Special Master who could assist the Court, holding that the appraisal statute implicitly prohibits the Chancellor and Vice Chancellors from appointing a neutral expert as a special master in an appraisal proceeding. *But see* 73 Del. Laws c. 201 (amending 10 *Del. C.* § 372(a) to allow appointment of a master *in any cause pending* in the Court of Chancery unless a statute explicitly provides to the contrary).

⁴ Ron Perelman was the controlling shareholder of MAF and the driving force behind the Technicolor merger. Once the first step of the merger was completed in December 1982, Mr. Perelman’s business plan was found by the Supreme Court to have replaced that of Technicolor’s Chief Executive Officer before the merger, Morton Kamerman. *See Technicolor IV*, 684 A.2d at 300. Throughout this Opinion, the Perelman plan is the plan in place at the time the second step of the merger was completed on January 24, 1983. The exact nature of the Plan was one of the issues before the Court during the second trial.

date, especially a date more than two decades ago. Experience in the adversarial, battle of the experts’ appraisal process under Delaware law teaches one lesson very clearly: valuation decisions are impossible to make with anything approaching complete confidence. Valuing an entity is a difficult intellectual exercise, especially when business and financial experts are able to organize data in support of wildly divergent valuations for the same entity. For a judge who is not an expert in corporate finance, one can do little more than try to detect gross distortions in the experts’ opinions. This effort should, therefore, not be understood, as a matter of intellectual honesty, as resulting in *the* fair value of a corporation on a given date. The value of a corporation is not a point on a line, but a range of reasonable values, and the judge’s task is to assign one particular value within this range as the most reasonable value in light of all of the relevant evidence and based on considerations of fairness.⁵

⁵ See, e.g., *Taylor v. American Specialty Retailing Group, Inc.*, Del. Ch., C.A. No. 19239, Lamb, V.C. (July 25, 2003) (valuing company by averaging values yielded by DCF and guideline companies analysis when one analysis was about 10% higher than the other analysis); *Gotham Partners, L.P. v. Hallwood Realty Partners, L.P., et al.*, Del. Ch., C.A. No. 15754, Strine, V.C. (July 8, 2003) (valuing a company using the average of four valuations, where those valuations diverged by more than 173%). Many commentators have recognized the indeterminate nature of the search for the fair or intrinsic value of a company. Professors Allen and Kraakman have also noted the institutional disinclination of Chancery judges to engage in the valuation process in certain circumstances precisely because those judges recognize it as a “daunting task” subject to significant uncertainty. The same institutional pressures that result in this disinclination at the Chancery Court level, of course, do not apply at the appellate level and may explain why the Supreme Court exhibits more confidence in the ability to ascertain *the* fair value of an enterprise. See W. T. Allen and R. Kraakman, COMMENTARIES AND CASES ON THE LAW OF BUSINESS ORGANIZATION at 312 (2003).

II. VALUATION OF TECHNICOLOR

A. The Valuation Experts

Both petitioner and respondent retained valuation experts who testified at trial. Petitioner's expert was John B. Torkelsen, a Chartered Financial Analyst who also testified for Cinerama in the first trial. Torkelsen is the Managing Director of Equity Value Advisors, LLC, which provides security analysis consulting services, including business valuation and financial expert witness services. He received a Masters in Business Administration from Harvard University and a Bachelor of Science in Chemical Engineering from Princeton University.

In general, I found Torkelsen's testimony and his report on value unreliable. Without considering the fundamental credibility issues that were argued vigorously by respondent,⁶ I have concluded, independently, that the Torkelsen methodology,

⁶ Respondent repeatedly sought to undermine Torkelsen's credibility in this trial by highlighting his "hired gun" relationship with the Milberg Weiss law firm, including allegations that Torkelsen performed expert witness services for Milberg, Weiss on a contingency fee basis. Respondent's Proposed Findings of Fact and Conclusions of Law [hereinafter Technicolor Proposed Findings or "TPF"] at 27, citing Tr. 1341-57. References to Petitioners' Proposed Findings of Fact and Conclusions of Law throughout the opinion will be designated as "Cinerama Proposed Findings" or "CPF".

and in particular his repeated discarding or modification of contemporaneous (*i.e.*, 1981-1983) management forecasts, cast serious doubt upon the integrity and reliability of his expert report. Not only does Torkelsen value Technicolor at an amount nearly triple the deal price that the Supreme Court has affirmed as the highest price reasonably available and entirely fair (\$23 per share), but he arrives at a nearly identical price for Technicolor as his first report, after inexplicably making significant revisions to his 1989 report. Specifically, Torkelsen increased his valuation of Technicolor under the Perelman plan by \$1.02 per share⁷ by: (1) increasing his discount rate from 12.5% to 14.6%; (2) increasing his growth in perpetuity rate from 5% to 7.35% (nearly a 50% increase); and (3) considerably altering his depreciation forecast for each of the years in his 1983-1987 forecast period. If Torkelsen had changed his discount rate alone, his valuation figure would have dropped \$12.12 per share.⁸ Torkelsen partially offset that reduction, however, by increasing the growth in perpetuity rate, which added \$9.73 to the per share result, bringing it up to \$60.36.

⁷ From \$62.75 per share at the first trial (total Technicolor value of \$286.629 million) to \$63.77 per share at the second trial (total Technicolor value of \$291.253 million). *Compare* RX 18 with PNX 15 at 212. Trial exhibits will be designated throughout the opinion as follows: (1) Plaintiffs' exhibits from the first trial: PX [number] at [pg.]; (2) Petitioners' exhibits from the second trial: PNX [number] at [pg.]; (3) Defendant's exhibits from the first trial: DX [number] at [pg.]; (4) Respondent's exhibits from the second trial: RX [number] at [pg.].

⁸ From \$62.75 per share to \$50.63 per share.

When asked about these changes, Torkelsen dismissed them as minor variations and offered no plausible justification for making them. Respondent offers one—that Torkelsen changed his report because this Court heavily criticized his 1989 weighted average cost of capital (WACC) in its 1990 appraisal opinion.⁹ Respondent further points out that Torkelsen offers no new evidence to support the upward revision of the terminal value growth rate that restored much of the value lost after his revision of the discount rate. Respondent observes that Torkelsen also altered his depreciation assumptions to fully restore the value to his previously forecasted levels, as well as to address criticism leveled against his old 5% growth in perpetuity rate.¹⁰ This allowed him, respondent argues, to grow his forecasted revenue at a faster rate and to increase his terminal value base year cash flow—resulting in a higher terminal value.¹¹

Although I agree that these unexplained modifications produce skepticism, Torkelsen’s casual discarding of contemporaneous management forecasts raises (to my mind) even more red flags. As a general matter, I find Torkelsen’s rejection of

⁹ *Cede & Co. v. Technicolor, Inc.*, 1990 WL 161084, at *30 (Del. Ch. Oct. 19, 1990) (mem. op.) (finding that Torkelsen’s “technique of estimating a discount rate is decidedly less reliable than Professor Rappaport’s technique. It is not an acceptable professional technique for estimating Technicolor’s cost of capital to look to the cost of capital (CAPM derived) of the *acquiring company*. Torkelsen’s alternative of the average of all industrial concerns is far too gross a number to use except where no finer determination is feasible, which is not the case here.”).

¹⁰ TPF at 90.

¹¹ *Id.* at 90-91.

management projections erroneous and unreasonable. After considering all of the evidence, I am convinced that Technicolor management was in the best position to project the short-term prospects of the company, as they created projections *ex ante*, based upon information gleaned from their particular customers. I find it unreasonable to reject these forecasts (as Torkelsen did) in favor of information that is not in any way specific to Technicolor, but instead to create (as Torkelsen did) hindsight forecasts based primarily upon the industry as a whole. The specifics of Torkelsen's rejection of management forecasts will be discussed in more detail in the respective unit valuations. As a general matter, however, his overall rationale for rejecting them was not that Technicolor's management had some sort of bias or improper motive when creating them, but that management was incompetent. This rationale is wholly unpersuasive and demonstrably inaccurate. As will be shown below, management forecasts for Technicolor were historically accurate and, therefore, the best evidence regarding the short-term prospects of Technicolor. Although some aspects of Torkelsen's report and testimony were helpful, I have found that much of it is discredited by contemporaneous pre-merger evidence.

Respondent hired as its expert Professor Peter Easton,¹² the John J. Gerlach Chair in Accounting at Fisher College of Business at Ohio State University. Easton's relevant educational experience includes a Bachelors degree in Economics from the University of Adelaide in Adelaide, Australia, a Diploma in Financial Management at the University of New England in Armidale, Australia, and a Ph.D in Business Administration from the University of California at Berkeley. He also serves on the faculties of the University of Chicago Graduate School of Business and the University of Melbourne's School of Economics. As a professor and consultant, he focuses on financial statement information and valuation. As a scholar, he has published numerous scholarly articles in leading academic journals regarding the role of accounting information in security valuation. He also serves as the Associate Editor for four of the five leading academic journals in the United States, and for leading journals both in Australia and in the United Kingdom.

In general, I found Easton's testimony and his report on valuation to be more reliable and persuasive. First, he begins his valuation by adopting contemporaneous management forecasts—a much more credible exercise at the

¹² Respondent's expert at the first trial was Professor Alfred Rappaport, at the time a professor at the Northwestern University Graduate School and participant in a consulting firm, Alcar. He was not available to testify at the second trial.

start. Second, his projections are significantly more straightforward, directly projecting the necessary variables as contrasted with Torkelsen's contortionist projections-upon-projections to come up with a relevant proxy for a necessary input. Not only are Easton's projections easier to follow, they make more logical sense and leave less room for error. Third, Easton's projections are supported by several independent indicia of value, while Torkelsen does not even attempt to perform reasonableness checks upon his valuation. These reasonableness checks will be discussed below in Section VIII. Because I found Easton's analysis more reliable overall, I have begun with his projections and modified them only as necessary throughout most of the business units.

B. The Experts' Methodology

Both experts used the discounted cash flow ("DCF") method to determine Technicolor's value. Discounted cash flow has been accepted as an appropriate valuation method in Delaware.¹³ Easton also used the residual operating income method. I choose not to use this alternate form of valuation without actually deciding whether it is a viable valuation method.

¹³ See, e.g., *Erickson v. Centennial Beauregard Cellular, L.L.C.*, 2003 WL 1878583 (Del. Ch. Apr. 1, 2003); *Union Illinois v. Korte*, 2001 WL 1526303 (Del. Ch. Nov. 28, 2001); *Parnes v. Bally Entertainment Corp.*, 2001 WL 224774 (Del. Ch. Feb. 23, 2001).

A DCF analysis projects operating cash flows for an extended period, determining a terminal value upon sale at the end of the period, and then discounting those values at a set rate to determine the net present value of the common stock.¹⁴ Discounted cash flow is based upon three inputs: (1) the free cash flow projections for a certain number of years; (2) the terminal value estimate; and (3) the discount rate. The free cash flow and terminal value projections are evaluated for each business within Technicolor. A uniform discount rate adjusted for Technicolor's risk is used throughout. In addition, and finally, the post-judgment rate of interest must be determined.

I begin my analysis by defining the Perelman plan. Then I evaluate the free cash flow projections and terminal value of each business within Technicolor. Next, I examine the discount rate, including the amount of Technicolor debt in that calculation. Finally, I establish the rate and form of post-judgment interest. Once all the inputs are established, the final valuation of Technicolor can be calculated.

III. VALUATION UNDER THE PERELMAN PLAN

Former-Chancellor Allen's decision to value Technicolor under the Kamerman plan and not the Perelman plan constitutes the overriding basis behind the Supreme Court's reversal and remand, and consequently the fundamental cause

¹⁴ *Taylor v. American Specialty Retailing Group, Inc.*, 2003 WL 21753752 at *3 (Del. Ch. July 25, 2003).

of the great expenditure of time and energy occasioned by holding a second appraisal trial.¹⁵ According to the remand instructions, I first must determine what the Perelman plan means. Then, I must establish an approach for valuing Technicolor under that plan. Only non-speculative elements of value may be considered.¹⁶

The parties basically agree as to the nature of the Perelman plan.¹⁷ This plan sought to capitalize on the steady cash flow of Technicolor by retaining certain core businesses and selling off four non-profitable businesses. The plan itself did not change the value of the retained businesses, but focused solely on trimming the company's losses by selling off the four non-profitable businesses: Gold Key, Audio Visual, One Hour Photo, and Consumer Photo Processing.

As with the retained businesses, I need to individually determine the value of each of these divisions. Certain assumptions will be made, specifically that the discount rate used for the retained businesses is the same for the businesses being sold, and that the businesses were to be sold within six months of the merger.¹⁸ I

¹⁵ *Technicolor IV*, 684 A.2d at 300.

¹⁶ *Id.* at 299.

¹⁷ PNX 15 at 9; RX 4 at 10. The plan changed somewhat during its implementation, but I only address the plan as it was developed on the date of the merger.

¹⁸ The parties divide the time between six months and a year for the various divisions. I find that the Perelman plan intended to sell all four within six months, if possible. Therefore, since this is the best evidence as to sales time lines, I find that six months is the proper time for discounting the expected cash flows.

directly address the value of the four divisions being sold in Section V of this decision.

It is important to note at this time that the major issue in this dispute, according to the remand opinion, was the value added to Technicolor by the Perelman plan. The Perelman plan did not seek to change the retained businesses in any way. It is undisputed that MAF was merely a holding company and MAF did not seek to change the operation of the retained businesses, but merely to harness the cash flow of those operations. MAF's other holdings at the time were a chocolate company and a licorice extract supplier business, thus creating no synergies through the merger with Technicolor.

The only value added by the Perelman plan, therefore, was the cash flow generated by selling off the four non-profitable divisions within six months of the merger. The *difference* between the parties' valuations of that cash flow is less than \$3 million. Petitioner expected \$46,043,000 (or an undiscounted \$50.2 million), and respondent expected \$43,070,000 (or an undiscounted \$47 million).¹⁹ Taking the difference of \$2,973,000 and dividing it by the 4,567,491 outstanding Technicolor shares yields a difference in valuation of the Perelman plan by the parties of sixty-five cents per share.²⁰ After seven years of additional litigation

¹⁹ RX 30; *see also* text accompanying notes 303 and 304, *infra*.

²⁰ *Id.*

since the first remand,²¹ with extensive costs both to the parties and to the judicial system, and an entirely new trial to resolve the main issue (include the value of the Perelman plan)—all over a difference in value per share of only sixty-five cents, or a total of \$130,780 for Cinerama's 201,200 shares.

Of course, the ultimate difference between petitioner and respondent is much greater. Petitioner's expert opines that Technicolor's value per share on January 24, 1983 was \$63.77, while respondent's expert opines that value was \$22.62 per share, for a spread of \$41.15. My point is simply that the Perelman plan ultimately does not assume a large role in the final analysis, despite the emphasis it has received throughout these protracted proceedings.

Nevertheless, as directed on remand, I have conducted a completely new appraisal of the entire company under the Perelman plan, which is described below. To determine the final valuation of Technicolor per share, I must first determine the value of the retained businesses. Then, I determine the cash flow generated through selling off the four divisions under the Perelman plan. Finally, I sum the value of the retained businesses and the sold businesses, discounting each

²¹ The Supreme Court remanded the appraisal action on October 14, 1996. *See Technicolor IV*, 684 A.2d at 284.

according to a reasonable discount rate, subtract the value of Technicolor's outstanding debt,²² and divide by the number of outstanding shares.

One important point bears emphasizing at the outset. The Supreme Court reversed the first appraisal decision, and remanded for an entirely new trial. I understood this mandate for what it is—an instruction to hear and consider the evidence regarding valuation completely afresh in order to reach a new, independent determination of Technicolor's fair value on January 24, 1983. Based on the complete reversal in this case (Technicolor IV, 684 A.2d at 302), the 1991 valuation of \$21.60 per share has been rendered a nullity. Thus, the \$21.60 value found in the original decision exists no more. For this reason, one cannot view the \$21.60 as a “floor” or as a “ceiling” on the valuation to be determined on retrial. In addition, one cannot simply add the independent value of the “Perelman plan” to former Chancellor Allen's Kamerman plan valuation of Technicolor, and arrive at the fair value of Technicolor. The Supreme Court specifically noted that the \$21.60 valuation had been impermissibly tainted by former Chancellor Allen's majority acquirer principle. It thus becomes impossible to rely upon the \$21.60 number at all, and I have ignored it for purposes of the retrial. My valuation of

²² Outstanding debt is determined in the discount rate section as long-term debt.

Technicolor at \$21.98 per share is an independent and objective judicial determination based solely on the evidence adduced during the May 2003 retrial.

IV. VALUATION OF THE RETAINED BUSINESSES

A. North Hollywood

It is undisputed that Technicolor's most important line of business was professional film processing, and that North Hollywood was the largest of Technicolor's film processing operations.²³ Easton's analysis provides that North Hollywood comprises \$15.88 of his ultimate \$22.62 per share value for the company, or roughly 70% of Technicolor.²⁴ Torkelsen did not provide a separate value for North Hollywood alone.²⁵ Petitioner contends that Easton's method of valuing Technicolor as a sum of its parts is novel and improper. It argues that Easton's approach "ignores all synergistic benefits of an integrated enterprise" and that "if each division were treated as a stand-alone business for valuation purposes, a specific divisional discount rate would be required for each." To the contrary, I have found Easton's analysis far more complete and reasonable than Torkelsen's. This is, in part, precisely because Easton has broken down Technicolor into its

²³ PNX 15 at 2 n.3, 5, 60-61; RX 4 at 18, 23.

²⁴ RX 30. Easton came to this by dividing his projected value of North Hollywood (\$72,547,000) by 4,567,491 shares outstanding as of January 24, 1983.

²⁵ Petitioners' Reply Brief Concerning Respondents Proposed Findings of Fact and Conclusions of Laws [hereinafter Cinerama Reply Brief or "CRB"] at 13.

various divisions, making his calculations and conclusions of value more explicit and understandable. Although applying a separate discount rate to each division would theoretically yield a more accurate result, it appears, as partially evidenced by the dispute regarding Technicolor's beta and discount rate as a whole, that the data necessary to determine divisional discount rates with any reasonable degree of certainty and validity do not exist. Easton used Technicolor's overall discount rate as a reasonable proxy, especially given that the discount rate for the entire company is, in reality, a form of weighted-average discount rate based on the appropriate discount rates of the various divisions.

1. Management Forecasts

One of the key areas of contention between Easton and Torkelsen relates to the applicability of management forecasts. Easton derives his analysis from management projections, especially those contained in the calendar year 1983 Profit Plan ("CY 1983 Plan").²⁶ He also relies on Technicolor's historical results. Torkelsen, on the other hand, considers short-term management forecasts to be inadequate, and uses less than three years of historic data in deriving the statistical

²⁶ RX 4 at 17.

regressions from which he values North Hollywood.²⁷ As of the time of the merger, Technicolor did not have long-term (post 1983) projections.²⁸

a. Management forecasts are beneficial in an appraisal context

Management forecasts are an appropriate starting point from which to derive data in performing an appraisal analysis.²⁹ Contemporary pre-merger management projections are particularly useful in the appraisal context because management projections, by definition, are not tainted by post-merger hindsight and are usually created by an impartial body. In stark contrast, *post hoc*, litigation-driven forecasts have an “untenably high” probability of containing “hindsight bias and other cognitive distortions.”³⁰ Additionally, then-Vice Chancellor Steele noted in *Gilbert v. MPM Enterprises, Inc.* that “management was in the best position to forecast [the company]’s future before the merger....”³¹ If management forecasts

²⁷ PNX 15 at 22, 62. It is interesting to note, however, that Torkelsen only performs regression analyses for North Hollywood and Newbury Park. For the other film processing facilities (East Coast, S.p.A., and London) and Technicolor’s other divisions, Torkelsen relies on management’s CY 1983 Plan.

²⁸ Tr. at 1983. Testimony is cited within as follows: New Trial Testimony is “Tr. at ___”; Deposition Testimony is “[Name] at ___”; Old Trial Testimony is “[Volume Number] [Name] at [pg.]”.

²⁹ *In re Radiology Assocs., Inc. Litig.*, 611 A.2d 485, 490-91 (Del. Ch. 1991); see *Harris v. Rapid-American Corp.*, 1990 WL 146488 at *6-*7 (Del. Ch.), *aff’d in part, rev’d in part on other grounds*, 603 A.2d 796 (Del. 1992) (rejecting petitioners’ valuation method because the inputs were too speculative, largely due to the fact that management did not create them or give any input to the third party which did create them).

³⁰ *Agranoff v. Miller*, 791 A.2d 880, 892 (Del. Ch. 2001).

³¹ 709 A.2d 663, 669 (Del. Ch. 1997), *aff’d*, 731 A.2d 790 (Del. 1999).

are prepared a significant period of time before the merger, it may be necessary to make minor changes to them reflecting actual results as of the merger date.³² Such alterations are not necessary in this instance, however, because the CY 1983 Plan was being prepared beginning in December 1982 and was finished by March 1983.³³ Although March 1983 is post-merger, the CY 1983 Plan contains information that only validates what was known or knowable and susceptible of proof on or about January 24, 1983. I therefore find that for purposes of determining the fair value of Technicolor as of the merger date, use of the CY 1983 Plan as a contemporary management forecast is most suitable.³⁴

When management projections are made in the ordinary course of business, they are generally deemed reliable.³⁵ Experts who then vary from management forecasts should proffer legitimate reasons for such variance.³⁶ Torkelsen significantly alters management forecasts in his valuation of North Hollywood.

³² *Id.*

³³ Tr. at 1081; PX 348-55.

³⁴ Petitioner's attempt to strike respondent's valuation of North Hollywood as being tainted by post-merger bias through the use of the CY 1983 Plan is disingenuous and somewhat troubling considering that petitioner's own expert heavily relied on the CY 1983 Plan for all portions of his valuation other than North Hollywood and Newbury Park. See Tr. at 1277-1278.

³⁵ *In re Radiology Assocs., Inc. Litig.*, 611 A.2d 485, 490-91 (Del. Ch. 1991).

³⁶ See *Gray v. Cytokine Pharmasciences, Inc.*, 2002 WL 853549 at *8 (Del. Ch.) (rejecting valuation because it inexplicably ignored and altered management forecasts in favor of litigation-driven projections); *Kleinwort Benson Ltd. v. Silgan Corp.*, 1995 WL 376911, at *5 (Del. Ch.) (remarking that variations from management projections merit "close inspection" and may impeach the credibility of an expert witness).

Petitioner has attempted to discredit Technicolor's internal projections and assert the reasonableness of Torkelsen's alterations to management's forecasts, but do so unpersuasively for several reasons, as discussed below.

b. Technicolor management's projections
were consistently accurate

First and foremost, both experts have testified to and demonstrated the uncanny accuracy of Technicolor's management in preparing financial forecasts.³⁷ It has been shown that, once normalized for abnormal silver reclamation profits, the average operating margin variance (the difference between actual and projected profit margins) for North Hollywood during fiscal years 1979-82 was a mere 0.1%.³⁸ The average sales variance (as a percentage of the Plan) was 2.1%--an extremely accurate projection.³⁹

Second, Technicolor management did not produce calendar year forecasts prior to MAF's assuming control of Technicolor in late 1982. Petitioner has attempted to show that actual calendar year 1981 and 1982 results varied greatly from the fictional calendar year forecasts by reconstructing calendar year plans for

³⁷ Tr. at 1435-45, 2182; RX 4 at 16-17; PNX 1 (demonstrating an average profit margin variance of only 1.8% for fiscal years 1981-82).

³⁸ RX 4, Ex. 3; Tr. at 2179-80. Even if the abnormal silver reclamation profits are not corrected for, the absolute average operating margin variance is still only 3.0%. RX4, Ex. 3.

³⁹ *Id.*; Tr. at 2182. The absolute average sales variance (as a percentage of the Plan) would be about 9%. RX 4, Ex. 3.

1981 and 1982. This is an activity in which Technicolor management never engaged. For example, when switching from a fiscal year to a calendar year in December of 1982, Technicolor management did not borrow the last six months of the fiscal year 1982 projection when creating the CY 1983 Plan. Instead, it created new projections in order to make the CY 1983 Plan as accurate as possible.⁴⁰

Third, petitioner attacks the reasonableness of the CY 1983 forecasts by comparing them to actual post-merger 1983 results. It does so in contravention of my previous evidentiary rulings in this case.⁴¹ In a March 27, 2003 hearing, I stated that “[p]ost-merger evidence may be used to validate or invalidate what was known or knowable at the time of the merger, but only in the limited sense of crediting or discrediting pre-merger projections.”⁴² I qualified this, however, by stating that “the evidentiary weight of such post-merger evidence” will “necessarily be of less weight than pre-merger or contemporaneous evidence of post-merger value, and of no weight whatsoever without such contemporaneous evidence. *Basically it is useful only to supplement contemporaneous evidence*

⁴⁰ Tr. at 1602. The seasonal, sensitive, and volatile nature of scheduling in the motion picture industry testified to by petitioners’ witnesses meant that release dates for movies and demand for North Hollywood’s services (and therefore, also, its revenues) could vary greatly from month to month. See tr. at 111-31, 1427-28.

⁴¹ See *Cede & Co. v. Technicolor, Inc.*, 1999 Del. Ch. LEXIS 32 (Del. Ch.); *Cede & Co. v. Technicolor, Inc.*, C.A. No. 7129, bench ruling (Del. Ch. Mar. 27, 2003) (“March 27 Hearing”).

