

# THE COST OF CAPITAL IN SHAREHOLDER DISSENT AND ENTIRE FAIRNESS CASES

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This presentation is based on my chapter, “Cost of Capital in Appraisal, Oppression and Fairness Cases,” in *The Lawyer’s Guide to Cost of Capital*, Shannon P. Pratt and Roger J. Grabowski, eds. (American Bar Association, 2014), and includes additional material.

# Introduction

- Delaware courts, the primary venue for U.S. corporate litigation, have effectively set the standards for corporate valuations
- The Delaware Courts' preferred valuation method is discounted cash flow (DCF)
- The cost of capital is a vital component in DCF valuations
- Delaware sets the standards for corporate valuations for appraisal and fairness
  - Valuers should be guided by Delaware approach for corporate valuations generally, and specifically for determining cost of capital

# The Importance of Delaware

- Most cases discussing details of methodology in appraisal and fairness cases have come from the Delaware Court of Chancery
- Very few published non-Delaware decisions discuss cost of capital
  - Delaware Court of Chancery decisions are published, in contrast to lower court decisions in other states
  - There are a handful of U.S. District Court valuation decisions based on state law
  - Appellate cases rarely deal with the details of valuation methodology
  - Thus this presentation will primarily address Delaware case law

## DCF Accepted in *Weinberger*

- In appraisal and entire fairness cases, Delaware assesses value using the “fair value” standard
- The Delaware Supreme Court said in 1983 that the Court of Chancery’s determination of fair value “must include proof of value by any techniques or methods which are generally considered acceptable in the financial community” (*Weinberger*, 1983)
- It approved using DCF in appraisals, saying that “elements of future value ... which are known or susceptible of proof as of the date of the merger ... may be considered” in Delaware appraisals (*Id.*)

# DCF in Delaware Law

- Although Delaware courts favor DCF, “the ultimate selection of a valuation framework remains within the Court of Chancery's discretion” (*M.G. Bancorp., 1999*)
- The Court of Chancery has rejected DCF valuations on several occasions for various reasons, primarily because quality of projections was inadequate
- The courts continue to use other valuation methods, principally the guideline company method

# Cost of Capital in Delaware Law

- In determining the cost of capital to be applied in DCF valuations, the Delaware Court of Chancery has primarily used the Capital Asset Pricing Model (CAPM)
- In a few cases, the Court has used the build-up model, primarily in situations where the testifying experts relied on the build-up model rather than CAPM

# CAPM in Delaware Law

- Delaware first used CAPM to determine the cost of capital in in the 1990 *Technicolor* decision
- Since then, the Court has commonly used CAPM
- The Court has usually applied CAPM even when future results are highly speculative
  - It rejected a 35%-45% venture capital cost of equity and used a 21% CAPM-based number (*Gilbert, 1997*)
  - It accepted a 30% discount rate calculated using CAPM and rejected a higher rate (*Ryan, 1996*)
  - In contrast, for a small biotech company, the Court did not use CAPM – it used the 50% discount rate that had been used by the company’s investment banker as its financial advisor in the course of the transaction (*Gray, 2002*)

# Cost of Equity in the Capital Asset Pricing Model

- The basic formula for cost of equity is:

$$C_e = R_f + (RP_e \times \beta) + RP_s + RP_c \pm RP_i$$

where  $C_e$  = expected rate of return (cost of equity)

$R_f$  = risk-free rate

$RP_e$  = market equity risk premium (ERP)

$\beta$  = beta

$RP_s$  = size (small company) premium

$RP_c$  = company-specific risk premium (CSRP)

$RP_i$  = industry risk premium

# Weighted Average Cost of Capital (WACC)

- WACC is a function of a company's cost of equity and its after-tax cost of debt

$$\text{WACC} = C_e \times E_p + C_d \times (1 - T) \times (1 - E_p)$$

where  $C_e$  = expected rate of return (cost of equity)