⁴² March 27 Hearing, tr. at 90.

supporting or refuting an allegation that the pre-merger projections were intended for strategic purposes rather than for accuracy.”⁴³ Despite this caution, petitioner’s briefs repeatedly attempt to use post-merger information to denigrate the *accuracy* of management forecasts as opposed to using post-merger information properly to demonstrate strategic motives. For example, in its post-trial brief, petitioner points out that for the first quarter of 1983, revenues exceeded the CY 1983 Plan by 22.4%. This information does not suggest that the pre-merger projections were for strategic purposes rather than for accuracy. Additionally, were petitioner to continue its use of post-merger information, it would have to state that for the second quarter of 1983, there was less than a 5% variance between actual and Plan revenues.⁴⁴ Therefore, this use of post-merger information was unhelpful and improper and has been ignored in my valuation process.

c. Trends in the industry

In the course of preparing their forecasts, there is no evidence that Technicolor management had reason to skew the figures in any way.⁴⁵ Despite this

⁴³ *Id.* at 91-92 (emphasis added).

⁴⁴ PNX 1 at 6.

⁴⁵ See *In re Radiology Assocs., Inc. Litig.*, 611 A.2d 485, 490-91 (Del. Ch. 1991) (concluding that forecasts prepared with a “business purpose” were reliable and should be used to determine DCF inputs).

knowledge, Cinerama argues that the CY 1983 Plan was inconsistent with current trends in the motion picture industry.⁴⁶ Cinerama has failed to demonstrate, however, that Technicolor's management was unaware of these trends. Cinerama has further failed to demonstrate that Technicolor's performance had a correlation to "trends" in the motion picture industry. For example, though only about two-thirds of film processing revenues were derived from the motion picture industry (the remaining third coming mostly from the television industry), the evidence presented at trial by petitioner focused almost entirely, if not exclusively, on the trends in, and state of, the motion picture industry. Torkelsen first rejects management's projections, though he later admitted that the "management at Technicolor understood the economics of the company very well."⁴⁷ He then testified that Technicolor management's projections were untenable based upon the very same data available to Technicolor years after Technicolor's management came to their conclusions.⁴⁸ Even assuming, for the sake of argument, that Cinerama's portrayal of the motion picture industry in early 1983 is accurate, it is hard to believe that Technicolor management would have been ignorant of the trends affecting its industry. It is much more plausible, and in accord with the

⁴⁶ CPF at 59-61. RX 4 at 18.

⁴⁷ Tr. at 1439-40.

⁴⁸ Torkelsen agreed under cross-examination to the proposition that he claims to have analyzed the data "in a more rigorous manner" than Technicolor management. Tr. at 1439-40.

long-standing respect for management financial projections, that Technicolor made a conscientious effort to produce accurate forecasts, and that any variations in Technicolor's projections from industry trends were consciously and reasonably made based upon management's experience and information gleaned from Technicolor customers.⁴⁹

For the foregoing reasons, I conclude that management forecasts, and the CY 1983 Plan in particular, were the appropriate starting point for an appraisal analysis of North Hollywood.

2. Torkelsen's Regression Analysis

Finally, as will be shown below, Torkelsen's replacement of management forecasts with litigation-driven regression analyses leads to wholly unreasonable and unsustainable valuation inputs. Of great concern to the Court are Torkelsen's regression analyses. Although it is generally agreed that the developments announced in *Weinberger v. UOP, Inc.* regarding appropriate valuation methods for appraisal were positive, the multiplicity of accepted valuation methods and

⁴⁹ There is a presumption that directors—and by inference, officers—“acted on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the company.” *Aronson v. Lewis*, 473 A.2d 805, 812 (Del. 1984). In such instances, the court should “not substitute its own notions of what is or is not sound business judgment [for those of management].” *Sinclair Oil Corp. v. Levien*, 280 A.2d 717, 720 (Del. 1971). Technicolor management engaged in a rigorous process in creating the CY 1983 Plan because such plans were very important to management. Tr. at 1601-02.

analyses often leads to an “apples and oranges” comparison of the competing experts’ opinions.⁵⁰ While both experts in this matter used a DCF framework, Easton and Torkelsen took very different approaches in reaching their ultimate valuations. Despite the utility of and preference for contemporary management forecasts, if it can be shown that the regression analyses are more reasonable and accurate, it may still be appropriate to use them for determining the inputs to the DCF framework.⁵¹

a. When regression analysis is appropriate

In order for regression analysis to be an appropriate tool for forecasting economic relationships, the analysis must be based on a mature business with

⁵⁰ 457 A.2d 701, 712-13 (Del. 1983); *see* Jack B. Jacobs, Reappraising Appraisal: Some Judicial Reflections, Speech at 15th Annual Ray Garrett, Jr. Corporate and Securities Law Institute, Northwestern University School of Law 10 (unpublished manuscript Apr. 27, 1995). This problem could be largely overcome by a method similar to that adopted by the British High Court of Justice, in which competing experts discuss their reports (usually outside the presence of counsel) and file a joint report with the Court detailing the items in their respective reports on which they agree and disagree. *See* CIVIL PROCEDURE RULES, Rules 35.10, 35.12 (Sweet & Maxwell 2002).

⁵¹ Petitioner cites several federal cases for the proposition that regression analysis is a well-recognized statistical technique that has met with widespread judicial acceptance. I do not disagree with this proposition, but point out that in this instance, a statistical technique is very different from a valuation technique. With one exception, all the cases that petitioner cites use regression analyses merely to demonstrate a connection between the dependent and independent variables (a statistical technique)—not to forecast costs, revenues, or profits (a valuation technique). *See* CPF at 64-65; Reply Brief in Opposition to Petitioners’ Proposed Findings of Fact and Conclusions of Law [hereinafter Technicolor Reply Brief or “TRB”] at 18, n.11.

stable economic relationships.⁵² Further, there should be a significant relationship between the dependent (factor) and independent (response) variables throughout the historical period from which the regression is derived.⁵³ It should also be reasonable and expected that this relationship will continue throughout the forecast period.⁵⁴

b. Regression analysis is not appropriate
for valuing North Hollywood

Torkelsen only used thirty months—two-and-a-half years—of historical data in developing his regressions. Admittedly, from a purely statistical perspective, a

⁵² Tr. at 1255-56. It should also be borne in mind that “[r]egression analysis is widely used and, unfortunately, frequently *misused*.” DOUGLAS C. MONTGOMERY & ELIZABETH A. PECK, INTRODUCTION TO LINEAR REGRESSION ANALYSIS 42 (2nd ed. 1992) (emphasis in original).

⁵³ Tr. at 1194-95. Furthermore:

The purpose of a regression analysis is to estimate or explain a response variable (y) for a specified value of a factor variable (x). This purpose implies that the variable x is chosen or “fixed” by the experimenter... and the primary interest of a regression analysis is to make inferences about the dependent variable using information from the independent variable.

RUDOLF J. FREUND & WILLIAM J. WILSON, REGRESSION ANALYSIS: STATISTICAL MODELING OF A RESPONSE VARIABLE 52 (Academic Press 1998). This purpose is distinguished as being different from using regressions to determine a relationship or correlation between two random variables, though the authors note that the two concepts are often confused. *Id.* at 52-53.

⁵⁴ See MONTGOMERY & PECK, *supra* n.52, at 4. Regarding the dangers of using regression analysis to forecast, it has been written by scholars of regression analysis that:

It is not advisable to use an estimated regression relationship for extrapolation. That is, the estimated model should not be used to make inferences on values of the dependent variable beyond the range of observed x -values. *Such extrapolation is dangerous, because although the model may fit the data quite well, there is no evidence that the model is appropriate outside the range of the existing data.*

FREUND & WILSON, *supra* n.53, at 65 (emphasis added).

statistically valid regression model can be constructed with twenty data points.⁵⁵ This was done notwithstanding the fact, as has been touched on above, that data from only thirty months may include month-to-month variations that can easily skew the regression's forecasts from true long-term historical relationships developed over an appropriate business cycle.⁵⁶ As Easton pointed out, “[m]onthly data is highly variable and is not indicative of margins going forward.”⁵⁷ From the outset, the Court is therefore suspicious of Torkelsen’s regression analysis for North Hollywood as being based on very little historical data when additional data had been available.

Based on the above criteria and for the additional reasons discussed below, I have reservations about the appropriateness of a regression analysis in determining the value of North Hollywood. First, the North Hollywood operation, although it had been functioning for many years, had recently undergone a significant retooling and upgrade designed to modernize the facility.⁵⁸ This modernization program is apparently largely why Torkelsen only used data from 1980-82 in his analysis. Torkelsen then assumes that the advantages in efficiency obtained by the modernization effort will continue into perpetuity. This assumption is erroneous.

⁵⁵ Tr. at 2230.

⁵⁶ *Id.* at 2064.

⁵⁷ *Id.*

⁵⁸ PNx 15 at 63; Tr. at 1626.

Although this limitation may create a better fit for the data, it begs the question of whether the rewards reaped from the modernization program would continue through 1987 (the end of the explicit forecast period) and beyond. It is more plausible that competition from other processing firms as well as advancements and changes in the technology of film processing, distributing, and projection would cause the modernization program (as largely completed in 1980) to diminish in value as time progressed.

Second, the film processing business, although it was a mature operation, was facing some potential “bumps in the road” as of the merger. United Artists, previously one of Technicolor’s largest contract customers, indicated that it would not renew its contract when it expired in May 1983.⁵⁹ This information was known to Technicolor management before the merger.⁶⁰ Torkelsen makes no attempt to correct for this known certainty, but simply dismisses it by asserting that Technicolor would “make up” the difference in growth from other customers.⁶¹ Respondent rightly points out that it is highly unlikely that Technicolor could instantly “make up” the loss of 11% of its customer base in 1983 and into perpetuity by Torkelsen’s estimated annual growth of 2.31%.⁶² Torkelsen’s

⁵⁹ RX 4 at 26.

⁶⁰ *Id.* at 21.

⁶¹ Tr. at 1370, 1464-65.

⁶² PNX 15 at 95.

assumption also ignores the fact that Technicolor had been losing market share, was having a difficult time retaining its contract customers, and was facing the potential of non-film based motion picture delivery and projection systems in only a few years.⁶³ These major issues—the unknown future effects of the modernization program, potential technology threats, and the loss of the business from a substantial customer coupled with a demonstrated inability to retain key clients—lead to my conclusion that North Hollywood was not necessarily the type of business with stable economic relationships sufficient to support a forecast based on regressions, especially given a hesitance among authors of scholarly texts on regression to use it for forecasting purposes.

⁶³ DX 238; Tr. at 524-25, 1624-25. For example, even though Warner Brothers' contract with Technicolor was not due to expire until 1984, Technicolor had already been informed that Warner Brothers intended to seek competing bids. Gaul 47 (Mr. Raymond Gaul was Technicolor's president once it was under Perelman's control); Ryan 215-16 (Mr. Arthur Ryan was a Technicolor director before the merger). Some of these technological threats included videocassette and videodisc, cable television, and direct satellite transmission of movies to theaters. Tr. at 881-82; 963-66; 1163-64. Contracts with Disney and Universal were scheduled to expire in 1985 and 1986, respectively. PX 372. Perelman did not see North Hollywood as having great growth potential, in large part because there were so few major studios (a maximum of eight) that were potential customers, and two already had their own labs. PNX 15 at 33 n.20. *See also* tr. at 1839-40:

Q. You bought a company that you expected not to grow?

A. When we bought it, I didn't know how it would grow.

Q. Well, you expected it to grow and that's why you bought it. Yes?

A. How would I expect it to grow? We couldn't get any more customers. You've got to look at the base. There are six customers, two of whom own their own laboratory.... We couldn't grow outside the industry. We were tied to that one industry. So that our future was determined by A, could we keep the customers; and, B, at what price they would pay us to service them.”

c. Even if appropriate, Torkelsen's use of regression analysis leads to unreasonable results

Even if regression analysis is the appropriate method with which to forecast North Hollywood's performance and determine its fair value, the manner in which Torkelsen performed the regressions leads to incredulous results that are so far outside the realm of reasonableness that they must be rejected. Easton calculated that the value Torkelsen attributed to North Hollywood was \$42.54 per share,⁶⁴ or almost twice the \$23 per share merger consideration paid for the entire company, even though the \$23 price per share consideration was found by the Delaware Supreme Court to be entirely fair and the "highest reasonably available."⁶⁵ Regression analysis is most useful when a given independent (or response) variable is difficult to predict, and that variable is well correlated over the applicable time periods with another dependent (or factor) variable that is significantly easier to predict.⁶⁶ Such is not the case in the analyses performed by Torkelsen. Furthermore, as demonstrated below, his inputs to a regression model, already on shaky ground, are fatally flawed.

⁶⁴ RX 30. \$194,289,000/4,567,491 shares outstanding as of January 24, 1983.

⁶⁵ *Cinerama, Inc. v. Technicolor, Inc.*, 663 A.2d 1156, 1177 (Del. 1995) ("*Technicolor III*").

⁶⁶ Tr. at 1194.

i. Footage

Preliminarily, and to reinforce a point made above, all the data from which Torkelsen derives his regressions are tainted by his inclusion of United Artists' business, which would not be retained from the latter half of 1983 onward. This is just one of many unsubstantiated deviations from management's untainted, contemporary forecasts. Torkelsen justifies his variations with respect to the number of prints and footage forecast largely by surmising that Technicolor management was out of touch with respect to purported industry trends toward more major releases and wider release patterns.

I find it very interesting to note at this point that Torkelsen actually visited the North Hollywood facility in 1986.⁶⁷ He specifically points out in his report that his degree in chemical engineering enabled him to “ask questions concerning the technology and the economics of the facility both as to the past, *the present and the future.*”⁶⁸ Unfortunately for Cinerama, in 1986, both the present and the future (as well as several years of the past) of the technology and economics of the facility constituted improper post-merger information.⁶⁹ Once Torkelsen rejects contemporary management forecasts and decides to replace them with his own *post*

⁶⁷ PNX 15 at 2 n.3.

⁶⁸ *Id.* (emphasis added).

⁶⁹ I do not mean to say that any such visits by witnesses, especially valuation experts, in an appraisal context are entirely prejudicial, but I do harbor serious doubts as to whether an

hoc idea of what would have been more reasonable as of the merger date, there is a substantial risk of errors entering into the analysis, even with the best of intentions.

To help determine the footage figure to apply to his regression analysis, Torkelsen uses 35mm theatrical release prints as a surrogate for all film processed by North Hollywood.⁷⁰ Torkelsen mentions that Technicolor management prepared its forecasts in much the same way as he does, but provides no legitimate reasons for arriving at vastly different conclusions with respect to CY 1983 footage.⁷¹ He continues by stating that by January 24, 1983, the number of films Technicolor would process during CY 1983 would be known.⁷² If that were the case, there is no obvious need to revise the number of prints projected in the CY 1983 Plan.

observer in that setting can make a truly impartial determination of only what was known, knowable, or susceptible of proof as of the merger date.

⁷⁰ PNX 15 at 86. It should be noted that 35mm theatrical release prints, as a proxy for all North Hollywood revenue is incomplete, especially when placed in the context of Torkelsen's regression analyses. Only two-thirds of North Hollywood revenues came from the motion picture industry, and of the motion picture work, only two-thirds were release prints. One-third of North Hollywood 35mm motion picture volume consisted of dailies. Dailies and release prints were quite different to Technicolor, as the margins on dailies were higher; therefore dailies accounted for more than one-third of North Hollywood motion picture film processing revenues. In addition, at the time of the merger, there was speculation that dailies would be eliminated entirely through the use of high-definition videotape. RX 4 at 18.

⁷¹ PNX 15 at 86. I do not agree with Torkelsen's characterization of Technicolor's forecasting as being done in the "exact same way." Pretending that 35mm motion picture release prints represent all of North Hollywood's business is quite different from exploding a forecast of the other types (dailies, trailers, etc.) and gauges (8mm, 16mm, and 70 mm) of prints based on historical ratios. See PNX 15 at 87.

⁷² *Id.*

Instead of using the number of prints forecast by the persons who worked in the motion picture industry at Technicolor day in and day out at the time of the merger, Torkelsen chooses to forecast for 1983 the same level of release prints per studio as in 1982.⁷³ Mr. Jay Cipes was the Technicolor employee responsible for these projections.⁷⁴ In the CY 1983 Plan, Cipes forecast 37,800 release prints, down from 44,700 in the FY 1983 Plan.⁷⁵ Nevertheless, Torkelsen decides that Cipes' projections—projections made contemporaneously with the merger and representing a downward correction from the FY 1983 Plan—were inconsistent with industry trends.⁷⁶ Torkelsen instead forecasts 45,358 release prints for CY 1983.⁷⁷ I find this arbitrary (and quite substantial) increase in projected release prints unreasonable and unpersuasive. Cipes' forecast was based on the specific films anticipated in 1983 and his personal contact with Technicolor's customers.⁷⁸

⁷³ *Id.* Much has been made of the “trend” toward wider film releases. The problem inherent in that statement is the definition of a wide release. As argued by petitioner and defined by Murphy, a wide release is a release on more than 500 screens. This wholly arbitrary figure yields the conclusion that the “trend” is heavily dependent on how a wide release is defined, and as such, Torkelsen's arguments that Technicolor's forecasts varied from industry trends carry even less weight. *See* PNX 14 at 24.

⁷⁴ Cipes was the senior vice president of marketing for Technicolor. Tr. at 1604.

⁷⁵ PNX 15 at 91.

⁷⁶ *Id.* at 92.

⁷⁷ *Id.* at 91. It is interesting to note that Cipes forecasts fewer prints per release in 1983 than 1982 for Disney and Universal, but forecasts more prints per release in 1983 for United Artists and Warner Brothers. This appears to show a concerted effort by Cipes to make the CY 1983 Plan projections conform to the ebb and flow of the individual industry participants as of January 1983.

⁷⁸ PX 388; tr. at 1603-04.

Additionally, other members of Technicolor management carefully scrutinized, and when necessary, revised, Cipes' projections.⁷⁹ That 1983 projections vary from 1982 projections is not surprising: the films projected for 1983 were different from those released in 1982 and would have a different release strategy and audience.

The length of each print is also an essential element in determining footage. Cipes' forecast was based on an average of 10,000 feet per release print.⁸⁰ Torkelsen derives a figure of 11,087 feet processed per release print because he divides total footage for fiscal 1982 by the number of release prints made in that same year.⁸¹ He attempts to justify this by saying that the 11,087 feet includes the dailies, answer prints, trailers, etc. that are part of making a movie.⁸² This exercise results in double-counting those types of non-release print work. Since the Technicolor forecasts were exploded from the release print forecasts,⁸³ adding footage from other work to release print forecasts will result in unwarranted inflation of the footage figures. Between his inflation of the number of release prints and the size of each print, Torkelsen manages to inflate projected motion

⁷⁹ It is known that at least Wilson and Ryan were involved in the process. Tr. at 1603-07.

⁸⁰ PX 153, reproduced in PNX 15 at 87-88.

⁸¹ PNX 15 at 88.

⁸² *Id.*

⁸³ *See supra* n.71.

picture release print footage for CY 1983 from 378 million feet to more than 502 million—a nearly 33% increase.⁸⁴ This is unwarranted and entirely outside the realm of reasonableness based upon historic data.⁸⁵ I therefore conclude that Torkelsen’s use of a regression model based upon CY 1983 footage of 502.9 million feet yields an unreasonable and untenable result and must be rejected.

ii. Revenues, costs, and margins

The parties disagree as to the elasticity of demand for film processing services and its effects on footage. Torkelsen cites to the deposition testimony of Raymond Gaul, the President of Technicolor once it was under Perelman’s control, saying that all the major processors’ pricing “was about the same” and that the

⁸⁴ Cipes projected 37,800 prints at 10,000 feet each. Torkelsen projects 45,358 prints at 11,087 feet each. PNX 15 at 87-88, 91. Torkelsen also arbitrarily substitutes the number of prints forecast for non-contract customers with the actual non-contract prints made in fiscal 1982, with his only potential justification again being that Technicolor’s management must have been sorely mistaken when preparing the CY 1983 Plan. PNX 15 at 90-91. This is simply another example of Torkelsen’s unjustified *post hoc* decisions to substitute his own post-merger hindsight judgment for the unbiased, contemporary forecasts of Technicolor’s management.

⁸⁵ There is great discrepancy and confusion as to what the actual footage results were, though I need not make a specific finding as to this narrow issue. I believe a great part of the confusion is due to differences in fiscal/calendar years and what footage was analyzed (release print, total theatrical, or something else). Petitioner argues that actual total 1982 footage was 479.5 million feet in an attempt to validate Torkelsen’s figure of 502.9 million feet. CPF at 63-64. Presumably, total footage would include release prints, dailies, trailers, etc. That footage of release prints alone would exceed the total footage from the prior year seems specious. Respondent argues that actual total CY 1982 footage was 507.9 million feet. RX 29 at 10. Regardless, Torkelsen’s conclusion regarding release print footage is far too high. The 378 million feet projected by Technicolor management for release prints seems quite reasonable when one recalls that release prints only accounted for two-thirds of Technicolor’s motion picture processing work. *See supra* note 70.

industry was driven by service and capacity, not price.⁸⁶ James Wilson, a long-time executive of Technicolor, and vice-president of finance and administration for the motion picture and television division at the time of the merger, testified at trial that the industry was very competitive as to price.⁸⁷ As objective evidence supporting Wilson's very credible testimony, the contracts between Technicolor and three of its largest clients (Warner Brothers, MCA Universal, and Disney) contained "most favored nation" clauses that required that the lowest price offered to any customer for similar types and volumes of work be offered also to those contract customers.⁸⁸ If price was of little import to the producers, it is illogical for their contracts to contain these clauses. Accordingly, I find that the most reasonable view of the motion picture film processing industry as of January 24, 1983 was that it was very competitive as to price.

Torkelsen performs a series of regressions apparently designed to enhance his analysis. By adding a time variable to his revenue per foot analysis, he is able

⁸⁶ PNX 15 at 51 (quoting Gaul 31). Torkelsen's portrayal of Gaul's testimony strikes me as somewhat incomplete and almost a blatant mischaracterization when in addition to the quoted passage, he references Gaul's statement that no single laboratory could handle the volume of work required by Warner Brothers in support of the proposition that service was more important than price. PNX 15 at 53 (citing Gaul 47). On the very same page of Gaul's deposition, however, he testified, as has been noted above, that Warner Brothers would be seeking competitive bids when their contract with Technicolor expired in 1984, and furthermore, *that the reason Warner Brothers was doing so would be to solicit bids at lower processing prices.* Gaul 47.

⁸⁷ Tr. at 1623.

⁸⁸ *Id.* at 1623-25.

to add a “price increase variable” to his analysis that has the effect of increasing Technicolor’s revenues, and by logical extension its prices, by \$713 per million feet per month.⁸⁹ This means that revenues in month one of Torkelsen’s analysis are \$0.102374 per foot processed and by month thirty, revenues have increased to \$0.123764 per foot processed, an increase of more than 20.89% over only two-and-a-half years. With active customers so keen on price, and with all of Technicolor’s major contract customers being advantaged by “most favored nation” clauses, it seems highly unlikely that such an enormous price increase would be even remotely possible, as discussed below.

The constant (y-intercept) derived from Torkelsen’s regression analysis implies that North Hollywood revenues for non-35mm film processing would be \$28.128 million in CY 1983⁹⁰—almost double management’s forecast of only

⁸⁹ PNX 15 at 82-84. Analyzing the scatter graph shown on page 77 of Torkelsen’s report, it is interesting to note that the four data points representing August through November of 1982 vary greatly from the fitted line. PNX 15 at 77. Without engaging in a full, scientific analysis myself, it appears that the coefficient (or slope) of the line would be decreased significantly if those data points were corrected for or omitted. Torkelsen’s use of a small sample enhances any outlier effect that these four points may have. *See* FEDERAL JUDICIAL CENTER, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 199, 217 (2d ed. 2000) (stating that “[e]stimated regression coefficients can be highly sensitive to particular data points,” that “the coefficients in a multiple regression [can] change substantially if the data point[s] in question were removed from the sample,” and that “the sensitivity of the [fitted] line to individual points sometimes can be substantial”). Furthermore, if the profit per foot derived from Torkelsen’s analysis is laid out, it is clear that his 1983 figures (\$0.042) equal a profit per foot attained only at the height of the silver bubble (\$0.043) and unlikely to be repeated. From there, he manages to increase the profits per foot to \$0.058 by 1987, a 76% increase over historic levels. RX 24.

⁹⁰ PNX 15 at 84.

\$14.8 million in (net of contractual discounts) revenue for 8mm, 16mm and 70mm film processing for CY 1983.⁹¹ This is yet another example of the unreasonableness of Torkelsen's analysis.

In analyzing the costs at North Hollywood, Torkelsen essentially performs the same analysis as he did with revenues. His cost constant is \$2.17 million, or in other words, excluding costs associated with 35mm film processing, \$2.17 million in costs would be incurred as fixed costs and in connection with processing 8mm, 16mm, and 70mm film.⁹² His cost increase variable is constructed in much the same way as his revenue increase variable discussed above. The cost increase variable found by Torkelsen implies that every month the cost of processing one million feet of 35mm film will increase by \$369, or roughly half of the monthly increase in revenues per million feet of film processed.⁹³

This result leads to some interesting projections regarding Technicolor's operating margins. Torkelsen's bivariate revenue and cost regressions yield an operating margin of 22.6% for 1983, increasing to 27.1% by 1987.⁹⁴ Yet historically, operating margins (as a percentage of sales) at North Hollywood ranged from 16% to 21%. There was one exception in 1980, when the operating

⁹¹ RX 5 at 12.

⁹² PNX 15 at 108. These two constants, when combined, would imply that North Hollywood would have an operating profit of almost \$26 million if only 8mm, 16mm, and 70mm film were processed. This leads to a ludicrous operating margin of 92.3%.

margin was 28.2%.⁹⁵ The 28.2%, however, included a windfall in silver reclamation income.⁹⁶ In fiscal year 1980, silver reclamation income represented 11.5% of North Hollywood sales.⁹⁷ Excluding FY 1980, from FY 1978 through FY 1982, the average reclamation income as a percentage of sales was 4.9%.⁹⁸

Easton testified that Torkelsen's regressions based on footage and time instead of just time had the effect of almost doubling operating profit for 1987.⁹⁹ 1987 was the last year of the explicit forecast and used to determine the terminal value.¹⁰⁰ Terminal values are easily manipulated.¹⁰¹ Although Torkelsen did not provide the figures himself, Easton prepared an estimate of what North Hollywood's terminal value would be under Torkelsen's analysis. He calculates Torkelsen's discounted free cash flow terminal value for North Hollywood at \$146,552,000 out of a total North Hollywood value of \$209,420,000.¹⁰² In other

⁹³ *Id.*; *supra* n.89.

⁹⁴ RX 23.

⁹⁵ RX 4 at Ex. 7.

⁹⁶ Silver prices greatly affect the cost of film stock. During processing, however, some of this silver is reclaimed. Technicolor management would sell this reclaimed silver from time to time. During late 1979 and the first half of 1980, there was a significant run-up in the price of silver from \$6.25 per ounce in January 1979 to \$38.27 in January 1980 and decreasing to \$16.06 by July 1980. PNX 15 at 63-65.

⁹⁷ RX 4 at Ex. 7.

⁹⁸ *Id.*

⁹⁹ Tr. at 2072-73; RX 44.

¹⁰⁰ PNX 15 at 208.

¹⁰¹ RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 81 (6th ed. 2000) (teaching that "the horizon [or terminal] value can change dramatically in response to apparently minor changes in assumptions").

¹⁰² RX 5, Appendix B at 2.

words, roughly three-quarters of the value Torkelsen attributes to North Hollywood is due to the terminal value, as opposed to roughly half for Easton's analysis—yet another reason for my deep distrust of Torkelsen's conclusion.¹⁰³

This back-loaded terminal value is a direct result of Torkelsen's over-projection of North Hollywood's operating margins. Wilson testified that as a result of the contracts between Technicolor and the major studios, he did not think Torkelsen's projected increase in margins were reasonable.¹⁰⁴ Wilson explained that Technicolor's contract customers had a keen interest in Technicolor's margins, to the extent that when Technicolor wanted to raise prices it would essentially have to obtain approval from its customers.¹⁰⁵ Margin increases were basically not possible based on the key contracts in place on January 24, 1983.¹⁰⁶ Torkelsen's projections into perpetuity would essentially increase margins to and eventually beyond margins achieved only at the height of the silver bubble—a result entirely inconsistent with North Hollywood's past performance.¹⁰⁷ I find Wilson's

¹⁰³ *Id.* Easton projects \$34,128,000 as the discounted free cash flow terminal value out of a total value for North Hollywood of \$72,547,000. *Id.* See *Gray v. Cytokine Pharmasciences, Inc.*, 2002 WL 853549, at *9 (Del. Ch. Apr. 25, 2002) (noting that the results of a DCF valuation must be regarded with great suspicion and given little weight when the terminal value accounts for over 75% of a DCF analysis); *The Union Illinois 1995 Investment Limited Partnership, et al. v. Union Financial Group, Ltd.*, Del. Ch., C.A. No. 19586, Strine, V.C. (Dec. 19, 2003) (noting unreliability of a DCF model in which 97% of the value was derived from the terminal value).

¹⁰⁴ Tr. at 1631.

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ See RX 23.

testimony credible and, therefore, that Torkelsen's projections regarding operating margins are unreasonable, are based upon suspect methods, and must be rejected.

One final observation before I turn to growth rates. Torkelsen attributes his use of separate regression analyses for revenues and costs to a need to develop an income statement.¹⁰⁸ He also stated that “[y]ou’re going to get the same results” using the combined or separate analyses.¹⁰⁹ Statistically, however, the results are quite different. The combined revenue and cost regression performed by Torkelsen is PNX 2, and its omission from Torkelsen's report is strange, indeed. This combined analysis is a very poor predictor of North Hollywood performance. The R-squared of the model (or the changes in profits explained by the regression formula) is only 58%.¹¹⁰ That means that more than 40% of the changes in profits from month-to-month are not captured by Torkelsen's regression and are due to other factors. Furthermore, the absolute average monthly error is greater than 21%.¹¹¹ Additionally, the T-statistic of 1.752 means that the model is not statistically significant at the 95% confidence interval for a two-tailed test.¹¹²

¹⁰⁸ Tr. at 1261.

¹⁰⁹ *Id.*

¹¹⁰ PNX 2 at 2.

¹¹¹ *Id.* at 1.

¹¹² Tr. at 2074-76; FEDERAL JUDICIAL CENTER, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 127, 194 (2d ed. 2000) (remarking that the level of statistical significance required in most scientific work is the 95% confidence level, that one-tailed tests at the 95% level are the weakest standard used in technical literature, and that courts have expressed a preference for two-tailed tests).

Thus, Torkelsen's combined revenue/costs regression analysis is such a poor predictor of profit over the July 1980-December 1982 period (the period for which the regression was performed) that it would be worthless as a predictive tool for forecasting future profits. This fact is cleverly disguised by Torkelsen's summary page regarding North Hollywood operating profit.¹¹³ At the end of his analysis, Torkelsen returns to annual figures, presented in tabular form that falsely represent the accuracy of Torkelsen's back cast when compared with the high variances observed in the monthly data.¹¹⁴ In sum, these errors further undermine Torkelsen's methodology, at least to my mind.

iii. Growth rates

Both parties presented a great deal of evidence relating to the state of the motion picture industry in the early 1980s. In particular, there has been much dispute regarding a statement made by Mr. A. D. Murphy,¹¹⁵ quoted in the 1983

¹¹³ PNX 15 at 113.

¹¹⁴ Compare PNX 15 at 113 with PNX 2 at 1.

¹¹⁵ Murphy was Cinerama's expert on the movie industry for the first trial. He did not testify at retrial due to failing health, and passed away on June 16, 2003. Lorenza Muñoz, *Arthur Murphy, 70; Turned Box Office Data Into a Studio Science*, LOS ANGELES TIMES, June 18, 2003, at B12.

edition of The Movie Business Book, that “there will probably be another reduction in the number of screens from the current 18,000 total to a level of 8,000.”¹¹⁶ On cross-examination as an expert witness in the previous trial,¹¹⁷ and in a statement made to the Court for the current trial,¹¹⁸ Murphy attempted to recast his past comments in a light more favorable to petitioner. In brief, Murphy claims that his statement in The Movie Business Book was taken out of context, not properly updated from when it was originally made, and misrepresents his contemporaneously expressed views on the industry. I find Murphy’s attempts to recharacterize his previous statements unpersuasive. At best, Murphy’s statements from the late 1970s and early 1980s, when analyzed in their totality and in context, show that an observer could conclude that the motion picture industry had rough times ahead. Although true that Easton did not portray Murphy’s statement in the manner most favorable to Cinerama, Easton’s report, in my opinion, is highly persuasive; Easton’s selective quotations of Murphy¹¹⁹ are certainly not unexpected in an adversarial process—especially in a “battle of the experts” appraisal trial.

¹¹⁶ Tr. at 149; DX 258; DX 263.

¹¹⁷ Murphy’s cross-examination from the original trial is found at Tr. Vol. II at 167-228 and Tr. Vol. III at 14-136. On cross-examination, Murphy admitted that “lots of people,” including Jack Valenti, President of the Motion Picture Association of America, and Richard Orear, then President of the National Association of Theater Owners, were predicting that screens would decline. Tr. Vol. III at 40-47. He also stated that he revised the numbers that appeared in the 1983 The Movie Business Book. Tr. Vol. II at 210-12.

¹¹⁸ PNX 13.

¹¹⁹ RX 4 at 19.

Barry Reardon testified on behalf of Cinerama regarding the explosive growth of the film industry at the time of the merger. Though I find him credible as a witness overall, the little weight I gave his testimony was tempered with the cautiousness requisite to the realization that he is a close personal friend of the Forman family, Cinerama's owners, who would directly benefit from a favorable outcome for the petitioner. Reardon admittedly agreed to testify as a personal favor to them, which could easily (though perhaps unintentionally) bias his opinions in favor of petitioner.¹²⁰ I am also cautious with the treatment of his testimony because he relied upon post-Merger documents to refresh his recollection about pre-Merger events. Though seemingly harmless, such reliance would likely exacerbate the hindsight bias he may have already had due to his twenty years of post-Merger industry experience as an executive at Warner Brothers.¹²¹ Therefore, I find that Reardon's testimony was not helpful in this adjudication, since it was tainted with the infirmities of personal bias, hindsight bias, and because it was

¹²⁰ Tr. 79-81.

¹²¹ Besides the fact that he admitted that he did not attempt to wall off the events that occurred after the merger, Reardon contemporaneously published views that seem inconsistent with his current testimony at trial. For example, at trial Reardon testified that screen growth was on an upward trend as of the merger date. (Tr. 156-61) Though he testified that he had never held a contrary view, respondents pointed out that he opined in a late-1981 industry publication that cable television could negatively affect screen growth in three to five years. (RX 14 at 16)

geared toward the industry as a whole, rather than providing any information specific to Technicolor or its customers.

Torkelsen references both the Murphy and Wilkofsky Gruen reports in support of the proposition that the motion picture industry was booming and that rapid growth was expected in the industry.¹²² Torkelsen notes that overall industry growth was forecast at over 8%.¹²³ He also cites statistics from the Motion Picture Association of America (“MPAA”) that theater admissions from 1972 to 1982 had increased at an annual rate of 2.66% and that box office revenue growth had grown annually over that same period at a rate of 8.50%.¹²⁴ Torkelsen continues by assuming that “[i]f the average number of days that a print is shown were held constant, then the number of prints required to fill all theatres would have to grow at the rate of all theatre screens.”¹²⁵ Borrowing again from the MPAA statistics, Torkelsen states that historically the number of movie screens in the United States

¹²² PNX 15 at 95.

¹²³ Interestingly, Torkelsen does not cite to any specific proposition in either the Murphy or Wilkofsky Gruen reports for this assertion, but rather summarily instructs the reader to “see the Wilkofsky Gruen and Murphy reports.” *Id.* Furthermore, a growth rate means absolutely nothing when taken out of the context of the time period over which the growth will occur. Torkelsen’s report does not provide the Court with any ability to give an iota of credence to his bare assertion of “over 8 percent industry growth.” *Id.*

¹²⁴ Given that Technicolor’s business was processing film, increases in admissions are not necessarily probative. That increase could simply be a product of larger theaters. Similarly, average annual box office revenue growth of 8.50% could be a function of larger theaters, inflation, or any number of other factors.

¹²⁵ *Id.* at 93. Torkelsen, as is rather common throughout his report, and this section in particular, fails to justify this assumption or provide evidence that this assumption is true.

grew at 2.31% annually from 1972-1982. Citing this figure as a conservative estimate, he then uses this historic average annual growth rate as a proxy for the growth rate of the number of prints produced by North Hollywood. This aspect of Torkelsen's report is particularly troubling because no evidence was presented establishing a correlation between the past screen growth and the number of release prints processed by North Hollywood.¹²⁶ This is another example of the unreasonableness of Torkelsen's analysis.¹²⁷

The terminal value is used to determine the value of the entity being valued beyond the explicit forecast period since it is impractical to forecast free cash flow into perpetuity.¹²⁸ Torkelsen calculates his terminal value based on normalized net cash flow for 1987, then grows that figure based upon the Gordon Growth Model into perpetuity.¹²⁹ Torkelsen discusses the growth rates projected for North

¹²⁶ Given Torkelsen's affinity for regression analyses, it is remarkably befuddling why he did not perform a regression based on past screen growth nationwide and the number of release prints processed by North Hollywood to determine if there is any correlation between the two. This would be an appropriate use of multiple regression analysis. "Multiple regression analysis is a statistical tool for understanding the relationship between two or more variables." FEDERAL JUDICIAL CENTER, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 181 (2d ed. 2000).

¹²⁷ Petitioner offered PNX 10 to demonstrate a relationship between screen growth and film footage. Without a more detailed analysis, however, petitioners have provided me no legitimate grounds for determining that there is a significant statistical (as contrasted with a purely practical) correlation between the two. Easton testified that in the four years from 1979-1982, Technicolor experienced an overall decrease in footage, which tends to undermine petitioners' argument. Tr. at 1988-90. In this instance, Torkelsen and the petitioner have the burden of showing that their conclusions and assumptions were reasonable. They have failed to do so.

¹²⁸ RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 80 (6th ed. 2000).

¹²⁹ PNX 15 at 208.

Hollywood and Videocassette by the Wilkofsky Gruen reports but decides not to adopt them.¹³⁰ Instead, Torkelsen chooses to grow the terminal value at the stipulated rate of inflation (5%)¹³¹ plus the rate of real long-term growth in the United States' gross domestic product ("GDP"), which he calculates at 2.35% compounded annually.¹³² The only support Torkelsen provides for this inexplicable substitution is the assumption that "it is reasonable to expect that Technicolor's real growth over the long-term should be in line with national real economic growth. Technicolor's market, the entertainment industry, should at least maintain its share of [GDP] going forward."¹³³ Again, Torkelsen has failed to explain why he substituted a figure that would be Technicolor-specific (*i.e.*, the growth rate of 6.3% found by Wilkofsky Gruen) for a generic figure (GDP) that has not been shown to have any relation to or correlation with either Technicolor or North Hollywood. Accordingly, Torkelsen's determination of the terminal value is inherently flawed and unreasonable.¹³⁴

¹³⁰ *Id.* at 209-11.

¹³¹ Pre-Trial Order for Retrial at 12.

¹³² PNX 15 at 211.

¹³³ *Id.* at 210-11.

¹³⁴ Easton also points out a serious flaw in Torkelsen's discounting of the terminal value for Technicolor. *See* RX 5 at 4-5. Torkelsen essentially discounted the terminal value by one too many years. Although his error *reduced* his value for Technicolor, it is a mistake that is not expected in litigation of this caliber. When asked on direct examination during Cinerama's rebuttal if there were errors in RX 5, Torkelsen had an opportunity to contest Easton's report, but he did not disagree that his terminal value calculation in PNX 15 had been performed incorrectly. Tr. at 2327-30.

Having demonstrated and discussed the unreasonableness of Torkelsen's analysis and the plethora of errors throughout, it is clear that his valuation of North Hollywood cannot be sustained. He bases his regression model on an artificially small data sample—less than three years. He makes perplexing alterations to contemporaneous management forecasts that have been shown to be historically very accurate and prepared with great care. He determines footage, margins, and other inputs to his model inconsistently and arbitrarily. Finally, the growth rates he applies to the data are not specific to Technicolor, but rather are proxies that have no demonstrated statistically significant or practical relationship to Technicolor's past performance. Torkelsen's valuation of North Hollywood is rejected in its entirety as unreasonable.

3. Easton's Analysis

It now remains to be seen whether Easton provides a reasonable valuation of North Hollywood. Easton's report relies heavily upon management forecasts, especially Technicolor's CY 1983 Plan.¹³⁵

a. Revenue and sales

The CY 1983 Plan projected net sales revenues for North Hollywood of \$81.409 million.¹³⁶ This was part of a downward trend experienced by

¹³⁵ RX 4 at 17.

¹³⁶ PX 347 at 077181.

Technicolor in the late 1970s and early 1980s.¹³⁷ For CY 1983, management projected the following footages and gross sales (all figures in thousands): 35mm, 460,209 feet and \$79,065; 16mm, 91,960 feet and \$14,905; 8mm, 7,862 feet and \$640; 70mm, 3,309 and \$1,943.¹³⁸ These figures translate into the following revenues per foot: 35mm, \$0.172; 16mm, \$0.162; 8mm, \$0.081; 70mm, \$0.587.¹³⁹

i. Footage

Easton accepts management's figures for 1983, but then adjusts to correct for the loss of the United Artists business in the future.¹⁴⁰ I agree with Easton's use of management figures for CY 1983 and accept them as part of my appraisal analysis.¹⁴¹ I also agree with Easton's desire to correct the CY 1983 footage in order to obtain accurate forecasts going forward, although I disagree with his method.

With respect to the United Artists business, Easton essentially extracts 11% of CY 1983 footage for five of twelve months to arrive at a corrected CY 1983 footage (for purposes of forecasting from 1984-87) of 439,116,000 feet. I find this to be unreasonable and incorrect. It was apparent and documented that United

¹³⁷ See RX 4 at 24; RX 4 Exs. 8C, 8D.

¹³⁸ PX 348 at 114796-97.

¹³⁹ RX 4 at 25.

¹⁴⁰ RX 4 at 26; Tr. at 1986-87. The United Artists' contract was going to expire in 1983 and was not expected to be renewed.

¹⁴¹ See *supra* notes 29-36 and accompanying text.

Artists' work under an expiring contract was to represent 6.6% of the CY 1983 release prints.¹⁴² I conclude that a more appropriate adjustment would be to subtract 6.6% from the CY 1983 figures for moving forward. This results in a footage reduction greater than that made by Easton. Since the footage figures from the other gauges are exploded out from the 35mm figures, it is appropriate to similarly reduce the 16mm, 8mm, and 70mm footage projections. Therefore, I find that the appropriate corrected footage figures for North Hollywood CY 1983 for use in forecasting forward are (in thousands): 35mm, 429,835; 16mm, 85,891; 8mm, 7,343; 70mm, 3,091.

Easton analyzes Technicolor data from Hope Reports, Inc.¹⁴³ to determine the growth or decline in footage for each gauge.¹⁴⁴ Specifically, he calculates the percentage change in footage for each gauge for the years 1979-82 and then adopts these growth rates, applying them to the corrected CY 1983 figures to forecast footage from 1984-87.¹⁴⁵ With respect to 35mm film, Technicolor experienced an overall annual 4% decline in footage from 1979-82.¹⁴⁶ Easton decides that

¹⁴² 2,500/37,800. Historically, United Artists was 11% of North Hollywood's business. *See supra* notes 59-62 and accompanying text. Easton was unable to explain why he performed the reduction the way he did instead of simply subtracting 6.6%. Tr. at 2268-69; *See* PNX 15 at 87-88.

¹⁴³ Hope Reports, Inc. compiled industry data received from the major film labs for publication in quarterly reports, to which many of the major film labs subscribed.

¹⁴⁴ RX 4 at 25; DX 238.

¹⁴⁵ *Id.* at 25-26.

¹⁴⁶ *Id.* at Ex. 4.

negative growth in 35mm was not likely to continue and substitutes the negative 4% growth for 0% growth, aggressive when compared to recent historical data.¹⁴⁷ This substitution is especially aggressive when the Hope Reports showed that Technicolor processed 507,922,000 feet of film in 1982, and the CY 1983 plan projected only 460,209,000 feet, a decrease of almost 10%.¹⁴⁸ Although somewhat arbitrary, and even optimistic, I find Easton's assumption of no growth or decline in 35mm reasonable based on the information available as of the merger date. Accordingly, I project 35mm footage at the following levels (in thousands):

35mm:

1983	460,209
1984	429,835
1985	429,835
1986	429,835
1987	429,835

With respect to 16mm and 8mm film, severe declines in footage had occurred between 1979 and 1982. This was due in large part to the introduction of videocassettes as an alternative medium for industrial and educational use.¹⁴⁹ Given that the use of videocassette was expected to increase at the expense of these gauges, Easton applied the historical declines to the corrected CY 1983 figures,

¹⁴⁷ *Id.* at 25; Tr. at 1988-90.

¹⁴⁸ RX 4 at 25; DX 238.

¹⁴⁹ Tr. at 1991.

with no growth or decline projected after 1987. I agree with this analysis and adopt it.¹⁵⁰ Therefore, the footage figures I adopt for my analysis are as follows:

16mm:

1983	85,891
1984	74,725
1985	65,011
1986	56,559
1987	49,207

8mm:

1983	7,343
1984	4,186
1985	2,386
1986	1,360
1987	775

70mm film was essentially an alternative to 35mm, with the overwhelming majority of its use in the theatrical area.¹⁵¹ In the few years before the merger, 70mm film had grown more popular as demonstrated by an overall annual increase of 11% between 1979 and 1982.¹⁵² Easton projects this significant increase to continue until 1987, but then flat growth of 70mm footage from 1987 onward. Again, I find this to be a reasonable assumption, supported by the empirical

¹⁵⁰ In support of Easton's conclusion, Wilson testified at trial that Technicolor's management was aware that 16mm "was going down," and that 8mm and 16mm "was a declining business." He testified that knowledge of these declining historical relationships affected Technicolor's budgeting process. Tr. at 1607-13.

¹⁵¹ PX 348 at 114796-97; Tr. at 1991-92.

¹⁵² RX 4 Ex. 4.

evidence available contemporaneously with the merger, and I adopt it. These footage figures are:

70mm:

1983	3,091
1984	3,431
1985	3,808
1986	4,227
1987	4,692

To summarize:

North Hollywood Projected Footage					
(in 000s)	35mm	16mm	8mm	70mm	Total
CY 1983	460,209	91,960	7,862	3,309	563,340
Corrected CY 1983	429,835	85,891	7,343	3,091	526,160
Growth Rate	0%	-13%	-43%	11%	--
1984	429,835	74,725	4,186	3,431	512,176
1985	429,835	65,011	2,386	3,808	501,039
1986	429,835	56,559	1,360	4,227	491,981
1987	429,835	49,207	775	4,692	484,508

ii. Price and revenue

In his report, Easton analyzes the historical growth rates in prices by Technicolor and one of its largest competitors, MGM, using the data provided in

the Hope Reports.¹⁵³ Easton concludes that price increases between 1977 and 1982 were largely in line with inflation.¹⁵⁴ He also finds that relative market share was constant, such that it was unlikely that Technicolor would be able to raise prices and maintain market share.¹⁵⁵ This inability to increase prices significantly more than inflation is also due to the contracts by which North Hollywood obtained the vast majority of its business.¹⁵⁶ Easton assumes that growth in prices at the rate of inflation (5%) over the prices derived from the CY 1983 Plan would be reasonable. I agree and adopt that same framework for my valuation analysis. The difference between gross and net sales is attributable to the discounts granted to contract customers.¹⁵⁷ Similar to Easton, I adopt the ratio of net-to-gross sales that was projected in the CY 1983 Plan (approximately 84.3%). At the end of the explicit forecast period, Easton expected sales to grow at the rate of inflation. I find that to be a reasonable determination, and accept it.

In summary:

¹⁵³ RX 4 at 26; RX 4 Exs. 5, 6.

¹⁵⁴ RX 4 at 26. Technicolor's prices slightly outpaced inflation while MGM's real prices were falling, though this may not be entirely accurate as to Technicolor because there were missing data. *Id.*

¹⁵⁵ *Id.* at 26-27.

¹⁵⁶ *See supra* Section IV(A)(2)(c)(i) and accompanying footnotes.

¹⁵⁷ RX 4 at 27; PX 348 at 114773; Tr. at 1615-16.

North Hollywood Projected Sales Revenue

(in 000s)	35mm	16mm	8mm	70mm	Gross	Net	Growth
1983 Price	\$0.172	\$0.162	\$0.081	\$0.587	--	--	--
1983 Sales	\$79,065	\$14,905	\$640	\$1,943	\$96,553	\$81,409	-9.0%
1984 Price	\$0.180	\$0.170	\$0.085	\$0.617	--	--	--
1984 Sales	\$77,539	\$12,717	\$358	\$2,115	\$92,729	\$78,185	-4.0%
1985 Price	\$0.189	\$0.179	\$0.090	\$0.647	--	--	--
1985 Sales	\$81,416	\$11,617	\$214	\$2,465	\$95,712	\$80,700	3.2%
1986 Price	\$0.199	\$0.188	\$0.094	\$0.680	--	--	--
1986 Sales	\$85,487	\$10,612	\$128	\$2,873	\$99,100	\$83,557	3.5%
1987 Price	\$0.209	\$0.197	\$0.099	\$0.714	--	--	--
1987 Sales	\$89,761	\$9,694	\$77	\$3,349	\$102,881	\$86,744	3.8%

iii. Margins

As discussed above, margins at North Hollywood were traditionally in the 16% to 21% range.¹⁵⁸ The CY 1983 Plan projected an 18.9% margin.¹⁵⁹ Easton uses this figure for his analysis, having testified at trial that it was in accordance with previously observed margins at North Hollywood, especially when adjusted for abnormal silver reclamation income.¹⁶⁰ I find his analysis credible and sensible. Exhibits 3 and 7 of his report analyzing the operating margins and silver reclamation revenue at North Hollywood were very helpful.¹⁶¹

¹⁵⁸ See *supra* text accompanying notes 98 and 959.