$E_p$  = equity as percent of capital structure

$C_d$  = average interest rate on debt

$T$  = marginal tax rate

$C_d \times (1 - T)$  = cost of debt

- We will discuss the Courts' views as to each component of WACC, primarily based on Delaware cases

# Components of WACC: The Risk-Free Rate

- Delaware usually bases the risk-free rate on the 20-year Treasury rate
- In 2000, the Court of Chancery rejected the 30-year Treasury yield as the risk-free rate and stated that “using the 20-year Treasury rate is ... in keeping with the accepted practice” (*MedPointe*, 2004)

# Risk-Free Rate Is Usually Based on 20-year Treasuries, But ...

- However, a 2013 Delaware case used the 10-year Treasury yield (*Merion Capital*, 2013)
  - The court cited 4 treatises:
    - 2 supported the 10-year rate,
    - 1 supported the 10-year rate for mature firms,
    - 1 supported the 20-year rate
  - Nonetheless, the 20-year rate was applied in recent Delaware cases in 2012, 2013 and 2014
- A U.S. District Court, using Nevada law, based the risk-free rate on 5-year Treasuries (*Steiner*, 1998)

# Components of WACC: The Equity Risk Premium

- Prior to 2004, Delaware decisions which used CAPM usually accepted a 7.0% to 7.2% equity risk premium (ERP) based on Ibbotson data
- Delaware courts accepted these rates because most expert testimony used ERPs based on Ibbotson, which uses data for all years from 1926 forward

# ERP – Fama-French

- In 2004, Leo Strine, Jr. (then Vice Chancellor, now Chief Justice of the Delaware Supreme Court) rejected a 7.3% historical ERP and instead used Fama-French to derive a 4.5% ERP, stating:

*Although the Fama-French three-factor CAPM model is not wholly accepted, neither is the original CAPM itself. By better factoring in the real risks of leverage, the Fama-French model captures useful data that contributes to a more reliable and real-world cost of capital. (Union Illinois, 2004)*

- Equal weight was given to Fama-French and “pure CAPM” in a 2006 decision (*PNB Holding*, 2006)

# What Is the Supply Side ERP?

- The essential difference between supply side ERP and historical ERP is that the supply side ERP does not include the impact of changes over time in P/E ratios
  - Since P/E ratios in the market in recent decades are higher than in early periods, the historical ERP is higher than the supply side ERP

*The supply-side ERP, as published in the Valuation Yearbook, is calculated using the same equation as the historical ERP with slightly different inputs. The difference lies within the equity returns whereby the supply-side ERP only includes the returns attributable to economic growth (i.e., inflation) and company earnings. These returns are termed supplied equity returns.*

(Magdalena Mroczek, "Unraveling the Supply-Side Equity Risk Premium," *The Value Examiner*, Jan.-Feb. 2012)

# Supply Side ERP Accepted in 2010

- In 2010 Strine rejected a 7.1% ERP based on historical data and accepted a 6.0% ERP based on Ibbotson's supply side ERP, the expert's teaching experience, and relevant literature

*[There are] persuasive reasons support[ing] a lower forward-looking real return on equity than the return found in the historical data (Global GT, 2010)*

# The Supply Side ERP Is Now the Standard

- The supply-side equity risk premium was again adopted in three Delaware decisions in 2012 and 2013

*I find that the supply side equity risk premium of 5.73% is the appropriate metric to be applied. (Just Care, 2012)*

*Orchard has not provided me with a persuasive reason to revisit the supply-side versus historical equity risk premium debate. I therefore find that the Ibbotson Yearbook's supply-side equity risk premium of 5.2% is an appropriate metric. (Orchard Enterprises, 2012)*

*Selection of a supply-side equity risk premium is consistent with prior decisions by this Court. (Merion Capital, 2013)*