¹⁵⁹ PX 348 at 114780. Wilson testified at trial that margins at North Hollywood were expected to be around 21%, though he was emphatic that the CY 1983 Plan represented the views of Technicolor management at the time it was prepared, and that although he could not recall a specific reason for the projections twenty years later, he was sure that the variation had been explained. Tr. at 1714-17.

¹⁶⁰ Reference was made both to 19% and 18.9%. As will be seen below, I use exactly 18.9% in my calculations. Tr. at 2001-07.

¹⁶¹ RX 4 Exs. 3, 7.

The parties presented conflicting evidence regarding whether further abnormal silver reclamation profits would be possible in the future.¹⁶² I find that the more sensible conclusion is that Technicolor would be unable to reap large windfalls from silver reclamation in the future for two reasons. First, a portion of Technicolor's windfall in late 1979 and early 1980 was a result of the rapid increase in the price of silver. A more gradual increase would increase the cost of film stock more or less in line with the excess profits expected from silver reclamation. Second, Technicolor's contract customers had a great deal of leverage in keeping prices down and North Hollywood's margins constant.¹⁶³ It would be unreasonable to assume that these customers would ignore the effects of silver reclamation in their negotiations with Technicolor management. I find, therefore, that Easton's conclusions regarding silver reclamation are reasonable, and I adopt them for my analysis.

Because silver reclamation profits would not continue, margins would be unlikely to increase significantly for reasons set forth by Easton as well, with which I agree and find reasonable.¹⁶⁴ First, as I have determined, footage will

¹⁶² Tr. at 2007, 2265-66.

¹⁶³ *See supra* nn.108 and 109 and accompanying text.

¹⁶⁴ RX 4 at 29. I do not consider his argument regarding industry over-capacity, as it is based on a document not in the record on remand, but do not need to do so in order to support the conclusion that it is reasonable to project margins will remain constant.

decrease and revenue will increase approaching 1987. As footage decreases, the fixed cost per foot increases. The increase in revenue would be largely attributable to the increase in price per foot to account for variable costs. Second, with the “most favored nation” clause in Technicolor’s contracts, it would seem reasonable that retaining clients and raising margins would be mutually exclusive. I find that use of an 18.9% margin for CY 1983 and onward is appropriate and reasonable.

iv. Net investment in fixed
capital and working capital¹⁶⁵

The DCF model calculates enterprise value based on free cash flow, not income, as measured by Generally Accepted Accounting Principles or the Internal Revenue Service.¹⁶⁶ Therefore, it is vitally important to account for working capital requirements and fixed capital investment (net of depreciation) in determining the free cash flow that will be discounted back to present value.¹⁶⁷

¹⁶⁵ Torkelsen only provided net fixed capital investment and depreciation schedules for Newbury Park. PNX 15 at 177-84. It is clear from his analysis, however, that he forecasts significant negative net capital investment (that is, depreciation exceeds fixed capital investment) every year from 1983-87. *Id.* at 177, 181. Easton clearly laid out the unreasonableness of this determination, and I agree with his criticism of Torkelsen’s approach. RX 5 at 23-27; Tr. at 2293-98.

¹⁶⁶ RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 121-22 (6th ed. 2000).

¹⁶⁷ *Id.* at 77-78, 123.

Due to the modernization program discussed briefly above, capital expenditures at North Hollywood had been high in the past.¹⁶⁸ It would seem unreasonable that these high levels of capital investment would continue, and indeed, the CY 1983 Plan reflects that assumption. For fiscal years 1979-1982, capital expenditures averaged \$2.0 million, or 2.4% of the following year's net sales.¹⁶⁹ For CY 1983, however, management projected only \$704,000 in capital investment, a marked decrease representing only 0.9% of my projected 1984 net sales.¹⁷⁰ It does not, however, seem probable that this low level of capital investment would be sustainable into perpetuity. As a result, capital expenditures should be higher than 0.9% of next year's sales from 1984 forward. Easton projects fixed capital investment equal to 1.8% of the following year's sales going forward. This is equal to the depreciation rate (as a percentage of net sales) he projects. Depreciation at North Hollywood historically had been between 1.5% and 2.1% of net sales, with an average of 1.8%.¹⁷¹ I find Easton's assumptions reasonable and in accord with both the CY 1983 Plan and Technicolor's historic

¹⁶⁸ *See supra* note 58.

¹⁶⁹ RX 4 at 30.

¹⁷⁰ *Id.* & 8C; Tr. at 2014.

¹⁷¹ RX 4 at 30.

results. Accordingly, after CY 1983, I will calculate fixed capital investment as 1.8% of the following year's net sales, and depreciation as 1.8% of net sales.¹⁷²

Between 1979 and 1982, working capital (as a percentage of net sales) had averaged 17.8%.¹⁷³ The CY 1983 Plan projected working capital at 17% of net sales. Easton uses 17% for his analysis, and finding it reasonable and supported by the evidence, I do so as well.

v. Conclusion

I present the summary of my findings regarding North Hollywood's fair value in tabular form below. As can be seen, and for the reasons discussed above, I find that the fair value of North Hollywood as of January 24, 1983 is \$53,991,172, or \$11.82 per share.

¹⁷² At trial, there was very little testimony or evidence offered regarding the investment tax credit applied in Torkelsen's analysis but omitted from Easton's analysis. Torkelsen's analysis of the investment tax credit assumes that every capital expenditure made by Technicolor (with the exception of the videocassette recorders ("VCR") purchased for use in Newbury Park) qualifies for the credit. No evidence has been offered to show that this was true. Similarly with any potential deferred tax liability, petitioners have not shown the effects of this potential liability outside of Torkelsen's already heavily discredited report. PNX 15 at 175, 177-78.

¹⁷³ RX 4 at 30.

Key Value Driver Assumptions

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989
Net Sales	\$81,409	\$78,185	\$80,700	\$83,557	\$86,744	\$91,081	\$95,635
Sales Growth (net)	-9.0%	-4.0%	3.2%	3.5%	3.8%	5.0%	5.0%
Operating Margin	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%
Depreciation as % of Sales	2.2%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
FCI as % of Next Years Sales	0.9%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
WC as % of Sales	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%

DCF Valuation Inputs Summary								
(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989	Terminal Value
Net Sales	\$ 81,409	\$ 78,185	\$ 80,700	\$ 83,557	\$ 86,744	\$ 91,081	\$ 95,635	--
Operating Margin (as % of Sales)	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%
Operating Income before taxes	\$ 15,386	\$ 14,777	\$ 15,252	\$ 15,792	\$ 16,395	\$ 17,214	\$ 18,075	--
Taxes @46%	\$ (7,078)	\$ (6,797)	\$ (7,016)	\$ (7,264)	\$ (7,542)	\$ (7,919)	\$ (8,315)	--
Operating Income after taxes	\$ 8,309	\$ 7,980	\$ 8,236	\$ 8,528	\$ 8,853	\$ 9,296	\$ 9,761	--
Plus: Depreciation	\$ 1,749	<u>\$ 1,407</u>	<u>\$ 1,453</u>	<u>\$ 1,504</u>	<u>\$ 1,561</u>	<u>\$ 1,639</u>	<u>\$ 1,721</u>	--
Less: Fixed Capital Investment	\$ 704	<u>\$ 1,453</u>	<u>\$ 1,504</u>	<u>\$ 1,561</u>	<u>\$ 1,639</u>	<u>\$ 1,721</u>	<u>\$ 1,808</u>	--
Working Capital (17% of Sales)	\$ 13,818	\$ 13,271	\$ 13,698	\$ 14,183	\$ 14,724	\$ 15,460	\$ 16,233	--
Less: Working Capital Investment	\$ (341)	\$ (547)	\$ 427	\$ 485	\$ 541	\$ 736	\$ 773	--
Free Cash Flow	\$ 9,695	\$ 8,482	\$ 7,758	\$ 7,986	\$ 8,234	\$ 8,478	\$ 8,901	\$ 62,771
WACC	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>
Discount Period	<u>0.4274</u>	<u>1.4274</u>	<u>2.4274</u>	<u>3.4274</u>	<u>4.4274</u>	<u>5.4274</u>	<u>6.4274</u>	<u>6.4274</u>
Discount Factor	<u>0.9254</u>	<u>0.7719</u>	<u>0.6438</u>	<u>0.5370</u>	<u>0.4479</u>	<u>0.3736</u>	<u>0.3116</u>	<u>0.3116</u>
Discounted Free Cash Flow	<u>\$ 8,971</u>	<u>\$ 6,547</u>	<u>\$ 4,995</u>	<u>\$ 4,288</u>	<u>\$ 3,688</u>	<u>\$ 3,167</u>	<u>\$ 2,774</u>	<u>\$ 19,561</u>
North Hollywood Value								<u>\$ 53,991.172</u>
Per Share Value (4,567,491 shares outstanding)								<u>\$ 11.82</u>

B. Newbury Park

The videocassette recorder was introduced in the United States in 1976.¹⁷⁴ Technicolor opened its videocassette duplication division in Newbury Park, California five years later, in January 1981. This division offered mass reproduction of pre-recorded videocassettes for film copyright owners and distributors. Technicolor opened the division after agreeing to perform all of Warner Brothers' duplication for three years.¹⁷⁵ Technicolor's Newbury Park videocassette duplication plant had an initial capacity of approximately two million units per year.¹⁷⁶ At trial, I heard testimony regarding the prospects of both the videocassette industry as a whole and of Technicolor's videocassette division in particular.

1. Business Prospects for the Pre-recorded Videocassette Industry

Overall, the wildly divergent testimony at trial pointed to one simple fact: the future of the prerecorded videocassette industry was not certain. As anticipated, petitioner viewed the industry's future through rose-colored glasses, predicting quite lucrative prospects for duplicating prerecorded videocassettes,

¹⁷⁴ PNX 14 at 34.

¹⁷⁵ DX 53 at 114931-32.

¹⁷⁶ PTO § II, ¶ 12.

despite the admitted uncertainty rampant in the industry. In contrast, respondent predicted a rocky path, despite increasing sales and VCR acceptance in American households.

One Cinerama witness, Stephen Roberts, offered glowing reports of the videocassette industry as of the time of the merger. Drawing upon his expertise as a Fox executive, he testified that as of the time of the merger, he believed that the prerecorded videocassette industry would grow *fifteen-fold* by 1986.¹⁷⁷ Yet interestingly enough, just four months before the merger Roberts testified before Congress and stated a completely opposite proposition—that the unauthorized rentals of videocassettes was acting as a “ravaging steamroller” and would “crush” the videocassette business.¹⁷⁸

Though Roberts brushes these former contradictory statements aside as hyperbole, this Court is unwilling to play a game of “believe me now that I was lying then.” If anything, his statements before the House Subcommittee only four months before the merger seem more reliable, though they may be to some extent exaggerated due to the persuasive intent of his speech. Unable to reconcile these contrary views, I am reluctant to give any weight to Roberts’ current rosy predictions regarding the videocassette industry. In any event, his predictions *du*

¹⁷⁷ Tr. at 259.

¹⁷⁸ DX 285 at 838.

jour evaluated the industry as a whole and were not tailored to the prospects of Technicolor's videocassette division.

Cinerama's industry expert, Dr. Arthur Gruen, projects dramatic future growth for the videocassette industry in his expert report and trial testimony as well. Besides the fact that Torkelsen rarely relies upon Gruen's predictions in his calculations for Newbury Park, Gruen's testimony may be somewhat influenced with hindsight bias due to the great deal of knowledge he has amassed about the industry as it existed from 1986 onward. This extensive post-merger knowledge, though impressive, may have unconsciously, yet impermissibly, colored Gruen's analysis and opinions. In fact, Gruen conceded as much at trial.¹⁷⁹ Additionally, Gruen relied upon post-merger documents to refresh his recollection about the pre-merger state of the industry. More importantly, the relevance of his testimony and report is limited because of its complete failure to evaluate Technicolor specifically, even though information was available upon which such an analysis could have been executed. Instead, Cinerama seems to have strategically ignored the less-pleasant reality of late-coming Technicolor in favor of the rosier forecasts of the industry as a whole.

¹⁷⁹ Tr. at 700-04.

Further, Gruen may have erroneously based his opinions on some significant legal inaccuracies, as adeptly pointed out by Technicolor. For example, he maintained in every draft of his expert report, until the final draft, that the federal courts as of the time of the merger had held that the recording of television programs and movies for home use did not constitute copyright infringement. This was simply incorrect—individuals were prohibited at the time from using their VCRs to copy movies and television programs. This feature was one of the only advantages of VCRs over competing technologies. Even his final version of the report omitted another detail that was of profound consequence in the industry—that the Ninth Circuit had found the mere *sale* of videocassette recorders to be illegal and as constituting contributory copyright infringement.¹⁸⁰ It was not until well after the merger that VCRs could be legally sold and that consumers could use their VCRs to copy televised material and movies without fear of infringing a copyright. Uninformed of these legal obstacles that existed at the time of the merger, Gruen projected that the industry would grow in leaps and bounds, despite the fact that VCRs could not be sold and consumers could not use their VCRs to

¹⁸⁰ *Universal City Studios, Inc. v. Sony Corp. of America*, 659 F.2d 963, 974-76 (9th Cir. 1981), *rev'd*, 464 U.S. 417 (1984).

record copyrighted materials.¹⁸¹ His testimony was further undermined by a document he published in 1985 entitled “Video 1995.” In this report, Gruen stated that by the end of 1982 (*i.e.*, pre-merger), the prerecorded videocassette rental market had “almost totally overwhelmed retail sales.”¹⁸² Intuitively, and as he confirmed at trial, a rental market requires a much smaller inventory than does a sales market, which would not be good for prerecorded videocassette distributors or duplicators.¹⁸³ Although I find several portions of his report interesting and somewhat enlightening, my reliance upon his expert report took into account its infirmities described above.

In general, after hearing all of the testimony at trial, and reviewing the voluminous paper record, I cannot avoid the conclusion that the growth of the videocassette industry as a whole was uncertain at the time of the merger. Respondent Technicolor provided ample evidence that the industry stood on shaky grounds, as it was complicated by several factors, such as low barriers to entry, competing technologies, legal complications, and confused marketing strategies.

¹⁸¹ This time-shifting feature (*i.e.*, allowing consumers to tape record programs of their choosing to be watched at a more convenient time or multiple times) was one of the only advantages that VCRs had over competing technologies of the day.

¹⁸² Tr. at 735-38.

¹⁸³ Tr. at 736-37.

a. Low barriers to entry

Duplicating prerecorded videos was a fairly simple business that required only an original tape and an army of VCRs with which to copy it.¹⁸⁴ To illustrate, when Technicolor entered the market, it simply leased a facility and installed about 2,000 VCRs in it. This provided it an initial duplication capacity of approximately two million tapes per year for a relatively modest capital investment.¹⁸⁵ Additionally, videocassette duplicating did not require significant technical expertise. Technicolor used virtually the same VCR machines that any consumer could purchase.¹⁸⁶ This was a business simple enough that virtually anyone could enter the market at any time as a matter of logic.

At the time of the merger, there were relatively few main competitors in the prerecorded videocassette industry: CBS/Fox Home Video and Bell & Howell/Columbia Video Services.¹⁸⁷ CBS/Fox Home Video was then operating at full capacity and was seeking to expand its capacity with a \$15 to \$20 million project to build a new plant.¹⁸⁸

¹⁸⁴ RX 4 at 50.

¹⁸⁵ PTO § II, ¶ 12, Tr. at 1775. At the time of the merger, Newbury Park had net operating assets of approximately \$5.59 million.

¹⁸⁶ Tr. at 1637-38.

¹⁸⁷ Tr. at 1181, 1784.

¹⁸⁸ *Id.* at 245-48.

b. Competing technologies

Besides the competition generated by the industry's relatively low barriers to entry, video competed with other technologies for consumer attention as well. At the time, a movie could be seen on videocassette, videodisc, cable or broadcast television.¹⁸⁹ The VCR was a relatively new technology and had not yet achieved widespread consumer acceptance.¹⁹⁰ VCRs did, however, have one primary advantage over videodisc—their ability to record television programs. This was an activity that would reduce, not increase, consumer demand for Newbury Park's prerecorded videocassettes.¹⁹¹ Therefore, even if VCRs penetrated more households because consumers found the recording feature desirable, it does not immediately follow that demand for prerecorded videocassettes would increase at the same rate, as Torkelsen assumed, especially when it would be less costly for a consumer to purchase a VCR and premium cable television to record films at home¹⁹² than it would be to purchase a VCR and pay the prevailing \$60-\$100 price

¹⁸⁹ *Id.* 745-46.

¹⁹⁰ RX 4 at 49-51, DX 244G at 10107554, Tr. at 278-79. Only 6% of TV households owned VCRs in 1982. PNX 14 at 37.

¹⁹¹ Tr. at 670; DX 244G at 1017567.

¹⁹² As Jack Valenti, President of the MPAA, told a Congressional subcommittee, "As one VCR owner wrote in his diary, 'why buy prerecorded movies? You can record the same thing from a premium pay channel ... much cheaper.'" DX 220 at 11.

per prerecorded video.¹⁹³ In fact, blank tape sales grew rapidly during this period.¹⁹⁴

c. Legal complications

As mentioned earlier, the prerecorded videocassette industry as a whole was turbulent due to various legal obstacles. At the time of the merger, home recording of television broadcasts had been held illegal, as was the sale of VCRs.¹⁹⁵ The first sale doctrine, which allowed a prerecorded videocassette purchaser to rent the copyrighted materials to the public without permission, threatened to extinguish the profitability of the industry.¹⁹⁶ Significant lobbying efforts were underway and court challenges had been brought to minimize the effects of these legal barriers, but as of the merger date, no headway had been gained. As Roberts testified before Congress, Fox's business was hurting because of the first sale doctrine.¹⁹⁷ He further stated that "[t]he future of the prerecorded cassette business is now

¹⁹³ DX 272 at 11, Tr. at 407.

¹⁹⁴ PNX 14 at 43.

¹⁹⁵ *Universal City Studios, Inc. v. Sony Corp. of America*, 659 F.2d 963, 969-74 (9th Cir. 1981), *rev'd*, 464 U.S. 417 (1984). The appeal from the Ninth Circuit's ruling was argued before the United States Supreme Court just days before the merger.

¹⁹⁶ DX 285 at 838 (House Subcommittee hearing regarding "Home Recording of Copyrighted Works" on Sept. 22, 1982). Roberts testified that "[a]bout 18 months ago we saw a spot on the horizon, a spot that has grown into a ravaging steamroller which is now crushing the prerecorded video cassette business and is about to flatten the video disc business as well. I am referring to the unauthorized rental of prerecorded video products." *Id.*

¹⁹⁷ *Id.* at 840.

bogged down in uncertainties, marketplace distortions and artificial pricing mechanisms.”¹⁹⁸

d. Marketing strategies

Just before the merger, the videocassette industry had undergone a significant restructuring. The marketing of prerecorded videocassettes began as a direct sales model, selling videos directly to customers. Although Technicolor’s directors heard lofty reports of Newbury Park’s business in November of 1981,¹⁹⁹ they were hearing a very different story by the spring of 1982. This is because in early-to-mid 1982, its major flagship customer, Warner Brothers, championed a “rental plan” movement that led to marketing confusion and ripples in videocassette sales.²⁰⁰ Accordingly, Technicolor directors learned in May of 1982 that its Newbury Park division was suffering because “the videocassette business with Warner Brothers has been less than anticipated, as Warner Brothers has not made any firm commitment as to how it will market its video cassettes—sale or rental.”²⁰¹ Arthur Ryan, at the time a Technicolor director, partially blamed

¹⁹⁸ *Id.*

¹⁹⁹ *I.e.*, that sales had exceeded expectations and that Technicolor was doing all of Warner Brothers’ videocassette duplication work, half of Disney’s and was in negotiations with Universal, Paramount and MGM. DX 10 at 000709.

²⁰⁰ Tr. at 288-89.

²⁰¹ PX 63 at 000960-61.

Newbury Park's poor 1982 fiscal performance on Warner Brothers' inconsistent orders and its "indecision regarding the method of marketing their videocassettes (*i.e.*, rental or sale)."²⁰² He also indicated that the division was attempting to stem costs and expenses by cutting back on labor and overhead.²⁰³

By the time of the merger, the direct sales model had almost completely transformed into a rental model, where videos would instead be sold to rental chains that would then rent the videos to customers for a fee.²⁰⁴ As Gruen admitted, by the end of 1982 (pre-merger), the prerecorded videocassette rental market had "completely overwhelmed the sales market, the rental market had completely reversed the growth in prerecorded videocassette shipments, and Hollywood was striking out in its efforts to deal with those problems in Congress and the courts."²⁰⁵ He also conceded that a rental market requires a much smaller inventory than does a sales market, which would not be good for prerecorded videocassette distributors or duplicators.²⁰⁶ As expected, the number of prerecorded videos sold per VCR began to decline as a result, from 1.72 in 1981 to 1.18 in 1982, while the number of blank tapes sold grew.²⁰⁷

²⁰² PX 64 at 001070-71.

²⁰³ *Id.* at 001071.

²⁰⁴ Tr. at 995-96.

²⁰⁵ Tr. at 739.

²⁰⁶ Tr. at 736-37.

²⁰⁷ Tr. at 995, PNX 14 at 43.

2. Business Prospects for Newbury Park Specifically

Although Technicolor's Newbury Park facility suffered from the same infirmities that affected the entire industry, its future was further clouded by other factors, such as its late entrance into a market with relatively low barriers to entry. Technicolor did have a competitive advantage in the market due to its strong pre-existing relationships with many of the major movie distributors,²⁰⁸ but it was somewhat disadvantaged because it entered the market later in the game than many of its competitors.²⁰⁹ By year-end 1982, most of the major movie distributors had already formed contractual ties or a long-standing relationship with one of the existing video duplicators. In fact, it was only MGM that was not bound in such a way, which provided a limited universe of potential clients for Technicolor to acquire. The evidence suggests that this limited universe was unlikely to expand since Newbury Park's competitors did not seem to anticipate leaving the business.²¹⁰

²⁰⁸ Respondent discounts this advantage as a fragile one because Technicolor's customers could simply enter the business themselves. I believe, however, that these relationships would still advantage Technicolor over a new entrant that did not have such pre-existing relationships. Even though Technicolor could not guarantee the business of its film processing customers, it would certainly have more of an "in" than entering strangers to the industry.

²⁰⁹ RX5 at 52 ("Unlike in the film processing business, Technicolor was not the industry leader and was at a comparative disadvantage due to its later entry into the market.").

²¹⁰ *Id.*

As a new business, Newbury Park did not begin to turn a profit until the last six months of 1982.²¹¹ Its 1982 annual report to stockholders, dated September 7, 1982, reported that the company expected Newbury Park to “realize a significant sales increase in the current fiscal year and to provide an important profit contribution to the Company.”²¹² As expected, it recorded \$1,379,000 in profit in the last half of 1982. Almost a third of this profit, however, was attributable to rebates on raw material stock (*i.e.*, blank tape rebates),²¹³ which seemed unlikely to accrue to Technicolor in the future.²¹⁴ Both Wilson and Easton testified that the large customers would likely demand that the rebates be passed through to them once they were discovered. Though Torkelsen believes that these rebates would continue to accrue to Technicolor, Technicolor management apparently did not believe that these rebates would continue to do so because they did not include them in their profit forecasts for Newbury Park. This assumption seems the more reasonable one, in light of the fact that Technicolor’s contract with Warner Brothers provided that it would pay only the manufacturer’s invoice price *less any discount*.²¹⁵ Even if technically the rebates were not yet considered a “discount”

²¹¹ DX 248TT at 057826.

²¹² PX 7 at 4.

²¹³ *Id.*

²¹⁴ For example, Wilson testified that he did not expect rebate income to continue. Tr. at 1650-53, 1792.

²¹⁵ DX 53 at 9.

under the contract, Warner Brothers could have easily acquired the material rebates to itself because it was also permitted to designate its own supplier for raw videocassette stock.²¹⁶ And if Technicolor did not keep its prices competitive, Warner Brothers had the contractual right to unilaterally terminate its duplicating contract.²¹⁷ It seems clear to me that Technicolor had plenty of incentive to shave off the rebates to keep its prices as low as possible. Because management likely had the most current and thorough information regarding the future of material rebates at the time of the merger, I accept their projection that these rebates would not continue to accrue to Technicolor.²¹⁸

Even though material rebates would be taken out of the profit equation in the future, Newbury Park did have some relatively important advantages in the industry. As part of Technicolor, it benefited from the good will that Technicolor had already established with its major film customers. Further, it was one of the

²¹⁶ *Id.*

²¹⁷ *Id.* at 7-8.

²¹⁸ Petitioner creatively attributes management's failure to project continued rebate income to the fact that the rebates were accounted for on its profit and loss statements as a net negative material cost rather than in its sales numbers. Because of this, petitioner contends that management excluded these profits from their CY 1983 Plan because the profit plans included revenue only from duplication funds. Petitioner states that management deliberately ignored the positive impact of negative material costs, again implying that management was simply incompetent. CPF at 75. It seems hard to believe that management somehow ignored or failed to notice a source of "income" that amounted to one-third of the division's profits in the last half of 1982 and yet still quite accurately created its projections. Further, because management did not expect this source of income to continue, it seems reasonable to expect its exclusion from the CY 1983 Plan.

newest and largest videocassette duplicating facilities in the United States at the time.²¹⁹

3. Valuation of Newbury Park

The experts differ quite significantly in their respective valuations of Newbury Park.²²⁰ The magnitude of this difference accounts for 18.5%, or \$7.63 per share, of the total difference in the parties' valuations.²²¹ Though both experts use the DCF method to value Newbury Park, that is almost the end of the similarities between their reports.

Because both experts agree that the Perelman plan was not expected to impact the value or profitability of Newbury Park, its consideration is not necessitated in this section.²²²

a. Rejection of the Torkelsen Report

Consistent with the majority of his expert report, Torkelsen inexplicably ignores contemporaneous management projections in favor of his own *post-hoc* calculations, even though management forecasts were shown to be extremely

²¹⁹ PX 400 at 113846.

²²⁰ Though Torkelsen did not separately value Newbury Park, or any Technicolor division for that matter, he provided his inputs for the videocassette business as well as his assumptions for discount rate and terminal value growth rate in perpetuity in his aggregate valuation of Technicolor. Easton then used these inputs to compute a synthetic Torkelsen valuation for Newbury Park.

²²¹ TPF 60. Torkelsen forecasts \$46.310 million (\$10.14 per share) and Easton projects \$11.476 million (\$2.51 per share) for Newbury Park. RX 33; RX 4 at 61; RX 30.

²²² Tr. at 1510, 1835, 1856, 1853, 1910-11.

accurate.²²³ As pointed out in Easton's supplemental expert report,²²⁴ Torkelsen's projections include an inconsistency that directly affects his calculation of Newbury Park's working capital investment. Although he uses management's CY 1983 Plan for his 1983 working capital forecast and he intends to grow working capital with net revenue going forward, Torkelsen overstates the net revenue forecast by incorporating the pass-through revenue of blank tape sales. This results in a similarly overstated working capital investment. Easton notes that:

[t]his inconsistency highlights the use of incompatible net revenue and working capital investment forecasts for Videocassette in 1983. Management's 1983 Videocassette net revenue forecast was \$5.3 million and management specifically projected Videocassette net working capital of \$1.732 million at the end of 1983 in the same forecast. Mr. Torkelsen employs a year-end 1983 working capital balance that is virtually identical to the assumption in the management forecast (\$1.726 million versus management's \$1.732 million), and thus the implied 1983 working capital investment levels, yet he inflates the 1983 Videocassette net revenue forecast to \$26.65 million—five times management's forecast level of \$5.3 million. Thereafter, Mr. Torkelsen grows this already inflated 1983 Videocassette net revenue from \$26.65 million in 1983 to \$60.483 million in 1987—an annual growth rate of 17.8% from his highly inflated base.²²⁵

²²³ Actual results for the first six months of FY 1983 show that management for this same period made predictions that were within 4% for unit forecasts, 3% for net sales, and 28% for profit net of material rebates. Tr. at 1825-26; DX 248 TT at 057819, 057821.

²²⁴ RX 5.

²²⁵ *Id.* at 6 (citations omitted).

Correcting for this mistake alone to comply with Torkelsen's stated working capital investment forecast methodology yields a significantly lower figure for 1984 through 1987, which leads to a higher overall value for the division—an increase of \$2.49 per share.²²⁶

It appears that Torkelsen's mistaken calculation of Newbury Park's duplicating revenue (\$10.7 million) was 101.8% greater than management's original CY 1983 sales projection alone, and 87.3% greater than the \$5.7 million 1983 base year projection Easton used. Even more shocking is Torkelsen's projected margin of 50.1%, as compared to management's projected 26.8%.²²⁷ Such extreme divergence from a contemporaneous management forecast that has not been discredited is simply unreasonable on its face.

Besides these very basic problems, Torkelsen's valuation is less reliable due to its indirect methodology. Torkelsen's forecast consists of two basic elements: (1) a unit forecast and (2) a profit margin per unit assumption. His analysis of both results in base year amounts that are extremely inflated over the CY 1983 Plan. Specifically, he projects a unit level of 171% over plan and a margin level of more

²²⁶ In his analysis of this issue, Easton also corrects for Torkelsen's terminal value over-discounting error in RX 5 at Ex. 2.

²²⁷ *Id.* at 13.

than 50% over plan. This further leads to an absolute dollar profit of 377% over management's 1983 plan (\$5.383 million versus \$1.427 million).²²⁸

Additionally, both key inputs to Torkelsen's forecast are convoluted. The unit forecast is indirectly derived, using contortionist calculations and inappropriate proxies for growth. Torkelsen largely ignores management's unit forecasts and instead creates base year values by *annualizing* the units sold in July through December of 1982 (*i.e.*, by multiplying those results by two), not taking into account seasonality or other factors. This simple oversight leads to a unit projection for 1983 that is 71% higher than management forecasts for this same period (2.4 million units instead of 1.4 million units). Torkelsen's unit projection calculation is so grossly in excess of management's calculation that it seems to lack all credibility—especially in light of the fact that Technicolor management indicated that they generated their projections by relying upon information gleaned from the videocassette customers themselves, the studios. Further, management was aware of the data Torkelsen annualized when drafting their projections and drew from it strikingly different conclusions.

Even though these flaws alone are enough to reject Torkelsen's projections for this business unit, there are additional errors. Not only does Torkelsen begin

²²⁸ *Id.*

with erroneous base numbers that will be carried forward through the forecast period, he then inflates these excessive numbers by using a convoluted measure of growth. He generates an all-new revenue forecast in a round-about way, using indirect (and, some would argue, extremely attenuated and inappropriate) indicia of future revenue growth. Specifically, he uses a logistic curve forecasting methodology to project the aggregate number of VCRs (not prerecorded videocassettes) owned by consumers over the 1983 to 1987 forecast period to arrive at a growth forecast that changes from 59.6% to 26.7%.

To do this, Torkelsen uses a product life-cycle methodology to predict growth in household VCR penetration using a logistic S-curve analysis and an experience curve model. According to this theory, growth of a new consumer electronic product follows the shape of an S-curve, divided into four stages: introduction of the new product, growth, maturity, and decline.²²⁹ Torkelsen analogizes to the examples of mainly unrelated products in demonstrating this sort of growth curve: clothes dryers, AM radio stations, radios, telephones, and color TVs.²³⁰ This S-curve analysis, while enticingly complicated, erroneously assumes that all new products maintain identical, successful life cycles. In reality, we all know this to be untrue. For a relevant example, videodisc players had been

²²⁹ PNX 15 at 119.

²³⁰ *Id.* at 120-21.

introduced during that era, but they did not follow this successful S-curve of growth. Throughout the ages, several new technologies have been introduced and some have been quickly replaced by better technologies before they have even had the chance to realize full acceptance into American households. At that time, VCRs were still new enough to lack the growth stability predicted in this methodology, especially in light of the various competitive and legal challenges the industry faced at the time. Torkelsen relies upon examples of unrelated technologies without demonstrating how they were similar to the VCR experience and specifically whether these technologies were subject to competing technologies as was the VCR. Further, S-curve forecasts are not extremely reliable because they are highly sensitive to their data inputs and can be dramatically skewed by even small differences in their factors.²³¹

Going forward with his VCR penetration calculation, Torkelsen then substitutes the projected growth in VCR households as a proxy for growth in the prerecorded videocassette industry. The statistics at the time, in contrast, showed that there was actually a *declining* ratio of prerecorded videocassette sales to VCRs and an increasing ratio of blank cassettes to VCRs.²³² In fact, while VCR penetration was growing at 60% in 1982, the growth in prerecorded videocassette

²³¹ Tr. at 1297-98.

²³² PNX 14 at 43; RX 15 at 35; Tr. at 975-76.

sales was stagnant or declining.²³³ Therefore, even the 1982 data demonstrates that VCRs are an unreliable proxy.

Moving on, Torkelsen's second key input, as indicated above, is his operating margin per unit for duplication. Rather than passing through the cost of raw materials (*i.e.*, blank videotapes) to its customers as required by contract, and as forecasted by management, Torkelsen includes this cost in his Newbury Park margin calculation. In fact, Torkelsen's profit forecast rests upon the assumption that Newbury Park will realize a \$2.22 profit per tape, which he maintains will continue from 1983 through 1985. Yet, at the tape duplicating volumes that he predicts, Technicolor would be paid only \$2.49 in duplicating fees, according to its contracts in place at the time of the merger.²³⁴ Accepting these figures would result in an operating margin of 89% for duplication (*i.e.*, \$2.22/\$2.49),²³⁵ an improbable result that would be impossible to sustain in a competitive market.²³⁶

²³³ Compare PNX 14 at 37 with RX 15 at 35.

²³⁴ The Warner contract provided a pricing structure that charged decreased prices for increased volumes. DX 53. At its highest volumes, Technicolor agreed to charge only \$2.49 per tape for its duplicating services. Not only was Warner Brothers to account for 70% of Newbury Park's half-inch duplicating work in 1983, but it seems that Universal, which would account for the remaining work, was subject to an identical pricing arrangement. DX 150D at GS1161. Further, Torkelsen admitted that Technicolor's revenue per half-inch tape before material rebates was \$2.47 just before the merger. Tr. at 2339.

²³⁵ PNX 15 at 132; Tr. at 1302-03.

²³⁶ As noted above, duplication had significant competition with few barriers to entry. Further, Technicolor's only contractual customer had the unilateral right to terminate the contract if Technicolor's prices did not remain competitive.

Wilson illustrated by chart these absurd results at trial²³⁷ and petitioners contested them, insisting instead that Torkelsen's margin ranged from only 49.9% to 55.6% once material costs were extracted, not 89%.²³⁸ Even this profit margin, however, does not comport with reality. Wilson also calculated the *actual* profits for each half-inch tape²³⁹ during the last six months of 1982—arriving at a figure of only \$0.86, a figure that *included* \$0.60 in material rebates, a figure much lower than the \$2.22 calculated by Torkelsen. All remaining profit was attributable to the lower volume three-quarter inch tape, master tape and dubbing tapes.²⁴⁰ Simply put, Torkelsen's numbers do not add up.

Although Technicolor management specifically forecasted its expected volume and the revenues to be produced by that volume, Torkelsen rejects these contemporaneous projections as “unrealistic.”²⁴¹ Torkelsen attempts to arrive at more “realistic” results with a hindsight valuation that completely ignores the seasonality of the business, completely ignores the closest insiders' projections, and results in a strikingly high number. This is simply inexcusable. Similar to the expert employed by Dunham's in *Taylor v. American Specialty Retailing Group*,

²³⁷ RX 26–28.

²³⁸ PNX 21, PX 48.

²³⁹ Half-inch tape accounted for approximately three-quarters of Newbury Park's revenue and is the product that was the sole driver of both experts' growth forecasts.

²⁴⁰ RX 26.

²⁴¹ CPF at 78.

Inc.,²⁴² Torkelsen’s “valuation lacks credibility because . . . he ignored a contemporaneous set of projections prepared by [Technicolor’s] management, choosing instead to rely on far more [optimistic] assumptions of [Technicolor’s] future prospects that he prepared on his own.”²⁴³

Though there was limited historical data to rely upon, management had proven accurate in its predictions. At trial, Wilson demonstrated this accuracy. For the period of July through December 1982 (*i.e.*, just prior to the merger), management’s actual results for Newbury Park were within 5% of the half-inch volume forecast (748,489 versus 782,000), and net duplicating revenue per unit was exactly as forecast (\$2.85 per tape). Instead, Torkelsen substitutes his judgment, annualizes base numbers that ignore the seasonality of the business by cleverly using the results of the six most profitable months of the business and multiplying them by two. Further, his resultant revenue forecast assumes an absolute operating profit per tape that fails to exclude blank tape rebates that were not expected even *by management* to continue.²⁴⁴

Finally, Torkelsen forecasts Newbury Park’s videocassette duplication unit volume as a certain portion of the industry’s sales, from which he forecasts

²⁴² 2003 WL 21753752 (Del. Ch. July 25, 2003).

²⁴³ *Id.* at *2.

²⁴⁴ RX 26-27.

revenue.²⁴⁵ This revenue figure is a final output provided solely to generate a working capital investment ratio.²⁴⁶ This complex, and elusive, projection results in a base year projection for Newbury Park's duplicating revenue that was *more than double* Technicolor management's projection for that *same year* (\$10.742 million as opposed to \$5.323 million).²⁴⁷ And despite all of the uncertainty facing the industry at this time, Torkelsen glowingly projects a value of Newbury Park that is roughly *nine times* its net operating assets at the time of the merger.²⁴⁸ Further, Torkelsen's per-share value of Newbury Park *alone* is approximately equal to the pre-merger stock price of Technicolor in its entirety.²⁴⁹ If Newbury Park were so valuable at the time, it seems that another bidder would have come forward to purchase Technicolor or its assets or that competitors would have rushed into the business.

b. Easton Report

Easton acknowledges that creating projections for Newbury Park was the most difficult portion of his report, due to the manifest uncertainties in the industry

²⁴⁵ PNX 15 at 114-60.

²⁴⁶ Tr. at 1279.

²⁴⁷ RX 29 at 8. In contrast, Easton arrives at a base year revenue projection of \$5.735 million for duplicating revenue. Though his projection ends up being slightly higher than Technicolor's final CY 1983 Plan and 35% higher than calendar 1982 actual results, it seems much more directly and accurately to approximate expected revenue.

²⁴⁸ RX 4 at Ex. 13R, RX 33.

²⁴⁹ Torkelsen values Newbury Park at \$10.14 per share, though the Technicolor stock price before the merger ranged from \$9 to \$11. Tr. at 1860-61.

and limited information available for a new division. In contrast to Torkelsen, however, Easton chooses to begin with management's CY 1983 forecast for the business. Because I find Easton's expert report, which was based upon contemporaneous management projections, more credible and reliable, I will use his report as a starting point, diverging from it as necessary.

Technicolor management painstakingly created projections for the Newbury Park facility very close to the time of the merger. Management went through quite a long process to arrive at their projections, which had proven extremely accurate even in the face of the uncertainty in the business and its newness in the industry.²⁵⁰ Thus, I believe that Easton correctly identifies the CY 1983 Plan as the best source for reliable data regarding the business expectations of Newbury Park. Technicolor management was paid well for their expertise in analyzing these business expectations just before the merger, they took their job seriously, and had proven reliable and accurate in their results.

Regardless of this, petitioner attacks Easton's reliance upon management's CY 1983 Plan. As part of this attack, however, petitioner attempted to disprove the accuracy of management forecasts by erroneously adopting Torkelsen's method of annualizing the last six months of Newbury Park's performance (*i.e.*,

²⁵⁰ Tr. at 1304, 1825-26.

simply multiplying by two the profitable results of July through December of 1982). Petitioner then attempts to establish that the CY 1983 Plan was completely unreliable because the annualized results showed that Newbury Park was “substantially in excess of plan.”²⁵¹ I find this criticism wholly unfounded. Annualizing data in an industry subject to seasonality is simply inappropriate—especially when the six-month period includes the six most profitable months of the season—summer through Christmas.²⁵² Further, these were the only profitable months in Newbury Park’s history. Therefore, I find petitioner’s attack on Easton’s use of the CY 1983 Plan unpersuasive.

Easton valued the business primarily using the DCF methodology. As explained above in Section II.B., a DCF analysis projects operating cash flows for an extended period, determining a terminal value upon sale at the end of the period, and then discounting those values at a set rate to determine the net present value of the common stock.²⁵³ Free cash flows are equal to after-tax operating income minus changes in net operating assets (*i.e.*, changes in fixed and working capital minus depreciation). Thus, two variables are critical in the DCF analysis:

²⁵¹ CPF at 73.

²⁵² Further, management was aware of the data that Torkelsen relies upon at the time they made their projections and drew very different conclusions from this information than Torkelsen does in his hindsight valuation.

²⁵³ *Taylor v. American Specialty Retailing Group, Inc.*, 2003 WL 21753752 at *3 (Del. Ch. July 25, 2003).

after-tax operating income and net operating assets. To predict these variables, Easton first projects sales revenue and sales revenue growth, the operating margin ratio, and the change in the net book value of the operating assets.

i. Sales and sales growth

In FY 1982, Technicolor realized sales of \$2.6 million²⁵⁴ and projected sales of \$5.323 million in its CY 1983 Plan.²⁵⁵ In his valuation, Easton uses a slightly higher figure (\$5.7 million) as his 1983 net sales assumption, but selects this number from an earlier draft of the CY 1983 Plan. This divergence from the CY 1983 Plan was appropriately criticized by petitioner as “strange” and as erroneously resulting in a revenue forecast that was “some \$400,000 in excess of the actual plan forecast.”²⁵⁶ This error, as petitioner pointed out, similarly affected Easton’s revenue forecast by inflating it \$110,000 (to \$1.537 million rather than the \$1.427 million found in management’s plan).²⁵⁷ Because I agree with petitioner’s criticism on this point, I have corrected for these errors by using \$5.323 million as the 1983 sales assumption.

²⁵⁴ DX 149(16) at GS0045.

²⁵⁵ PX 353 at 078838.

²⁵⁶ CPF at 72.

²⁵⁷ *Id.*

To estimate sales growth for the following years of the forecast period, Easton offers four wide-ranging scenarios. Of the four, two are easily disposable. One is based upon growth at only the 5% rate of inflation during the entire forecast period, concededly an extremely pessimistic assumption.²⁵⁸ The other is overly optimistic, and is based upon a one-to-one ratio of VCR-to-prerecorded videocassette growth—an assumption I rejected in Torkelsen’s report.²⁵⁹

The other two forecasts seem much more closely to represent the growth of Newbury Park’s business at the time of the merger. All four of the growth forecasts use Technicolor management’s CY 1983 Plan as a starting point for growth into the immediate future. From that point, one of the four remaining scenarios selects a growth rate based upon a contemporaneous industry study performed by a neutral entity, International Resource Development, Inc. (“IRD”). The other projection carries management’s CY 1983 Plan projection forward at a constant rate (33.1%) through 1987. After 1987, both projections drop the growth rate to the expected rate of inflation (5%), as projected by IRD.

Easton chooses to accept the latter scenario, carrying forward management’s projection of 33.1% growth during the period of 1984–1987. I have difficulty accepting this conservative projection for several reasons. First, Easton too readily

²⁵⁸ RX5 at 58.

²⁵⁹ *Id.* at 57.

dismisses Technicolor's competitive advantage in the industry. Although I have acknowledged that logically there were few barriers to entry, in all practicality, Technicolor stood a much better chance of acquiring the business of the large studios with which it had pre-existing relationships than would a complete stranger to the industry. Second, this was a fairly new business that was still ramping up in its operations. It was just starting to realize a profit on the eve of its second birthday. A business emerging from net operating losses to finally reap positive gains seems to be a business in the process of positive, not steady state, growth. Even Easton acknowledges later in his report that the Newbury Park unit was "in a high growth stage."²⁶⁰ Though I accept management's CY 1983 Plan projected growth of 33.1% for the first year, I believe that it would be an error to carry this same growth rate forward for several years.

Instead, I believe that the IRD projection seems to be the most neutral and comprehensive evidence of prerecorded videocassette growth for this time period. The IRD report is an impartial analysis of the industry and specifically assesses videocassette demand, taking into account factors that added turbulence to the industry's future at the time, such as long-term competing technologies. Therefore, in the absence of better information, such as management projections, I

²⁶⁰ RX 4 at 60.

believe that this study is the best secondary source for projecting Newbury Park's future growth rate.

I acknowledge Gruen's expert opinion that similarly predicts a high level of growth in prerecorded videocassette sales over the few years following the merger. As he explained, the VCR had achieved a critical mass of acceptance into American households, allowing manufacturers to begin realizing economies-of-scale from their mass-production.²⁶¹ Such mass-production would reduce prices for consumers, making VCRs more financially accessible to households.²⁶² At the time, for example, retail prices of VCRs had declined to about \$600²⁶³ and growth in VCR sales had been rapid, characterized by an upward trajectory in the annual number of units sold: 430,000 in 1978; 500,000 in 1979; 800,000 in 1980; 1,400,000 in 1981; and 1,900,000 in 1982.²⁶⁴ Though I do not agree that one could foresee prerecorded videocassette growth would grow at a one-to-one ratio with VCR sales (or TV households for that matter), a trend of positive growth in VCR sales would inevitably lead to some level of positive growth (not flat sales) in the

²⁶¹ PNX 14 at 37; Tr. at 656-57.

²⁶² *Id.*

²⁶³ PNX 14 at 42; Tr. at 259-60, 653, 658.

²⁶⁴ PNX 14 at 37.

rerecorded videocassette market. In fact, consumer spending on home video had been growing rapidly: from \$260 million in 1981 to \$520 million in 1982.²⁶⁵

Admittedly both the IRD and Gruen reports are not specifically tailored to Technicolor and its clients. They are, however, at a minimum less flawed than conservatively carrying forward for several years a management projection designed only to project the growth of the third year of an infant operation. Further, the IRD report seems more reliable and less subject to manipulation than any other evidence presented by either party as to the growth of prerecorded videocassettes. Thus, I accept the IRD forecast for the remaining forecast period and I accept Easton's scenario of a growth rate that begins with management's forecast for 1983 and adopt the IRD report's forecasts for the subsequent years in the forecast period.

These growth rates are as follows:

1983	33.1%
1984	112.1%
1985	17.2%
1986	17.2%
1987	17.2%
1988	5%
1989	5%

²⁶⁵ PNX 35.

ii. Operating margins

As a new business, Newbury Park incurred an operating loss in FY 1982 of \$1.2 million. It was not until the last six months of 1982 that it began to make a profit, as discussed above. Going forward into 1983, Technicolor management projected operating margins of 26.8% in its CY 1983 Plan. As with the sales and growth rate section, Easton graciously provides two scenarios of Technicolor's operating margins going forward.

In one, he offers a projection simply carrying forward the management CY 1983 Plan's forecast of 26.8% through the forecast period. In his second scenario, he projects a margin that quickly decreases to a margin resembling Technicolor's more mature film processing business. Although Technicolor management projected a healthy profit margin for the immediate future, I agree with Easton that such high margins would be unlikely to continue far into the future, which rules out his first scenario. It seems more likely that the excess margins would erode over time, as competition grew within the duplication industry. With barriers to entry much lower than that of its film processing business, competitors would have plenty of incentive to enter a business with such high margins, driving the prices down. Technicolor's customers had the power to unilaterally terminate their duplication contracts with Technicolor, forcing Technicolor to keep its prices competitive.

Therefore, I accept Easton's conclusion that the profit margin would erode over time, as demonstrated in his second scenario, but I reject his conclusion that it would quickly plummet to a mature business level. Easton's second scenario begins with management projections of operating margins in 1983 (26.8%) and then immediately drops down for the remaining period to mirror the margin of Technicolor's more mature business—its film processing business (19%). I believe that it is likely that the margin would eventually erode to its mature business margin level, but not the year immediately following the merger—especially when sales growth was rapidly increasing. As petitioners point out, Easton erroneously employed a “margin from a mature, slow growth business into a new business poised to grow very rapidly.”²⁶⁶ Therefore, to be reasonable, I have carried management's 1983 margin projection forward until 1987, the point at which the IRD predicted a leveling-off of sales to the rate of inflation. Rather than an immediate decline to the mature-business margin of 19%, I gradually decrease the 1987 margin by averaging management's predicted margin (26.8%) with the mature business margin (19%), resulting in a margin of 22.9% for 1988. Thereafter, I accept the mature business margin of 19%.

²⁶⁶ CPF at 77.

To be explicit, the projected Operating Margins are as follows:

1983	26.8%
1984	26.8%
1985	26.8%
1986	26.8%
1987	26.8%
1988	22.9%
1989	19%

iii. Fixed and working capital investment,
depreciation, and change in net operating assets

As a new facility, Newbury Park incurred large capital expenditures in its first full fiscal year of operations (approximately \$2.9 million). In April 1981, analysts estimated that videocassette-duplicating equipment for two million units of capacity alone would cost approximately \$1.2 million and would be depreciated over two years.²⁶⁷ Consistent with this projection, Wilson testified that Newbury Park would incur approximately \$500,000 of normal capital expenditures per year, assuming that capacity remained the same.²⁶⁸ Though Technicolor management projected only \$0.373 million in fixed capital expenditures for CY 1983,²⁶⁹ this low number was likely due to the recent investments that grew capacity over the preexisting levels of production. As Easton notes, capital expenditures would

²⁶⁷ RX 4 at 60.

²⁶⁸ *Id.* at 59.

²⁶⁹ This calculation was derived by Easton by calculating the difference in gross property, plant, and equipment between the CY 1983 Plan balance sheet and his estimated CY 1982 balance sheet. RX 4 at 59.

likely increase after 1983 to achieve the capacity required to produce the sales projections determined above.

To make these determinations, Easton relies primarily upon Technicolor management's testimony and contemporaneous estimates of Newbury Park's projected investments to determine fixed and working capital investment and depreciation. After accepting management's projected \$0.373 million in capital expenditures for 1983, he predicts increases of fixed capital investments to \$0.6 million per each incremental 1 million units of capacity. I accept these figures, as they seem reasonable in light of the two-year depreciation estimates for equipment that cost approximately \$1.2 million to achieve Newbury Park's then-current capacity.

Lacking historical data, Easton projects investment in working capital to equal 11% of incremental net sales, to produce a ratio of working capital-to-net sales of just over 16% by 1988, within what I consider a reasonable range as compared to other film divisions. I accept this working capital investment projection as supported by the evidence.