# Components of WACC: The Cost of Debt

- The entity being appraised is the company as it existed before the transaction
- Thus, the Courts have concluded that, in an appraisal, a company's pre-transaction borrowing cost is appropriate for determining cost of debt
  - A recent U.S. District Court case (under Wisconsin law) determined the cost of debt based on the credit rating implied by the company's size and pre-transaction financial condition (*Trostel*, 2012)

## Cost of Debt – *Technicolor*

- In *Technicolor*, the pre-transaction borrowing cost was not used due to the facts of the transaction
  - *Technicolor* was acquired in a two-step transaction – a third-party tender offer followed somewhat belatedly by a squeeze-out
  - Therefore, it was valued under the acquiror's new business plan which became operative after the tender offer – but before the squeeze-out occurred
  - Therefore, the Court did not use *Technicolor's* pre-tender offer borrowing cost but instead used the interest rate on the acquirer's debt at the time of the squeeze-out (*Technicolor*, 2003)

# Tax-Affecting Cost of Debt

- When the Court of Chancery computes WACC for a C Corp, it tax-effects the cost of debt based on the company's marginal corporate tax rate
- When the Court appraised an S Corp in 1991, it did not tax-effect the cost of debt (*Radiology Associates*, 1991)
- However, in a 2006 case valuing a debt-free S Corp, the Court tax-effected earnings based on taxes payable by shareholders (*Delaware Open MRI*, 2006)
  - In my opinion, the Court is likely to tax-effect S Corp debt similarly in future cases

## Cost of Debt – NOLs

- In a case where the company had net operating loss carryforwards (NOLs), the Court of Chancery applied a full marginal tax rate to cost of debt because “deductions for interest payments would allow the Company to save its NOLs for subsequent years” (*Gholl*, 2004)
- When a company could only deduct part of its interest payments for U.S. taxes, a District Court prorated the tax effect (*Steiner*, 1998)

# Delaware Appraisals Use the Company's Capital Structure

- In appraisal cases, Delaware calculates WACC based on the debt/equity ratio in the company's actual or intended capital structure at the valuation date – not a hypothetical capital structure based on industry norms
  - Debt incurred in the transaction leading to the appraisal is not considered
  - The Court rejected a hypothetical debt-free capital structure when the company being appraised had a leveraged structure (*Andaloro*, 2005)
  - On the other hand, it rejected an assumption that the parent would have perpetually rolled over a leveraged subsidiary's existing debt (*Id.*)

# Court Disregards Capital Structure Changes in Anticipation of Transaction

- The Court disregards changes in capital structure in anticipation of the transaction if the changes would not have been made but for the transaction

*The Company paid off all of its debt, however, as a condition of the Merger Agreement. Moreover, in connection with the merger, all of Just Care's preferred stock was converted to common equity.*

...

*I find that the correct capital structure for an appraisal of Just Care is the theoretical capital structure it would have maintained as a going concern. (Gearrauld, 2012)*

# Using the Expected Capital Structure

- The Court may rely on testimony to determine the appropriate capital structure

*The Company's actual capital structure at the time of the Merger consisted of no debt, but the parties agree that as a going concern the Company would be expected to take on a certain amount of debt. (Laidler, 2014)*

## Other Jurisdictions May Differ

- In contrast to Delaware's standard, a U.S. District Court applying Nevada appraisal law did not accept the company's actual capital structure
  - The Court said that it was "not precluded from using the industry average" even though "management has 'no plans' to change the capital structure" (*Steiner*, 1998)

# Capital Structure in Fairness Cases

- It should be noted that in fairness cases, Delaware considers acquisition value and accepts the use of “an ‘optimal’ debt/equity structure” (*Wacht*, 1994)
  - In contrast to fairness cases, which value a company as it might be run by a third party, appraisal cases value a company “as is” under its current management

# Cost of Equity Is a Function of Capital Structure

- However, no decision has yet discussed the important fact that the cost of equity is a function of the capital structure, increasing as leverage increases
  - Cost of equity is necessarily higher in a highly leveraged company than in an unleveraged company