In determining depreciation expenses, Easton acknowledges Newbury Park's past depreciation figures of 24% of net sales in FY 1982 and approximately 21% of net sales in CY 1983. Easton projected that these figures would decline to 16.1% of net sales by 1986 to equal projected fixed capital investments as a

percentage of next year's sales. This is a reasonable assumption for this type of division and is supported by the evidence and is adopted in my valuation.

As for changes in net operating assets, Easton calculates the changes in each period by summing investments in fixed and working capital net of depreciation and adding the balance to the prior year's net operating assets.²⁷⁰ This calculation leads to a declining ratio of net operating assets as a percentage of sales that is consistent with a long-term growth expectation. Again, I accept these conclusions as reasonable and supported by the evidence.

iv. Newbury Park valuation conclusion

In sum, after calculating the historical and forecasted value drivers, I arrive at a DCF valuation of \$10,398,185, or \$2.28 per share.

Key Value Driver Assumptions--Newbury Park

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989
Net Sales	\$5,323	\$11,290	\$13,232	\$15,508	\$18,175	\$19,084	\$20,038
Sales Growth (net)	33.2%	112.1%	17.2%	17.2%	17.2%	5.0%	5.0%
Operating Margin	26.8%	26.8%	26.8%	26.8%	26.8%	22.9%	19.0%
Depreciation as % of Sales	20.8%	18.2%	16.4%	16.0%	16.2%	16.1%	16.1%
FCI as % of Next Years Sales	3.3%	15.9%	16.0%	16.2%	16.1%	16.1%	16.0%
WC as % of Sales	30.2%	20.1%	18.7%	17.6%	16.6%	16.4%	16.1%

²⁷⁰ *Id.* at 60-61.

DCF Valuation Inputs Summary

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989	Terminal Value
Net Sales	\$ 5,323	\$ 11,290	\$ 13,232	\$ 15,508	\$ 18,175	\$ 19,084	\$ 20,038	--
Operating Margin (as % of Sales)	26.80%	26.80%	26.80%	26.80%	26.80%	22.90%	19.00%	5.0%
Operating Income before taxes	\$ 1,427	\$ 3,026	\$ 3,546	\$ 4,156	\$ 4,871	\$ 4,370	\$ 3,807	--
Taxes @ 46%	\$ (656)	\$ (1,392)	\$ (1,631)	\$ (1,912)	\$ (2,241)	\$ (2,010)	\$ (1,751)	--
Operating Income after taxes	\$ 770	\$ 1,634	\$ 1,915	\$ 2,244	\$ 2,630	\$ 2,360	\$ 2,056	--
Plus: Depreciation	<u>\$ 1,107</u>	<u>\$ 2,055</u>	<u>\$ 2,170</u>	<u>\$ 2,481</u>	<u>\$ 2,944</u>	<u>\$ 3,073</u>	<u>\$ 3,226</u>	<u>--</u>
Less: Fixed Capital Investment	\$ 373	\$ 2,104	\$ 2,481	\$ 2,944	\$ 3,073	\$ 3,226	\$ 3,366	--
<i>Working Capital</i>	\$ 1,608	\$ 2,269	\$ 2,474	\$ 2,729	\$ 3,017	\$ 3,130	\$ 3,226	--
Less: Working Capital Investment	\$ (253)	\$ 662	\$ 205	\$ 255	\$ 288	\$ 113	\$ 96	--
Free Cash Flow	<u>\$ 1,758</u>	<u>\$ 923</u>	<u>\$ 1,399</u>	<u>\$ 1,526</u>	<u>\$ 2,214</u>	<u>\$ 2,094</u>	<u>\$ 1,819</u>	<u>\$ 12,829</u>
WACC	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>
Discount Period	<u>0.4274</u>	<u>1.4274</u>	<u>2.4274</u>	<u>3.4274</u>	<u>4.4274</u>	<u>5.4274</u>	<u>6.4274</u>	<u>6.4274</u>
Discount Factor	<u>0.9254</u>	<u>0.7719</u>	<u>0.6438</u>	<u>0.5370</u>	<u>0.4479</u>	<u>0.3736</u>	<u>0.3116</u>	<u>0.3116</u>
Discounted Free Cash Flow	<u>\$ 1,627</u>	<u>\$ 712</u>	<u>\$ 900</u>	<u>\$ 820</u>	<u>\$ 992</u>	<u>\$ 782</u>	<u>\$ 567</u>	<u>\$ 3,998</u>
Newbury Park Value								<u>\$ 10,398.185</u>
Per Share Value								<u>\$ 2.28</u>

Although this estimate was difficult due to the uncertainties in the industry, conflicting information regarding Newbury Park's facility, and the uncertainty inherent in performing a hindsight valuation, I take comfort from the simple fact that an unbiased average of the eight scenarios presented by Easton (using his assumptions) yields a valuation of \$12.741 million—within 23% of what I consider to be the most reasonable result (\$10.398 million). Easton performed this unbiased average to capture the considerable uncertainty of the business, arriving at a figure that would thus average out the very best and worst prospects for Newbury Park.²⁷¹ I find it reassuring that when averaging eight wildly different

²⁷¹ RX 4 at 62.

scenarios of a turbulent industry to capture the uncertainties, one arrives at a result closely resembling the figure I calculated above using reasonable forecasts based upon the best contemporaneous information available.

C. Other Businesses

The valuation of Technicolor's East Coast facilities, Technicolor, Ltd. (London), Technicolor, S.p.A. (Rome), Government Services, Vidtronics, and Magna Crafts (collectively the "Other Businesses") is rendered both simpler and more difficult by the fact that the parties valuations are not wildly divergent and because very little evidence was offered with respect to the valuation of these entities. Vidtronics presents the greatest discrepancy—as the experts differ by \$11 million. Easton projects its value at \$3.711 million and Torkelsen projects its value at \$14.642 million. The difference in valuation between the experts for the other businesses accounts for only \$0.42 per share of their total \$41.15 per share difference, a difference that is explained mostly by their different discount rates.

Easton's report bases revenues and costs on management's CY 1983 Plan for each division. His projections for subsequent years take varying approaches to predicting rates of growth for both costs and revenues. Notably for businesses anticipating declining or flat revenues from 1982 to 1983, Easton projects lower growth rates (sometimes negative) going forward for a few years until at some

point he projects the businesses to grow at the anticipated inflation rate of 5%.²⁷² For businesses anticipating revenue growth, Easton projects annual growth at the rate of inflation or 5% for the period 1984–89.²⁷³ Although the report offers various justifications in each instance for the rates of growth projected, none of the explanations seem sufficient to offset the appearance that the report considers detailed information when such information is beneficial to Technicolor’s position and uses more general projections when the details would suggest that the value of the underlying business would be higher if a more nuanced approach were adopted.

Torkelsen states that his projections for these entities are based entirely on management’s CY 1983 Plan for each entity. His method is to accept the 1983 projections for revenues and costs and grow both annually at the expected inflation rate of 5% annually. This approach, while certain to less accurately predict particular details, is likely to provide a fairly accurate rough measure of the value of an aggregate of the six businesses for which accurate detail is not available. Torkelsen’s argument is well taken that had the Perelman plan anticipated

²⁷² East Coast (NY) projected net *negative* sales of 7.4%. Easton projects negative sales growth through 1987. Technicolor, Ltd. (London) projected negative sales growth of 2% for 1983. Easton projects negative growth again for 1984 and below inflation rate growth through 1987. Technicolor, S.p.A. projected zero sales growth for 1983. Easton projects negative sales growth in 1984 and growth below the inflation rate through 1987.

²⁷³ Magna Crafts projected 1983 sales growth of 20.2%, Vidtronics projected 9.2%, and Government Services projected 5.0%. Easton uses the 1983 projection for all these businesses and then grows revenues and costs at the rate of inflation for 1984–89.

declining revenues in any of these businesses, it seems quite likely that they too would have been selected for disposal under that plan. Since they were not, at least as of the time of the merger, it seems reasonable to presume that on January 24, 1983, the revenue streams of these other businesses were expected to at least keep pace with inflation in the foreseeable future. In addition, this method, when applied to a group of six businesses in which roughly half predicted flat or declining revenues for 1983 and the other half predicted revenues increasing at or above the rate of inflation, unfairly favors the interests of neither party and is perhaps more fair *ex ante*.

I adopt the sales and operating expenses projected in the CY 1983 Plan for each of the businesses in this group and grow both at an annual rate of 5% through the forecast period. This will have the effect of holding operating margins constant at the margin forecast in the CY 1983 Plan. I note that, although both experts purport to use CY 1983 Plan projections as their basis for 1983 sales and profits, the actual dollar amounts reported by each expert differ for three of the businesses. For London and Rome, the difference is easily explained.²⁷⁴ For the third,

²⁷⁴ London's Profit Plan is reported in British Pounds Sterling and Rome's in Italian Lira. Each expert uses a slightly different conversion factor. The Court uses a factor of 1.65 to convert Pounds to Dollars and 0.0008 to convert Lira to Dollars.

Government Services, it is not. I have referred to Government Services CY 1983 Plan²⁷⁵ in order to derive the sales and costs for its valuation of this business.

Torkelsen's report does not provide separate valuations for the businesses in this group. For this reason, he provides no separate forecasts of depreciation, fixed capital investment, or working capital investment, instead addressing the effects of these factors as they relate to Technicolor as a whole. Easton bases his projections for these values on historical information for each of the businesses. Because I find that Easton's projections represent a reasonable estimate of these factors going forward from the date of the merger, I adopt Easton's projections of depreciation (as a percentage of sales); fixed cost investments (as a percentage of the following year's sales); and working capital (as a percentage of current year sales). As each of these value drivers are based on percentages of net sales and my projections for annual net sales vary from Easton's, the actual dollar values projected for depreciation, fixed capital investment, and changes in working capital differ from the actual dollar values projected by Easton. Finally, the change to working capital in 1983 is derived from Easton's report, which takes the historical 1982 working capital for each business, compares it to the projected working capital in the CY 1983 Plan, and calculates the 1983 change to working capital.

²⁷⁵ PX 351.

The following tables report the values I find when applying this method for each of the other businesses:

1. East Coast (New York)

Key Value Driver Assumptions--East Coast (NY)

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989
Net Sales	\$11,387	\$11,956	\$12,554	\$13,182	\$13,841	\$14,533	\$15,260
Sales Growth (net)	-7.4%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Operating Margin	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
Depreciation as % of Sales	2.4%	2.3%	2.2%	2.1%	2.0%	2.0%	2.0%
FCI as % of Next Years Sales	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
WC as % of Sales	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%

DCF Valuation Inputs Summary

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989	Terminal Value
Net Sales	\$ 11,387	\$ 11,956	\$ 12,554	\$ 13,182	\$ 13,841	\$ 14,533	\$ 15,260	--
Operating Margin (as % of Sales)	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
Operating Income before taxes	\$ 804	\$ 849	\$ 891	\$ 936	\$ 983	\$ 1,032	\$ 1,083	--
Taxes @ 46%	\$ (370)	\$ (390)	\$ (410)	\$ (431)	\$ (452)	\$ (475)	\$ (498)	--
Operating Income after taxes	\$ 434	\$ 458	\$ 481	\$ 505	\$ 531	\$ 557	\$ 585	--
Plus: Depreciation	<u>\$ 276</u>	<u>\$ 275</u>	<u>\$ 276</u>	<u>\$ 277</u>	<u>\$ 277</u>	<u>\$ 291</u>	<u>\$ 305</u>	--
Less: Fixed Capital Investment	\$ 239	\$ 251	\$ 264	\$ 277	\$ 291	\$ 305	\$ 320	--
<i>Working Capital</i>	\$ 1,168	\$ 1,226	\$ 1,288	\$ 1,352	\$ 1,420	\$ 1,491	\$ 1,565	--
Less: Working Capital Investment	\$ (86)	\$ 58	\$ 61	\$ 64	\$ 68	\$ 71	\$ 75	--
Free Cash Flow	<u>\$ 557</u>	<u>\$ 424</u>	<u>\$ 433</u>	<u>\$ 441</u>	<u>\$ 449</u>	<u>\$ 472</u>	<u>\$ 495</u>	<u>\$ 3,492</u>
WACC	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>
Discount Period	<u>0.4274</u>	<u>1.4274</u>	<u>2.4274</u>	<u>3.4274</u>	<u>4.4274</u>	<u>5.4274</u>	<u>6.4274</u>	<u>6.4274</u>
Discount Factor	<u>0.9254</u>	<u>0.7719</u>	<u>0.6438</u>	<u>0.5370</u>	<u>0.4479</u>	<u>0.3736</u>	<u>0.3116</u>	<u>0.3116</u>
Discounted Free Cash Flow	<u>\$ 515</u>	<u>\$ 327</u>	<u>\$ 278</u>	<u>\$ 237</u>	<u>\$ 201</u>	<u>\$ 176</u>	<u>\$ 154</u>	<u>\$ 1,088</u>
East Coast (NY) Value								<u>\$ 2,978.096</u>
Per Share Value								<u>\$ 0.65</u>

2. Technicolor, Ltd. (London)

Key Value Driver Assumptions--Tech. LTD (London)

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989
Net Sales	\$20,483	\$21,507	\$22,583	\$23,712	\$24,897	\$26,142	\$27,449
Sales Growth (net)	-2.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Operating Margin	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%
Depreciation as % of Sales	4.9%	4.2%	3.5%	2.8%	2.2%	2.2%	2.2%
FCI as % of Next Years Sales	1.3%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%
WC as % of Sales	26.2%	16.5%	16.5%	16.5%	16.5%	16.5%	16.5%

DCF Valuation Inputs Summary

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989	Terminal Value
Net Sales	\$ 20,483	\$ 21,507	\$ 22,583	\$ 23,712	\$ 24,897	\$ 26,142	\$ 27,449	--
Operating Margin (as % of Sales)	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%
Operating Income before taxes	\$ 2,105	\$ 2,215	\$ 2,326	\$ 2,442	\$ 2,564	\$ 2,693	\$ 2,827	--
Taxes @ 46%	\$ (968)	\$ (1,019)	\$ (1,070)	\$ (1,123)	\$ (1,180)	\$ (1,239)	\$ (1,301)	--
Operating Income after taxes	\$ 1,137	\$ 1,196	\$ 1,256	\$ 1,319	\$ 1,385	\$ 1,454	\$ 1,527	--
Plus: Depreciation	<u>\$ 1,010</u>	<u>\$ 903</u>	<u>\$ 790</u>	<u>\$ 664</u>	<u>\$ 548</u>	<u>\$ 575</u>	<u>\$ 604</u>	--
Less: Fixed Capital Investment	\$ 280	\$ 497	\$ 522	\$ 548	\$ 575	\$ 604	\$ 634	--
<i>Working Capital</i>	\$ 5,369	\$ 3,549	\$ 3,726	\$ 3,912	\$ 4,108	\$ 4,313	\$ 4,529	--
Less: Working Capital Investment	\$ 954	\$ (1,820)	\$ 177	\$ 186	\$ 196	\$ 205	\$ 216	--
Free Cash Flow	<u>\$ 913</u>	<u>\$ 3,423</u>	<u>\$ 1,347</u>	<u>\$ 1,249</u>	<u>\$ 1,162</u>	<u>\$ 1,220</u>	<u>\$ 1,281</u>	<u>\$ 9,032</u>
WACC	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>
Discount Period	<u>0.4274</u>	<u>1.4274</u>	<u>2.4274</u>	<u>3.4274</u>	<u>4.4274</u>	<u>5.4274</u>	<u>6.4274</u>	<u>6.4274</u>
Discount Factor	<u>0.9254</u>	<u>0.7719</u>	<u>0.6438</u>	<u>0.5370</u>	<u>0.4479</u>	<u>0.3736</u>	<u>0.3116</u>	<u>0.3116</u>
Discounted Free Cash Flow	<u>\$ 845</u>	<u>\$ 2,642</u>	<u>\$ 867</u>	<u>\$ 671</u>	<u>\$ 520</u>	<u>\$ 456</u>	<u>\$ 399</u>	<u>\$ 2,815</u>
Technicolor's 70% Interest Value	<u>\$ 591</u>	<u>\$ 1,849</u>	<u>\$ 607</u>	<u>\$ 469</u>	<u>\$ 364</u>	<u>\$ 319</u>	<u>\$ 279</u>	<u>\$ 1,970</u>
Tech., Ltd. (London) Value (70% Interest)								<u>\$ 6,450.561</u>
Per Share Value								<u>\$ 1.41</u>

3. Technicolor, S.p.A. (Rome)

Key Value Driver Assumptions--Tech. SPA (Rome)

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989
Net Sales	\$13,954	\$14,651	\$15,384	\$16,153	\$16,961	\$17,809	\$18,699
Sales Growth (net)	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Operating Margin	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%
Depreciation as % of Sales	1.3%	1.4%	1.4%	1.5%	1.5%	1.5%	1.5%
FCI as % of Next Years Sales	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
WC as % of Sales	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%

DCF Valuation Inputs Summary

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989	Terminal Value
Net Sales	\$ 13,954	\$ 14,651	\$ 15,384	\$ 16,153	\$ 16,961	\$ 17,809	\$ 18,699	--
Operating Margin (as % of Sales)	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%
Operating Income before taxes	\$ 733	\$ 777	\$ 815	\$ 856	\$ 899	\$ 944	\$ 991	--
Taxes @ 46%	\$ (337)	\$ (357)	\$ (375)	\$ (394)	\$ (414)	\$ (434)	\$ (456)	--
Operating Income after taxes	\$ 396	\$ 419	\$ 440	\$ 462	\$ 485	\$ 510	\$ 535	--
Plus: Depreciation	<u>\$ 183</u>	<u>\$ 205</u>	<u>\$ 215</u>	<u>\$ 242</u>	<u>\$ 254</u>	<u>\$ 267</u>	<u>\$ 280</u>	--
Less: Fixed Capital Investment	\$ 220	\$ 231	\$ 242	\$ 254	\$ 267	\$ 280	\$ 295	--
<i>Working Capital</i>	\$ 2,398	\$ 2,518	\$ 2,644	\$ 2,776	\$ 2,915	\$ 3,061	\$ 3,214	--
Less: Working Capital Investment	\$ 337	\$ 120	\$ 126	\$ 132	\$ 139	\$ 146	\$ 153	--
Free Cash Flow	<u>\$ 22</u>	<u>\$ 274</u>	<u>\$ 287</u>	<u>\$ 318</u>	<u>\$ 334</u>	<u>\$ 351</u>	<u>\$ 368</u>	<u>\$ 2,596</u>
WACC	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>
Discount Period	<u>0.4274</u>	<u>1.4274</u>	<u>2.4274</u>	<u>3.4274</u>	<u>4.4274</u>	<u>5.4274</u>	<u>6.4274</u>	<u>6.4274</u>
Discount Factor	<u>0.9254</u>	<u>0.7719</u>	<u>0.6438</u>	<u>0.5370</u>	<u>0.4479</u>	<u>0.3736</u>	<u>0.3116</u>	<u>0.3116</u>
Discounted Free Cash Flow	<u>\$ 20</u>	<u>\$ 211</u>	<u>\$ 185</u>	<u>\$ 171</u>	<u>\$ 150</u>	<u>\$ 131</u>	<u>\$ 115</u>	<u>\$ 809</u>
Tech., S.p.A. (Rome)								<u>\$ 1,791.761</u>
Per Share Value								<u>\$ 0.39</u>

4. Government Services

Key Value Driver Assumptions--Gov't Svcs.

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989
Net Sales	\$24,608	\$25,838	\$27,130	\$28,487	\$29,911	\$31,407	\$32,977
Sales Growth (net)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Operating Margin	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Depreciation as % of Sales	2.44%	2.54%	2.64%	2.74%	2.80%	2.80%	2.80%
FCI as % of Next Years Sales	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%
WC as % of Sales	4.48%	4.48%	4.48%	4.48%	4.48%	4.48%	4.48%

DCF Valuation Inputs Summary

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989	Terminal Value
Net Sales	\$ 24,608	\$ 25,838	\$ 27,130	\$ 28,487	\$ 29,911	\$ 31,407	\$ 32,977	--
Operating Margin (as % of Sales)	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Operating Income before taxes	\$ 861	\$ 904	\$ 950	\$ 997	\$ 1,047	\$ 1,099	\$ 1,154	--
Taxes @ 46%	\$ (396)	\$ (416)	\$ (437)	\$ (459)	\$ (482)	\$ (506)	\$ (531)	--
Operating Income after taxes	\$ 465	\$ 488	\$ 513	\$ 538	\$ 565	\$ 594	\$ 623	--
Plus: Depreciation	\$ 600	\$ 656	\$ 716	\$ 781	\$ 838	\$ 879	\$ 923	--
Less: Fixed Capital Investment	\$ 723	\$ 760	\$ 798	\$ 838	\$ 879	\$ 923	\$ 970	--
Working Capital	\$ 1,102	\$ 1,158	\$ 1,215	\$ 1,276	\$ 1,340	\$ 1,407	\$ 1,477	--
Less: Working Capital Investment	\$ 207	\$ 55	\$ 58	\$ 61	\$ 64	\$ 67	\$ 70	--
Free Cash Flow	\$ 135	\$ 330	\$ 373	\$ 421	\$ 460	\$ 483	\$ 507	\$ 3,573
WACC	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>
Discount Period	<u>0.4274</u>	<u>1.4274</u>	<u>2.4274</u>	<u>3.4274</u>	<u>4.4274</u>	<u>5.4274</u>	<u>6.4274</u>	<u>6.4274</u>
Discount Factor	<u>0.9254</u>	<u>0.7719</u>	<u>0.6438</u>	<u>0.5370</u>	<u>0.4479</u>	<u>0.3736</u>	<u>0.3116</u>	<u>0.3116</u>
Discounted Free Cash Flow	\$ 125	\$ 255	\$ 240	\$ 226	\$ 206	\$ 180	\$ 158	\$ 1,114
Gov't Services Value								\$ 2,503.479
Per Share Value								<u>\$ 0.55</u>

5. Vidtronics

Key Value Driver Assumptions--Vidtronics

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989
Net Sales	\$16,160	\$16,968	\$17,816	\$18,707	\$19,643	\$20,625	\$21,656
Sales Growth (net)	9.2%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Operating Margin	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%
Depreciation as % of Sales	5.8%	6.3%	6.8%	7.3%	7.8%	8.3%	8.8%
FCI as % of Next Years Sales	5.2%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
WC as % of Sales	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%

DCF Valuation Inputs Summary

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989	Terminal Value
Net Sales	\$ 16,160	\$ 16,968	\$ 17,816	\$ 18,707	\$ 19,643	\$ 20,625	\$ 21,656	--
Operating Margin (as % of Sales)	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%
Operating Income before taxes	\$ 2,686	\$ 2,820	\$ 2,961	\$ 3,109	\$ 3,265	\$ 3,428	\$ 3,599	--
Taxes @ 46%	\$ (1,236)	\$ (1,297)	\$ (1,362)	\$ (1,430)	\$ (1,502)	\$ (1,577)	\$ (1,656)	--
Operating Income after taxes	\$ 1,450	\$ 1,523	\$ 1,599	\$ 1,679	\$ 1,763	\$ 1,851	\$ 1,943	--
Plus: Depreciation	\$ 945	\$ 1,077	\$ 1,220	\$ 1,374	\$ 1,541	\$ 1,721	\$ 1,916	--
Less: Fixed Capital Investment	\$ 882	\$ 2,500	\$ 2,625	\$ 2,756	\$ 2,894	\$ 3,039	\$ 3,191	--
<i>Working Capital</i>	\$ 1,168	\$ 1,226	\$ 1,288	\$ 1,352	\$ 1,420	\$ 1,491	\$ 1,565	--
Less: Working Capital Investment	\$ (57)	\$ 162	\$ 171	\$ 179	\$ 188	\$ 197	\$ 207	--
Free Cash Flow	\$ 1,570	\$ (62)	\$ 23	\$ 118	\$ 222	\$ 336	\$ 461	\$ 3,254
WACC	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>
Discount Period	<u>0.4274</u>	<u>1.4274</u>	<u>2.4274</u>	<u>3.4274</u>	<u>4.4274</u>	<u>5.4274</u>	<u>6.4274</u>	<u>6.4274</u>
Discount Factor	<u>0.9254</u>	<u>0.7719</u>	<u>0.6438</u>	<u>0.5370</u>	<u>0.4479</u>	<u>0.3736</u>	<u>0.3116</u>	<u>0.3116</u>
Discounted Free Cash Flow	\$ 1,453	\$ (48)	\$ 15	\$ 63	\$ 99	\$ 126	\$ 144	\$ 1,014
Vidtronics Value								\$ 2,866.241
Per Share Value								\$ 0.63

5. 6. Magna Crafts

Key Value Driver Assumptions--Magna Crafts

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989
Net Sales	\$1,060	\$1,113	\$1,169	\$1,227	\$1,288	\$1,353	\$1,421
Sales Growth (net)	20.2%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Operating Margin	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%
Depreciation as % of Sales	0.3%	0.4%	0.5%	0.6%	0.7%	0.7%	0.7%
FCI as % of Next Years Sales	-0.5%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
WC as % of Sales	19.2%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%

DCF Valuation Inputs Summary

(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989	Terminal Value
Net Sales	\$ 1,060	\$ 1,113	\$ 1,169	\$ 1,227	\$ 1,288	\$ 1,353	\$ 1,421	--
Operating Margin (as % of Sales)	42.9%	42.9%	42.9%	43.0%	42.9%	42.9%	42.9%	42.9%
Operating Income before taxes	\$ 455	\$ 478	\$ 502	\$ 527	\$ 553	\$ 581	\$ 610	--
Taxes @ 46%	\$ (209)	\$ (220)	\$ (231)	\$ (242)	\$ (254)	\$ (267)	\$ (281)	--
Operating Income after taxes	\$ 246	\$ 258	\$ 271	\$ 285	\$ 299	\$ 314	\$ 329	--
Plus: Depreciation	\$ 3	\$ 4	\$ 6	\$ 7	\$ 9	\$ 9	\$ 10	--
Less: Fixed Capital Investment	\$ (6)	\$ 8	\$ 8	\$ 9	\$ 9	\$ 10	\$ 10	--
<i>Working Capital</i>	\$ 204	\$ 199	\$ 209	\$ 220	\$ 231	\$ 242	\$ 254	--
Less: Working Capital Investment	\$ 13	\$ (5)	\$ 10	\$ 11	\$ 11	\$ 11	\$ 12	--
Free Cash Flow	\$ 242	\$ 259	\$ 259	\$ 272	\$ 288	\$ 302	\$ 317	\$ 2,238
WACC	19.89%	19.89%	19.89%	19.89%	19.89%	19.89%	19.89%	19.89%
Discount Period	<u>0.4274</u>	<u>1.4274</u>	<u>2.4274</u>	<u>3.4274</u>	<u>4.4274</u>	<u>5.4274</u>	<u>6.4274</u>	<u>6.4274</u>
Discount Factor	<u>0.9254</u>	<u>0.7719</u>	<u>0.6438</u>	<u>0.5370</u>	<u>0.4479</u>	<u>0.3736</u>	<u>0.3116</u>	<u>0.3116</u>
Discounted Free Cash Flow	\$ 224	\$ 200	\$ 167	\$ 146	\$ 129	\$ 113	\$ 99	\$ 697
Magna Crafts Value								\$ 1,774.267
Per Share Value								\$ 0.39

7. Conclusion

Therefore, I find that the total value of the other businesses are as follows:

Total Value of Other Businesses (\$s in 000s)	<u>\$ 18,364.405</u>
Per share Value	<u>\$ 4.02</u>

D. Corporate Headquarters

Technicolor's corporate headquarters provided oversight and both managerial and accounting support for the company.²⁷⁶ This corporate unit would be retained even after the merger, as there was no equivalent corporate unit within MAF to merge the Technicolor operations into.²⁷⁷ The only change expected was that either Kamerman or Ryan would be let go following the merger.²⁷⁸ Therefore, it is undoubted that Technicolor's corporate headquarters would continue to incur corporate expenses, even under the Perelman plan. The remaining question is whether MAF is entitled to a management fee in this valuation for the costs it incurred to manage Technicolor, or whether these costs arose only because of the

²⁷⁶ Certain divisions, such as One Hour Photo, seem to have partially borne their own corporate expenses, but the retained businesses generally relied upon corporate headquarters for this support. RX 4 at 70.

²⁷⁷ *Id.*

²⁷⁸ *Id.* Because this change in management seems to be a result of the merger and because it would be impossible to quantify the value of this change if it were not, I have not separately

pending merger. Respondent points out that MAF management became involved in the management of Technicolor—it had begun to develop and maintain new financial relationships, and had been working to orchestrate the restructuring contemplated under the Perelman plan.²⁷⁹ For example, by the time of the merger, Bruce Slovin, an MAF executive, stated that he had already made approximately 33 trips to California on Technicolor business.²⁸⁰ Perelman testified that he attempted to strengthen ties with the studios in the industry by making loans and investments in production companies to get their processing work.²⁸¹ I have no doubt that MAF provided various services to Technicolor following the merger. Wilson indicated that, following the merger, MAF offered tax service, treasury service, and accounting and financial services, and that MAF assisted with the divestiture of the assets.²⁸² Easton reported that he believed that any benefits of the Perelman plan must be offset by the costs incurred in achieving those benefits, and that management fees to MAF were foreseeable and reasonable as of January 24, 1983.²⁸³ At first blush, this seems like a reasonable assumption.

valued the impact of substituting management on Technicolor's value. I do not believe such an exercise would be realistically possible in any event.

²⁷⁹ *Id.*

²⁸⁰ XXIV (Slovin) 37.

²⁸¹ XLII (Perelman) 35-36.

²⁸² XXIV (Wilson) 263-64, 269-70.

²⁸³ RX 4 at 72.

Upon further study, however, assessing a management fee to Technicolor seems erroneous because Technicolor's own corporate headquarters would have simply performed all of these provided services but for the merger. Wilson acknowledged that Technicolor had provided all of these services in the past and could provide them to itself in the future at no cost beyond its base corporate expenses.²⁸⁴ Therefore, MAF's services, though useful, were fairly redundant.

The costs that would arise to implement the Perelman plan would have been incurred by Technicolor management rather than MAF had these two entities not merged. Petitioner argues that MAF should not receive a management fee because the costs of the Perelman plan implementation occurred pre-merger, because it was a conceptual plan and because the Delaware Supreme Court characterized it as the operative reality on the date of the merger.²⁸⁵ Although I agree that the concept of Perelman's plan had been established, I do not agree that its implementation, or the costs associated with its implementation, had taken place before the merger. As discussed above, Perelman's plan was simply to capitalize on the steady cash flow by retaining certain core businesses and selling off four units that were not profitable.²⁸⁶ At the time of the merger, these businesses had not been sold and it

²⁸⁴ Tr. at 1805.

²⁸⁵ CPF at 89.

²⁸⁶ The Perelman plan is described in Section III, *supra*.

was foreseeable that certain expenses would be incurred for their disposal. It was not foreseeable, however, that MAF would incur these expenses rather than Technicolor, because Technicolor had the capability to do all of the things that MAF took upon itself. Thus, I do not believe that MAF is entitled to a management fee under the Perelman plan.

The factors left to determine before I can calculate the value of corporate headquarters, then, are what the cost of corporate headquarters operations were (and how they would have been affected by the selling off of the discontinued operations) and its fixed and working capital investment figures, depreciation, and the change in net operating assets.

1. Cost of Operations

Easton indicated that corporate headquarters' operating loss was approximately 2% of total Technicolor net sales in fiscal year 1982.²⁸⁷ He uses this number going forward, but adjusts it to add a management fee, which I have already rejected. The problem with using his projected operating loss of 2% of net sales is that he adopts the highest, rather than the average, of the past four historic operating margins. In fact, the operating margins as a percentage of Technicolor net sales for the years of 1979 through 1982 were: -1.9%, -1.8%,

²⁸⁷ RX 4 at 72.

-0.7%, and -2.0%—for an average of -1.6%.²⁸⁸ I have adopted this average of the historic operating margin as the assumption going forward.

Petitioner suggests that Easton erred by failing to account for the impact the Perelman plan would have on corporate headquarters, once the discontinued businesses shrank the fiscal revenue and once major concerns regarding One Hour Photo were alleviated. I believe that my approach of carrying forward the historical figures as a percentage of sales addresses this concern because most of the historical figures predate the 1981 implementation of One Hour Photo and because One Hour Photo carried many of its own administrative expenses. Further, because the calculations are based upon percentages of the net sales of Technicolor, shrinkage in future revenue is reflected in the calculations.

2. Fixed and Working Capital Investment; Depreciation

Corporate headquarters historically incurred small investments in fixed capital as a percentage of the following year's total net sales (0.15%). I continue this trend forward throughout the forecast period.

Similarly, depreciation averaged 0.05% of sales over the past four years (specifically, 0.03% in 1979, 0.07% in 1980, 0.05% in 1981, and 0.04% in 1982), which I carry forward throughout the forecast period. In contrast, Easton gradually increases the depreciation percentages over the forecast period to equal the

²⁸⁸ RX 4 Ex. 16B.

percentage of fixed capital expenditures (0.15%). I believe, however, that this was unwarranted for corporate headquarters even though I agreed with a similar Easton assumption for the videocassette business. This is because there was no corresponding reason to accept such an assumption for corporate headquarters, which was a stable, mature operation quite different from Newbury Park. Newbury Park had little historical data to rely upon and would presumably incur much more significant depreciation expenses since each duplicating machine had a useful life of only two years. Further, the historical data for corporate headquarters did not suggest an increasing trend in depreciation, but was relatively stable.

The historic average of working capital as a percentage of net sales was -1.3% (-1.3% in 1979, 3.4% in 1980, -5.3% in 1981, and -2.1% in 1982).²⁸⁹ I carry this average forward as well, rejecting Easton's roundabout approach of deriving working capital by projecting working capital investment as a percentage of incremental sales (using an unexplained 0.1%) and subtracting that number from the prior year's working capital. Instead, I rely upon Technicolor's historic working capital as a percentage of sales and carry this -1.3% figure forward through the historic period. Working capital for the base year was -\$4.548 million. Working capital for the following year is then derived by multiplying -1.3% by the

²⁸⁹ *Id.*

following year's sales. Working capital investment is determined by calculating the difference between the base and following year's working capital.

3. Conclusion

In sum, my findings regarding the value of Corporate Headquarters are as follows:

Key Value Driver Assumptions--Corporate HQ							
(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989
Net Sales	\$174,384	\$181,509	\$190,568	\$200,532	\$211,460	\$222,034	\$233,135
Sales Growth	4.1%	5.0%	5.2%	5.4%	5.0%	5.0%	5.0%
Operating Margin as %age of Sales	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%
Depreciation as % of Sales	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%
FCI as % of Next Years Sales	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
WC as % of Sales	-1.3%	-1.3%	-1.3%	-1.3%	-1.3%	-1.3%	-1.3%

DCF Valuation Inputs Summary								Terminal
(\$s in 000s)	1983	1984	1985	1986	1987	1988	1989	Value
Net Sales	\$ 174,384	\$ 181,509	\$ 190,568	\$ 200,532	\$ 211,460	\$ 222,034	\$ 233,135	--
Operating Margin (as % of Sales)	-1.6%	-1.6%	-1.6%	-1.6%	-1.6%	-1.6%	-1.6%	-1.6%
Operating Income before taxes	\$ (2,790)	\$ (2,904)	\$ (3,049)	\$ (3,209)	\$ (3,383)	\$ (3,553)	\$ (3,730)	--
Taxes @ 46%	\$ 1,283	\$ 1,336	\$ 1,403	\$ 1,476	\$ 1,556	\$ 1,634	\$ 1,716	--
Operating Income after taxes	\$ (1,507)	\$ (1,568)	\$ (1,647)	\$ (1,733)	\$ (1,827)	\$ (1,918)	\$ (2,014)	--
Plus: Depreciation	\$ 87	\$ 91	\$ 95	\$ 100	\$ 106	\$ 111	\$ 117	--
Less: Fixed Capital Investment	\$ 272	\$ 286	\$ 301	\$ 317	\$ 333	\$ 350	\$ 367	--
Working Capital	\$ (4,548)	\$ (2,360)	\$ (2,477)	\$ (2,607)	\$ (2,749)	\$ (2,886)	\$ (3,031)	--
Less: Working Capital Investment	\$ 174	\$ 2,188	\$ (118)	\$ (130)	\$ (142)	\$ (137)	\$ (144)	--
Free Cash Flow	\$ (1,866)	\$ (3,952)	\$ (1,734)	\$ (1,820)	\$ (1,912)	\$ (2,020)	\$ (2,121)	\$ (14,954)
WACC	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>	<u>19.89%</u>
Discount Period	<u>0.4274</u>	<u>1.4274</u>	<u>2.4274</u>	<u>3.4274</u>	<u>4.4274</u>	<u>5.4274</u>	<u>6.4274</u>	<u>6.4274</u>
Discount Factor	<u>0.9254</u>	<u>0.7719</u>	<u>0.6438</u>	<u>0.5370</u>	<u>0.4479</u>	<u>0.3736</u>	<u>0.3116</u>	<u>0.3116</u>
Discounted Free Cash Flow	\$ (1,727)	\$ (3,050)	\$ (1,117)	\$ (977)	\$ (857)	\$ (755)	\$ (661)	\$ (4,660)
Corporate HQ Value								\$ (13,802,515)
Per Share Value								\$ (3.02)

V. VALUATION OF THE BUSINESSES TO BE SOLD

The Perelman plan contemplated that four Technicolor divisions would be sold “as quickly as [MAF] could” in the course of the takeover: Consumer Photo Processing (“CPPD”), One Hour Photo, TV Program Licensing (“Gold Key”), and Audio Visual.²⁹⁰ Audio Visual also owned real property in Costa Mesa, California, for which a contract of sale was entered into on January 12, 1983.²⁹¹ That contract was to close on March 31, 1983 with aggregate proceeds of \$6,839,200. Perelman’s intentions with respect to these divisions are demonstrated by the “T-Company” projections provided to MAF’s lenders prior to the Technicolor acquisition.²⁹² Both experts relied upon the T-Company projections.

The T-Company projections anticipated \$50 million in gross proceeds from asset dispositions, less \$4 million in debt to be retired, combined with a tax benefit of \$4 million due to losses on the sale of those divisions, for a bottom-line figure of \$50 million realized from the sales.²⁹³ The \$50 million was not discounted to its present value nor adjusted for profits or losses incurred in operation of the

²⁹⁰ Tr. at 1850.

²⁹¹ RX 4 at 84; PNX 15 at 187-88.

²⁹² See PX 99; Tr. at 1421-22. The T-Company projections were made under the direction of Perelman by Bob Carlton of MAF, based upon Technicolor’s balance sheet. Tr. at 1851-52.

²⁹³ PX 99 at 7. The pages are not numbered, but the referenced page is titled “T COMPANY Divisions to be Disposed.” The \$50 million did not include any proceeds from the Costa Mesa sale, though it was clear that the sale would take place, and indeed, \$7 million for that property was handwritten on the document.

divisions before disposition.²⁹⁴ The T-Company projections were made very early—the chart on which both experts relied is dated June 26, 1982.²⁹⁵ By January 4, 1983, Bear Stearns had been retained to assist MAF in selling these divisions.²⁹⁶ Bear Stearns, consistent with Perelman’s testimony, indicated that MAF’s goal was to have the divisions disposed of quickly—by the end of June 1983.²⁹⁷ MAF’s intention was to sell these divisions as going concerns, which would require Technicolor to absorb any operating profit or loss incurred before the sale.²⁹⁸

Neither expert’s valuation of the sold businesses was terribly persuasive. Torkelsen claims to have forecast sales based on “book value as scheduled by MAF as part of the Perelman Plan,” reaching an undiscounted total of \$50.2²⁹⁹ million (including \$6.8 million from the Costa Mesa property) in cash proceeds from the sale of these four businesses.³⁰⁰ Easton projects cash proceeds of \$41 million plus a tax savings of \$6 million for an undiscounted net cash benefit of \$47

²⁹⁴ Tr. at 1851.

²⁹⁵ PX 99 at 7. At that time, MAF had received very little information about the Technicolor divisions. Tr. 1899, 1852; PNX 15 at 223.

²⁹⁶ PX 225. Bear Stearns did not think they would be very helpful in selling Audio Visual, as the sale of Audio Visual was really nothing more than inventory liquidation. *Id.*

²⁹⁷ *Id.*

²⁹⁸ Tr. at 1852.

²⁹⁹ The discounted value is approximately \$46 million. *See supra* text accompanying note 19.

³⁰⁰ PNX 15 at 188.

million³⁰¹ by June 30, 1983. After a detailed analysis of Audio Visual and Gold Key, Easton returns to the rough estimates of the T-Company document and arbitrarily discounts those projections at a rate of 10%.³⁰² Easton purports to accept the T-Company projections, but fails to include the roughly \$6.8 million to be received in March 1983 from the sale of the Costa Mesa property.³⁰³ I find that since both experts based their analysis on the T-Company document, and that neither expert adequately explains their variations from that document, which I find to be the best available evidence, I will accept the already discounted book value projections made in the T-Company document. Therefore, I project that in addition to the roughly \$6.8 million realized from the Costa Mesa sale, Technicolor will realize \$50 million in proceeds from the company sales and retire \$4 million in debt in 1983. I include a tax benefit of 46% (\$3.7 million) in my calculation.

Two issues remain before the net present value of the sold companies can be determined: the date the proceeds are expected, and any operating profit or loss incurred before disposition. The proceeds from the Costa Mesa sale were expected

³⁰¹ The discounted value is approximately \$43 million. *See supra* text accompanying note 19.

³⁰² RX 4 at 87. The \$50 million in proceeds expected in the T-Company document already represent a discount of roughly 15% from the total assets of the combined companies. RX 4, Ex.

17.
³⁰³ *Id.*

by March 31, 1983.³⁰⁴ Easton projects that the divisions would have been sold by June 30, 1983, consistent with Bear Stearns' correspondence and MAF's goal.³⁰⁵ Torkelsen largely agrees with this disposition date, but arbitrarily decides that since there were some problems associated with Gold Key, a more appropriate disposition date would be December 31, 1983. I have found no evidence to support this decision. I conclude, therefore, that the most reasonable expectation would be that the proceeds from these sales would be available on June 30, 1983.

With respect to the cash flow of the sold businesses before sale, Torkelsen clearly lays out that from July 1982 through December 1982, the four divisions had a pre-tax cash outflow of \$1.214 million, and a post-tax free cash flow of \$134,640.³⁰⁶ Easton, analyzing June 1982 through November 1982 numbers, determines that the after-tax operating loss was \$1.179 million.³⁰⁷ Since Torkelsen's figures clearly represent cash flow, the proper measure of a DCF analysis, I will accept them.³⁰⁸ It is reasonable to expect a similar outflow in the

³⁰⁴ RX 4 at 84.

³⁰⁵ *Id.* at 80; PX 225.

³⁰⁶ PNX 15 at 166.

³⁰⁷ RX 4 at 80.

³⁰⁸ Torkelsen, however, goes on to make inexplicable changes to these figures to give these divisions positive cash flow in the first half of 1983, and then cancels them out with transaction costs. While transaction costs are sure to be incurred, there is no evidence that allows me to determine them sufficiently to deduct them from the sale proceeds. Any figure I could put forth would be a complete fiction. Accordingly, I find Torkelsen's alterations arbitrary and without support. *See* PNX 15 at 167-69.

operations of those divisions during the first half of 1983. Therefore, I project a cash flow of \$134,640, discounted for simplicity's sake (and for lack of more detailed evidence) as if the entire cash flow occurred on June 30, 1983. I find that the net value of the sold businesses as of January 24, 1983 was \$52,761,127 or \$11.55 per share. Below my conclusions are detailed in tabular form.

Valuation of the Sold Businesses (in 000s)

	Subtotals	Totals
COSTA MESA		
Proceeds from Costa Mesa Sale	\$ 6,839	
Discounted @19.89% from 3/31/83 to 1/24/83	\$ 6,615	
<i>Costa Mesa Total</i>		\$ 6,615
OTHER SOLD BUSINESSES		
Estimated Realizable Asset Value	\$ 50,000	
Less: Estimated Liabilities	\$ 4,000	
Proceeds upon Sale	\$ 46,000	\$ 46,000
Book Value of Net Assets	\$ 54,111	
Loss on Sale (Proceeds - Book Value)	\$ (8,111)	
Plus: Tax Benefit (46% of Loss on Sale)	\$ 3,731	
Proceeds Net of Tax Benefit	\$ 49,731	
<u>Cash flows from Operations</u>	<u>\$ 135</u>	
Net Proceeds from Sale of Other Businesses	<u>\$ 49,866</u>	
<u>Discounted @ 19.89% from 6/30/83 to 1/24/83</u>	<u>\$ 46,146</u>	
<i>Other Sold Businesses Total</i>		<u>\$ 46,146</u>
 Total Net Value of Sold Businesses on 1/24/83		 \$ 52,761.127
Per Share Value		\$ 11.55

I note that my projection for the sold businesses is higher than both experts' projections. I project \$52.8 million, Torkelsen projects \$50.2 million, and Easton projects \$47 million. This discrepancy is easily explained, however. Torkelsen selects one of the only businesses in this category that contributed positive cash flow (Gold Key) to Technicolor and, rather than projecting it to be sold by mid-1983, projects that it would not be sold until December 1983. This allows Technicolor to reap the positive cash flows Torkelsen projected for an additional six months. More importantly, Torkelsen's discount rate is much lower than the discount rate I have selected. Easton inexplicably fails to include the \$6.839 million in proceeds resulting from the Costa Mesa sale. This contract was entered into before the merger date and was to close post-merger (March 31, 1983) and should have been incorporated into Easton's projection. Easton also discounted the T-Company projections by 10% for no valid reason that is readily apparent from reading his report.

VI. DISCOUNT RATE

Now that the forecasted cash flows are determined, I need to discount those cash flows to their present value. The Weighted Average Cost of Capital ("WACC") is used to determine the discount rate based on Technicolor's cost of capital. WACC is equal to the sum of: (1) the percentage of the capital structure financed with equity multiplied by the cost of equity capital; and (2) the percentage

of the capital structure financed with debt multiplied by the after-tax cost of debt. Each of these inputs will be determined to establish Technicolor's WACC.

A. Capital Structure

1. Long-Term Debt

To determine Technicolor's debt-to-equity capital structure, I must first determine Technicolor's outstanding long-term debt at the time of the merger. The only financial statement available to determine Technicolor's debt is the Macanfor consolidated statement dated December 31, 1982.³⁰⁹ Macanfor was created solely to merge with Technicolor. Therefore, the debt listed on that financial statement is limited to the debt used to purchase Technicolor and the debt attributable to Technicolor itself. All but \$21.3 million is attributable to the purchase of Technicolor.³¹⁰ The debt used to acquire the company cannot be figured into the calculation when determining Technicolor's long-term debt. Since all the remaining debt is Technicolor's, the resulting long-term debt of Technicolor is \$21.3 million.

Petitioner asserts that only \$19.9 million should be attributable to long-term debt because this is the figure that appears on MAF's 1983 10-K Annual Report filed with the SEC. This figure reflects MAF's bank loan agreement, that called

³⁰⁹ PX 396 at P300217.

³¹⁰ *Id.*

for all outstanding, pre-existing Technicolor debt to be repaid by January 24, 1983, subject to a limitation that the debt *could not exceed \$20 million*.³¹¹ Appropriately, the MAF 10-K stated that the \$19.9 million in Technicolor pre-existing debt was repaid to the bank on January 24, 1983.³¹² The MAF 10-K, however, is not the best evidence available, as it merely reports the payment of Technicolor debt that was capped at \$20 million and, therefore, was not necessarily an accurate reflection of the true outstanding Technicolor debt.

Petitioner further criticizes Easton’s reliance upon Macanfor’s balance sheet because Macanfor is not the same as Technicolor—an assertion that ignores the fact that Macanfor existed *only to purchase Technicolor*. Even petitioner acknowledges that “Macanfor was an MAF subsidiary created to accomplish the Technicolor acquisition.”³¹³ Therefore, any long-term operational debt not related to the purchase of Technicolor had to have been debt owed by Technicolor. Accordingly, I find petitioner’s assertion without merit. After deducting the debt not related to the purchase of Technicolor, I find that Technicolor’s outstanding debt at the time of the merger is \$21.3 million.

³¹¹ PX 244 at B000030-31.

³¹² PX 403 at M00023.

³¹³ CPF at 99.

2. Debt-to-Equity Capital Structure

Torkelsen determines the capital structure of Technicolor by analogizing to the capital structure of the average manufacturing business.³¹⁴ Easton uses the actual debt-to-equity structure of Technicolor at the time of the merger. Since Technicolor operated in a highly competitive area with a small customer base, I find that Technicolor is not typical of the average manufacturing business. It seems hardly necessary to state that the capital structure of Technicolor at the time of the merger is the best indication of the capital structure of the company in determining its future value.

I estimate Technicolor's capitalization by using the purchase price at the time of the merger—\$105.1 million. Using the long-term debt of \$21.3 million, the total capital is \$126.4 million. Therefore, of the total capital, 16.9% [$21.3 \div 126.4 = 16.9$] was debt and 83.1% [$105.1 \div 126.4 = 83.1$] was equity.

B. Cost of Equity Capital

The cost of equity capital is the risk-free rate of return plus Technicolor's risk under the Perelman plan. Risk is determined by multiplying Technicolor's

³¹⁴ PNX 15 at 200.

beta³¹⁵ by the equity risk premium. The required inputs to be determined are (1) the risk-free rate of return; (2) Technicolor's beta; and (3) the equity risk premium.

1. Risk-free Rate

Petitioner uses a risk-free rate of 10.37%, based on U.S. Treasury Bonds with greater than ten years to maturity without citing to any source.³¹⁶ Respondent uses a risk-free rate of 10.88% based on the 30-Year Total Constant Maturity Yield as of January 24, 1983, citing the Federal Reserve's website as its source.³¹⁷ According to the Federal Reserve, the risk-free rate never dropped below 10.39% the entire month of January 1983, and varied between 10.39% and 10.99% for that month.³¹⁸ I think it is reasonable to adopt the risk-free rate on the closing date of the merger, which was 10.88%.

2. Technicolor's Beta

Beta measures the relative risk of a company. Torkelsen does not calculate a beta specific to Technicolor, but instead makes an *assumption* that it should be

³¹⁵ Beta measures the relative risk of a company. Beta is "a measure of systematic risk of a security; the tendency of a security's returns to correlate with swing in the broad market." Shannon P. Pratt et al., *Valuing a Business*, Appendix A at 912 (4th ed. 2000). For example, a beta of 1 indicates that the security's price will rise and fall with the market. A beta greater than 1 indicates that its price will be more volatile than the market. And a beta less than 1 means that it will be less volatile than the market.