# Capital Structure Circularity

- A 2004 decision discussed the issue of circularity in determining the debt/equity ratio and the capital structure
- In an appraisal proceeding, the debt/equity ratio is usually determined based on the relative values of the pre-transaction debt (a known number) and equity (the value of which is the subject of the litigation)
- When the market value of the equity is unknown, its calculated equity depends on WACC, which, in turn, depends on the initially selected equity value

## Capital Structure Circularity (2)

- A 2004 decision discussed the issue of circularity because of starting with the valuator's selected equity value

*[The] assumed \$10.38 per share ... and ... assumed \$41.16 per share 'enterprise value[s]' are identical to the ultimate 'fair value' that each expert determined ... exemplify[ing] the ultimate circularity inherent in WACC.*

*The only sensible way (in the Court's view) to avoid the circularity ... is to use an enterprise valuation ... that is not litigation-driven. (Emerging Communications, 2004)*

# Components of WACC: Beta

- The Court accepts the concept that the ERP must be adjusted with an appropriate beta
- When shares of the company being appraised were actively traded prior to the transaction, customary practice is to determine beta by reference to the company's market prices

# The Court Questions Beta Based on Guideline Companies

- Strine, however, expressed concern about determining beta for private companies based on the betas of guideline public companies:

*I am chary about concluding that corporations that issue illiquid securities for which beta ... is indeterminable have a lower cost of equity than publicly-listed corporations whose durability is reflected in a trading history producing a reliable beta. (PNB Holding, 2006)*

# Beta Should Not Be Based on a Short Period

- The Court generally prefers betas based on long time periods
- However, one decision gave equal weight to two-year betas and five-year betas of guideline companies (*Andaloro, 2005*)
  - For both periods, the Court gave greater weight to betas of companies deemed to be more comparable

# Beta Based on Guideline Companies Should Consider Relative Risk

- Beta should be adjusted to reflect incremental risk when the subject company is smaller and more vulnerable than guideline companies:

*The plaintiff's expert derived Cell Tech's beta of 2.0 from the "comparable" company's beta of 2.2, thereby suggesting that Cell Tech involved lower risk than did the 'comparable' company. The comparison is factually unsupported. (Ryan, 1996)*

- The Court rejected beta of 0.63 for thinly traded LP units and used defendant's expert's beta of 3.35 (*Gotham Partners*, 2000)

# Raw Beta or Adjusted Beta?

- In 1998 Vice Chancellor Steele used raw beta:  
*Although “adjusted” beta may be appropriately used in future cases when supported by a record subject to the crucible of cross-examination, I find that petitioner did not meet his burden to prove why “adjusted” beta should be used in this case.*  
(Gilbert, 1998)
- However, in 2004 Chancellor Chandler questioned the use of raw beta and instead used adjusted beta:  
*Betas based on observed historical data are more representative of future expectations when they are adjusted.* (JRC Acquisition, 2004)

## Raw Beta or Adjusted Beta? continued

- In 2010 Strine rejected an adjusted beta for a foreign company, commenting that "no reliable literature or evidence was presented" to show that the beta of a company operating in Russia would revert to 1.0 (*GT Global*, 2010)
- Instead, he looked at raw beta and industry betas.
- He concluded:

*I find that a beta that gives 2/3 weight to the Bloomberg historic raw beta of 1.32 and 1/3 weight to the 1.24 industry beta is the best approach to this DCF analysis. (Id.)*

# Components of WACC: The Size Premium

- Delaware “has traditionally recognized the existence of a small stock premium in appraisal matters” (ONTI, 1999)

*There is finance literature supporting the position that stocks of smaller companies are riskier than securities of large ones and, therefore, command a higher expected rate of return in market.*

*(Emerging Communications, 2004)*

- The Court of Chancery recognizes that concepts of beta and size premium are distinct and that size premium measures risk that is not measured by beta (*JRC Acquisition, 2004*)

# Size Premium May Be Rejected

- The court may decide, however, that based on facts and circumstances, a size premium should not be applied:

*I cannot conclude that it has been persuasively shown that the statutory fair value of Technicolor stock would more likely result from the inclusion of a small capitalization premium than from its exclusion. (Technicolor, 1990)*

## An Unusual Approach to the Size Premium

- An Alabama appraisal decision accepted defendant's expert's size premium that considered two factors, a "micro-capitalization risk premium" of 3.5% and a "company size premium" of 4.35%

*The typical small company has a higher degree of investment risk than a similar, but larger company.*

...