³¹⁶ PNX 15 at 194.

³¹⁷ RX 4 at 91.

³¹⁸ <http://www.federalreserve.gov/releases/h15/data/b/tcm30y.txt>.

around one without any verifiable reason other than his own opinion.³¹⁹ Easton lists the various betas for Technicolor from January 1980 through December 1982, listing separate periods with varying betas.³²⁰ Five different sources are used for the historical betas.³²¹ Easton then averages Technicolor beta from January 1980 through December 1982, ending with a *pre-Perelman plan beta* of 1.43.³²²

Since I am required to evaluate Technicolor under the Perelman plan, and not the Kamerman plan, I am concerned that using the two-year historical beta created under the Kamerman plan would be viewed as an error by the Supreme Court. Thus, I will use the average beta for December 1982 (after the Perelman plan became the guiding force for Technicolor) as the appropriate beta. That beta, which is equal to 1.60, is appropriate because it incorporates the risks of the Perelman plan, as is indicated by the increase in Technicolor's post-offer, pre-Perelman beta (1.57) to the post-Perelman beta (1.60).³²³ It thus takes account of the market's perception of the changing riskiness of an investment in Technicolor after the tender offer, and for that reason is the most appropriate beta.

³¹⁹ PNX 15 at 198-99.

³²⁰ RX 4 at 93.

³²¹ *Id.*

³²² *Id.*

³²³ *Id.*

It is standard to use the derivable beta from market information when valuing a public company.³²⁴ As stated earlier in this opinion, Technicolor was in a highly competitive industry with a small customer base. It had already lost its United Artists contract, and was facing increased competition. The videocassette business was suspect in its potential, and there was no guarantee as to the sale or purchase price of the divisions Perelman sought to sell. Coupled with a new business plan, the Technicolor beta of 1.60 in December 1982, *as actually reflected by the market*, is the most accurate indication for purposes of valuing the company. Accordingly, I use a beta equal to 1.60 for my calculation.

3. Equity Risk Premium

Petitioner uses the average equity risk premium for long-term market risk in 1982, which is 8.3%.³²⁵ Petitioner states that the arithmetic mean of the differences between returns on common stock and the risk-free rate is most

³²⁴ See *Gotham Partners, L.P. v. Hallwood Realty Partners, L.P.*, C.A. No. 15754, 2003 WL 21639071 at *14 - *15 (Del. Ch. July 8, 2003) (slip op.) (noting that the beta for a public company is normally the market beta unless it can be shown that there was an insufficient market in the public company to create an accurate beta).

³²⁵ PNX 15 at 194.

commonly used.³²⁶ Respondent lists both the geometric and arithmetic means, but comes up with a slightly different number of 7.2% for the arithmetic mean.³²⁷

Easton, however, uses a different equity risk premium for his discount rate calculation. In his review of the previous trial he found an equity risk premium equal to 4.6%.³²⁸ He did not independently verify this number, but yet deems it reliable for his use. Since my mandate was to hold a completely new trial, I choose not to use an unverified equity risk premium from the first trial. Instead, I agree with petitioner's assertion that the arithmetic mean of the differences is the best source for the equity risk premium. Petitioner's arithmetic mean is based on 1982 historical averages.³²⁹ Respondent's is based on the mean at the time of the merger.³³⁰ Recognizing the differences between the two experts, I find that respondent's arithmetic mean at the time of the merger is the more appropriate value to determine Technicolor's cost of capital. Accordingly, the equity risk premium is 7.2%.

³²⁶ *Id.*

³²⁷ RX 4 at 92.

³²⁸ *Id.*

³²⁹ PNX 15 at 194.

³³⁰ RX 4 at 91.

4. Conclusion

Using the formula that Technicolor's cost of equity capital equals the risk-free rate added to the product of beta multiplied by the equity risk premium, I find this value to be 22.4% (*i.e.*, $10.88\% + (1.60)(7.2\%) = 22.4\%$).

C. After-tax Cost of Debt

The after-tax cost of debt is equal to the cost of debt multiplied by the difference of one minus the tax rate (*i.e.*, (cost of debt) (1 – tax rate)). The cost of debt is the borrowing cost of Technicolor at the valuation date. Petitioner does not analyze any borrowing cost, but simply assumes that the prime rate should be the borrowing cost. Respondent evaluates the borrowing cost as equivalent to the rate paid in acquiring Technicolor. Macanfor had a credit facility at 13.0% and a note payable to its parent at 15.625%.³³¹ Easton weighted the interest in proportion to the balance of each debt to obtain a borrowing cost of 13.96%.³³² I find this to be a more accurate borrowing cost than the prime rate since it accurately reflects the rate at which Technicolor would borrow under the Perelman plan. Using the 46%

³³¹ PX 396 at P300217-18.

³³² RX 4 at 90. Easton rounded up to 14.0%, but the actual value of 13.96% was used to obtain the after-tax cost of debt of 7.54%.

tax rate agreed upon by both experts, the resulting after-tax cost of debt is 7.54% (i.e., $(13.96\%)(1-46\%) = 7.54\%$).

D. Technicolor's Cost of Capital

Using all of the above inputs, I obtain the resulting discount rate:

$$\begin{aligned} \text{WACC} &= (\text{cost of equity capital}) (\text{percentage of equity capital structure}) + (\text{after-} \\ &\text{tax cost of debt}) (\text{percentage of debt capital structure}) = (22.40)(0.831) + \\ &(7.54)(0.169) = 19.89 \%. \end{aligned}$$

**VII. THE FINAL VALUATION OF TECHNICOLOR
UNDER THE PERELMAN PLAN**

To determine the final valuation of Technicolor per share, I sum the value of the retained businesses and the sold businesses, subtract the value of the outstanding debt,³³³ and divide by the number of outstanding shares.

³³³ Outstanding debt is determined in the discount rate section as long-term debt.

Technicolor under the Perelman Plan

Fair Value as of January 24, 1983

	Value	Per Share
North Hollywood	<u>\$ 53,991,172</u>	<u>\$ 11.82</u>
Newbury Park Video	<u>\$ 10,398,185</u>	<u>\$ 2.28</u>
East Coast	<u>\$ 2,978,096</u>	<u>\$ 0.65</u>
Technicolor Ltd.	<u>\$ 6,450,561</u>	<u>\$ 1.41</u>
Technicolor SpA	<u>\$ 1,791,761</u>	<u>\$ 0.39</u>
Magna Craft	<u>\$ 1,774,267</u>	<u>\$ 0.39</u>
Vidtronics	<u>\$ 2,866,241</u>	<u>\$ 0.63</u>
Government Services	<u>\$ 2,503,479</u>	<u>\$ 0.55</u>
Corporate Headquarters	<u>\$ (13,802,515)</u>	<u>\$ (3.02)</u>
Retained Businesses Subtotal	<u>\$ 68,951,247</u>	<u>\$ 15.10</u>
Plus: Sold Businesses	<u>\$ 52,761,127</u>	<u>\$ 11.55</u>
Plus: Debt Outstanding	<u>\$ (21,300,000)</u>	<u>\$ (4.66)</u>
Total Equity Value	<u><u>\$ 100,412,374</u></u>	<u><u>\$ 21.98</u></u>
**4,567,491 shares outstanding		

VIII. REASONABLENESS CHECKS

The above analysis sets forth the basis for the Court's valuation of Technicolor. As a check on that analysis, I examined the following corroborative indicia of value. Each supports the Court's final result as to the per share value of Technicolor.

Before I begin, however, I address each expert's reasonableness checks. Torkelsen uses the MAF T-Company projections from PX 99, but then changes several of the assumptions to match his position.³³⁵ I find it to be unreasonable to begin with an outside source as a reasonableness check and then to alter the assumptions of that source to match one's own position. That removes the credibility of the petitioner's check, and I disregard it entirely. Easton uses several indicia of reasonableness.³³⁶ I adopt his use of market price, even though I address its significance in a different manner, but I reject his use of the T-Company projections and alternative forecast methodologies. The T-Company projections strike me as self-serving since they are basically a reiteration of respondent's original position. Accordingly, I use the Supreme Court's fairness opinion and the market value at the time of the merger, and the conduct of knowledgeable insiders, to check the reasonableness of my final valuation.

³³⁵ PNX 15 at 214-30.

³³⁶ Some of his alternative forecast methodologies lack the requisite amount of support for me to rely upon them. In addition, I do not address the comparable company analysis of Vidtronics here because this is a check on the final valuation, rather than a check on a specific division.

A. The Supreme Court's Fairness Opinion

In petitioner's personal liability action filed against respondent and several others alleging a breach of fiduciary duty in approving the Technicolor merger with MAF, the Supreme Court affirmed this Court's "holding that the MAF transaction was entirely fair to the Technicolor stockholders."³³⁷ As part of that decision, the Supreme Court held that "[s]ubstantial record evidence supports the Court of Chancery's finding that the \$23 deal price was the highest price reasonably available. That conclusion is the result of an orderly and logical deductive process."³³⁸ The Supreme Court's holding that \$23 was the highest price reasonably available comports reasonably with the value I have ultimately found for Technicolor (\$21.98).

B. The Market Price

The Technicolor board agreed to Perelman's \$23 tender offer on October 29, 1982.³³⁹ On October 27, 1982, Technicolor stock traded at \$17.375 per share, with a volume of over 88 million shares. Immediately after Perelman's \$23 tender offer, Technicolor shares traded at \$22.375 per share, with a volume of over 655 million. On January 24, 1983, Technicolor shares were trading at \$22.875 per

³³⁷ *Technicolor III*, 663 A.2d 1156, 1180 (Del. 1995).

³³⁸ *Id.* at 1177.

³³⁹ *Technicolor IV*, 684 A.2d at 293.

share, with a volume of only 1.9 million. It is reasonable to assume that the market was weighing and reacting to all the competing information because the price immediately reflected the tender offer, yet no one attempted to outbid the tender offer. Accordingly, a value ranging from \$17 to \$23 appears to be reasonable in relation to the market value for Technicolor shares around the time of the merger.

C. Knowledgeable Insiders Accept \$23/Share

Morton Kamerman and Guy Bjorkman, Technicolor insiders at the time of the AMF merger, had substantial ownership interests in Technicolor. As directors (and, in Kamerman's case, CEO) Kamerman and Bjorkman were very knowledgeable about Technicolor. If Torkelsen was even close to correct in his opinion on value, the opportunity costs involved in the sale of the company would be enormous for insiders like Kamerman and Bjorkman.

As the Supreme Court noted in an earlier opinion in this case, "the fact that major shareholders, including Kamerman and Bjorkman, who had the greatest insight into the value of the company, sold their stock to MAF at the same price paid to the remaining shareholders powerfully implies that the price received was fair. If Technicolor was worth more than \$62 per share, as Cinerama contends, Kamerman (with 128,874 shares) and Bjorkman (with 409,406 shares) would have lost more than \$5,000,000 and \$16,000,000, respectively, by tendering their shares

to MAF for \$23 per share.”³⁴⁰ Accordingly, the fact that sophisticated, knowledgeable persons did not act in a manner consistent with the belief that Technicolor stock had an inherent value of \$63.77 as of January 24, 1983, is a significant factor in determining the reasonableness of the experts’ competing valuations. The actions of these knowledgeable and sophisticated insiders strongly supports the Court’s determination that \$21.98 is a reasonable assessment of the fair value of Technicolor stock on January 24, 1983.

D. Conclusion

The above three checks were used to evaluate the reasonableness of the Court’s final Technicolor valuation. Using the Supreme Court’s holding that \$23 per share was the highest price reasonably available, the final value of \$21.98 reasonably approximates that determination. In addition, using the market price variation of \$17 to \$23 as an external indicator, and the actions of sophisticated insiders as a reasonable barometer of fair value, the final appraisal value of \$21.98 per share appears highly reliable. Accordingly, I find that \$21.98 is the fair value of a share of Technicolor stock at the time of the merger.

³⁴⁰ *Technicolor III*, 663 A.2d at 1177.

IX. POST-JUDGMENT INTEREST

As previously determined, the pre-judgment interest established in the first appraisal trial constitutes the law of the case.³⁴¹ Accordingly, 10.32% annual compound interest applies from January 24, 1983 to August 2, 1991.³⁴² The only issues left to decide are the appropriate form of post-judgment interest, the relevant post-judgment period, and the appropriate rate.

After the fair value of the dissenting shareholders' shares is ascertained, 8 *Del. C.* § 262(h) requires the Court to determine “the fair rate of interest, if any” through the consideration of “all relevant factors.”³⁴³ Section 262(i) states that the interest applicable to an award “may be simple or compound.”³⁴⁴ The Supreme Court has acknowledged that this Court’s discretion to award simple or compound interest is broad, but requires explanation for the choice.³⁴⁵ In addition, the exercise of that discretion is entitled to deference absent abuse.³⁴⁶

³⁴¹ *Cede & Co. v. Technicolor, Inc.*, 2002 Del. Ch. LEXIS 39 (Del. Ch.).

³⁴² *Id.*

³⁴³ The inclusion of the language “if any” suggests that the Legislature contemplated circumstances where the relevant factors counsel a court to award zero interest.

³⁴⁴ Before 1987, the statute only allowed for the award of simple interest.

³⁴⁵ *Gonsalves v. Straight Arrow Publishers, Inc.*, 1999 WL 87280, at **4 (Del. Feb. 25, 1999) (*Gonsalves II*). See also *M.G. Bancorporation, Inc. v. Le Beau*, 737 A.2d 513, 527 (Del. 1999) (Court of Chancery “has broad discretion under the appraisal statute to award either simple or compound interest.”).

³⁴⁶ *Gonsalves II*, at **3.

Generally, interest awards require the Court to determine both the rate of interest and the form of interest in a way that is fair to both the dissenting stockholder and the surviving corporation.³⁴⁷ Awarding post-judgment interest serves three purposes. First, similar to prejudgment interest, it compensates the dissenting stockholder for the loss of use of the fair value of shares during the appraisal process and requires the surviving corporation to disgorge any benefit obtained from the use of those funds found to rightfully belong to the petitioner.³⁴⁸ This first purpose is “substantive” in nature, *i.e.*, it ensures shareholders receive the full value of their shares without regard to the time necessary to efficiently prosecute an appraisal action. Second, post-judgment interest ensures that neither party is punished for one party’s decision to appeal. And third, it encourages the surviving corporation to promptly pay, eliminating the need for judicial proceedings to enforce the award. The second and third purposes are not compensatory in nature, but are borne out of concerns for the orderly administration of justice, and the avoidance of improper manipulation of the appeals process.

Prejudgment interest is distinct from post-judgment interest in that prejudgment interest is an essential element of fully compensating a dissenting

³⁴⁷ *Gonsalves v. Straight Arrow Publishers, Inc.*, 2002 Del. Ch. LEXIS 105, at *37 (Del. Ch.).

³⁴⁸ *Id.* at *38.

stockholder—this is why prejudgment interest is often awarded at rates that a “prudent investor” could expect to receive and why prejudgment interest is frequently compounded. Post-judgment interest has more modest aims, however, and merely ensures that the dissenting shareholder remains whole during any post-judgment litigation. Post-judgment interest should not serve to punish the surviving corporation, nor should it provide a windfall to the dissenting stockholder in excess of the principal award.³⁴⁹

The prejudgment interest award of 10.32% compound interest from January 24, 1983 to August 2, 1991 fairly compensated petitioner. But as noted above, the goals of post-judgment interest are to ensure the petitioner remains whole during post-judgment litigation and prevent improper judicial machinations, either through frivolous appeal or willful delay of payment. Since the statute allows the Court to consider all relevant factors in determining the fair rate of interest,³⁵⁰ the procedural posture and relative change in position of the parties is a factor in this Court’s post-judgment interest award.

Before the first judgment, Technicolor was holding Cinerama’s money pending the outcome of the trial. At the end of the trial, however, Technicolor was required to pay \$21.60 per share, plus prejudgment interest, to Cinerama. Rather

³⁴⁹ *Id.*

³⁵⁰ 8 *Del. C.* § 262(h).

than accepting its award, Cinerama chose to appeal the judgment—forcing Technicolor to continue holding Cinerama’s money. Cinerama sought to appeal both on the fairness of the dispute and the appraisal value. Since those appeals were bifurcated, the appeal process took even longer. The Supreme Court held that the appraisal case was moot while Cinerama appealed the entire fairness action. Thus, during the entire course of Cinerama’s pursuit of its entire fairness appeal, the appraisal action lay dormant. Once the appraisal decision was eventually reversed and remanded, Cinerama then took an interlocutory appeal from an earlier decision of the successor judge, resulting in further delay.

None of these appeals constituted bad faith or misconduct by either party. Therefore, no punitive aspect is appropriate in determining the appropriate rate and form of interest. Nonetheless, the post-judgment goal of putting the parties back in the position they would have been had the judgment been paid requires consideration of the party initiating the appeal. Equity is the guiding force behind this factor. Were it not a factor, and prejudgment interest applied throughout, unjust incentives might arise due to the varying nature of interest rates. Petitioner could opportunistically appeal just to increase the amount of interest paid and have an almost guaranteed rate of return on its money. Conversely, respondent might appeal in order to have use of the money owed to petitioner at a low rate of

interest.³⁵¹ Regardless, the proper application of the law, and not the time-value of money, should govern a decision to appeal.

The post-judgment interest award, in order to remove any improper incentive to appeal, must consider the identity of the appealing party.³⁵² Accordingly, if respondent appealed, it is more likely that the post-judgment interest would be closer to what petitioner would have received had the judgment been invested by a prudent investor. Since petitioner appealed in this case, the more appropriate post-judgment interest will reflect what the petitioner would have received had the judgment been placed in escrow pending the outcome. This principle removes any tactical incentive petitioner may have had in its appeal and ensures that neither party is punished nor rewarded for the length of the appeals process. Since respondent did not choose to be in the appeals process, there is no reason to require that petitioner's opportunity cost be a factor since petitioner

³⁵¹ Granted, neither of these issues would arise were the statute to be changed to require the parties to place the judgment amount in escrow until all appeals were heard. In fact, the most equitable approach to all interest issues would be to require the surviving corporation to place the amount offered to the dissenting stockholder in escrow at the time appraisal was sought. Should the statute ever be changed to reflect this idea, many of the concerns and arguments involving interest rate and form would either disappear or be significantly reduced.

³⁵² In other circumstances the relative culpability of the parties in delaying final judgment, even absent misconduct, has been a factor in determining interest awards. *See, e.g., Grimes v. Vitalink Communications Corp.*, 1997 WL 538676, at *13 (Del. Ch.) (“The extent to which one party may be relatively more responsible for a delay in the proceedings may be addressed by balancing the two rates to relieve some of the burden imposed by the other party.”); *Ryan v. Tad's Enterprises, Inc.*, 709 A.2d 682, 706 (Del. Ch. 1996, V.C. Jacobs) (plaintiffs’ “excessive delay” warranted awarding only two-thirds the statutory rate of simple interest); *Wacht v. Continental*

chose its current position. “[P]etitioners’ election to exercise their statutory right to reject the merger amount and to pursue appraisal does not shift to the corporation all responsibility for losses they may incur as a result of their inability to use the funds retained by the corporation.”³⁵³ Therefore, I now determine the post-judgment interest, starting with the form, then the applicable period, and, finally, the appropriate rate based on that principle.

A. Form of Interest

Since the interest is likely to exceed the principal due to the longevity of this action, whether it is simple or compound is of great significance. Initially, simple interest was most favored in Delaware.³⁵⁴ Over time, the Court of Chancery recognized that compound interest more accurately reflects the time value of money in the modern commercial world.³⁵⁵ Nonetheless, in *Technicolor IV* the Supreme Court stated that “[a]n award of compound interest is the exception rather than the rule,”³⁵⁶ a point the Supreme Court later reiterated in *M.G. Bancorporation, Inc. v. Le Beau*.³⁵⁷ I also take note of the Supreme Court’s

Hosts, Ltd., et al., 1994 WL 928836, at *3 (Del. Ch.) (discounting rate of interest because of plaintiff’s failure to prosecute claim diligently).

³⁵³ *Grimes v. Vitalink Communications Corp.*, 1997 WL 538676, at *10 (Del. Ch.).

³⁵⁴ *Rapid-American Corp. v. Harris*, 603 A.2d 796, 807 (Del. 1992).

³⁵⁵ See, e.g., *Gonsalves*, 2002 Del. Ch. LEXIS 105 at *41-*43; *Onti, Inc. v. Integra Bank*, 751 A.2d 904, 926-929 (Del. Ch. 1999).

³⁵⁶ 684 A.2d 289, at 302.

³⁵⁷ 737 A.2d 513, 527 (Del. 1999).

concern that this Court should not award compound interest “routine[ly]”³⁵⁸ or as “a matter of course.”³⁵⁹

I have said on other occasions that it is hard to imagine any corporation or sophisticated investor seeking only simple interest on the funds they hold.³⁶⁰ I have also noted that an award of simple interest may not fully disgorge a defendant company from the benefit it received from using the plaintiff’s funds.³⁶¹ But since the purpose of post-judgment interest in an appeal by petitioner is to basically treat the funds as if in escrow, the form of interest should be neutral with respect to the length of the appeals process. In the unique circumstances of this case, the only way to achieve neutrality with respect to the length of the appeals process is through simple interest. Any improper incentive in the appeal becomes moot, and neither party is rewarded for the length of the delay. Compound interest would reward petitioner for delay caused by the appeals process, and punish respondent

³⁵⁸ *Id.*

³⁵⁹ *Gonsalves v. Straight Arrow Publishers, Inc.*, 1999 WL 87280, **4 (Del. Jan. 5, 1999). Although the Supreme Court has expressed concern over the frequent award of compound interest, several cases since 1987, when the award of compound interest became permissible, have awarded only simple interest. *See, e.g., Ryan v. Tad’s Enters., Inc.*, 709 A.2d 682 (Del. Ch. 1996), *aff’d*, 693 A.2d 1082 (Del. 1997); *TV58 Ltd. Partnership v. Weigel Broad. Co.*, 1993 WL 285850 (Del. Ch. July 22, 1993); *Harris v. Rapid-American Corp.*, 1990 WL 146488 (Del. Ch. Oct. 2, 1990), *aff’d in part and rev’d in part on other grounds*, 603 A.2d 796 (Del. 1992).

³⁶⁰ *See Onti*, 751 A.2d, at 926-27; *Gonsalves*, 2002 WL 31057465, at *10.

³⁶¹ *Id.*

for defending the original judgment. Equity should not allow that. Accordingly, I award post-judgment simple interest on the \$21.98 per share principal award only.

B. Applicable Period

Respondent argues that certain time periods, specifically the time petitioner spent appealing the entire fairness aspect of this action, should not be considered in the time period for establishing interest. I reject this argument because post-judgment interest already takes this delay into effect in its goal of treating the principal as if it had been placed in escrow. Moreover, the use of simple interest further prevents any injustice associated with the entire fairness appeal delay. The principles described earlier preclude the need to remove certain time periods from the interest calculation. Consideration of who appealed the original judgment and the award of simple interest by its nature removes any impropriety. Accordingly, the applicable post-judgment time period commenced on August 3, 1991, and runs until the date the judgment is finally paid.

C. Rate of Interest

As stated earlier, petitioner seeks to continue the pre-judgment rate of interest (10.32%) through the post-judgment period. Respondent, however, asserts that the first \$21.60 of any award should receive the risk-free rate of interest, and any award over that amount should receive interest based on an equally weighted

average of respondent's borrowing cost and the prudent investor rate. I reject both of these positions.

The purpose of the post-judgment rate in this situation is to place the parties in the same position they would have been if the judgment had been paid on the judgment date. Neither party's position meets this goal. Petitioner's desire to continue the pre-judgment interest rate just rewards petitioner for its appeal and would result in a windfall to petitioner. After the August 2, 1991 judgment, petitioner's expectation of receiving at least \$21.60 per share was all but certain—reducing the investment risk and also the expected return. Respondent's proposal, however, goes too far the other way. There is some risk inherent in an appeal,³⁶² and the risk-free rate punishes petitioner for exercising its legal right to appeal.

The best rate to apply to the funds held (as though) in an escrow account is the current legal rate.³⁶³ The current statutory legal rate equals 7.0%.

D. Conclusion

Post-judgment interest serves to remove any improper incentives on appeal by including in its relevant factors the appealing party. The ultimate purpose of post-judgment interest is to place the parties in the position they held at the time of the original judgment. Accordingly, post-judgment interest is awarded, on the

³⁶² Although the risk of receiving less than \$21.60 per share approaches zero.

³⁶³ 6 *Del. C.* § 2301(a).

principal amount of \$4,422,376 only, as simple interest at the current statutory legal rate of 7.0% from August 3, 1991, to the date the judgment is paid. Post-judgment interest is awarded only on the principal amount of the judgment (\$4,422,376) in order to preserve the fundamental fairness imperative of the simple interest determination.

X. CONCLUSION

For the above reasons, I conclude that Technicolor must pay Cinerama \$21.98 per share (a total of \$4,422,376), together with prejudgment interest of 10.32% compounded annually from January 24, 1983 to August 2, 1991, plus post-judgment simple interest on the principal amount only at 7.0% from August 3, 1991 until the date the judgment is paid.

Counsel shall confer and submit a form of Order consistent with this decision.