*Since a small, closely-held company is usually restricted to narrower markets than publicly-traded companies, an additional small company premium is warranted.*

*(Baron Services, 2003)*

- This unconventional approach recognizes that the size premium may result from both a company's competitive position and its access to capital markets

# Size Premium Data

- The Court must consider whether to use size premiums based on data starting in 1926 or starting at a later date
- In one case, the Court took the unusual approach of weighting the historical premium data for various periods:

*[T]he difference in returns over sixty-nine years is much greater than that over other, perhaps equally valid periods of time. ... I think the better approach is to weight the more recent results more heavily than the older ones. ... I will take the returns over the past 14, 28, 42, 56, and 69 years and average them. (ONTI, 1999)*

## Circularity Again – The Size Premium

- The Court recently discussed the “issue of circularity” that arises because selection of a size premium is a function of the value of enterprise selected by the valuator:

*[A] discounted cash flow analysis both values the size of a company ... and relies on the appropriate Ibbotson premium to determine the value of the company. This process is circular; which should come first, the valuation of the company or the selection of the Ibbotson risk premium? (Sunbelt Beverage, 2010)*

- In this case, the Court used the weighted average of the Ibbotson size premiums for the two deciles into which the subject company's value might fall

# Components of WACC: Company-Specific Risk Premium

- In a 1994 fairness case, the Court criticized plaintiff's expert for *not* using a company-specific premium (CSRP) in calculating WACC (*Wacht*, 1994)
- The Court accepted a CSRP in a 1999 appraisal, noting that no beta had been calculated by the experts, and explaining:

*I am willing to accept that the addition of a company-specific premium is appropriate in the absence of beta [emphasis added]. (ONTI, 1999)*

# Courts Now Reluctant to Apply Company-Specific Risk Premium

- Although Delaware had previously accepted the CSRP, in the past decade, courts have usually declined to apply company-specific risk premium
- CSRPs can only be included with evidence produced at trial that persuades the court to accept the adjustment (*Gesoff*, 2006; *Sunbelt Beverage*, 2010)
- On balance, the current reluctance of courts to accept CSRPs in CAPM means that an expert who uses this premium should expect a strong challenge on the stand

# Components of WACC: The Industry Risk Premium

- The Court has rarely considered the industry risk premium in a CAPM context because experts have seldom applied industry risk premium in their CAPM analyses
- It was rejected in a case where it was one of the “eyebrow-raising premiums that [the expert] heaped on top of the core CAPM analysis” (*Maric Capital*, 2010)
- However, it has been addressed and accepted in several cases where the expert used the build-up method

# Build-Up Method

- Delaware courts usually reject the build-up method because CAPM “offers more complete information” (*Hintmann, 1998*)
  - However, the build-up model has been accepted in some more recent decisions based on expert testimony (*Gholl, 2004; Henke, 2005; Laidler, 2014*)
  - In a 2012 case where experts used both methods, the build-up method was rejected (*Orchard Enterprises, 2012*)
- A U.S. District Court appraisal under Missouri law applied the build-up method (*Swope, 2001*)

# Build-Up Method Accepts Company-Specific Premium

- In contrast to its approach in CAPM, the Court accepts the company-specific premium in applying the build-up method

# Build-Up Method Accepts Industry Risk Premium in Lieu of Beta

- Delaware has accepted the industry risk premium in the build-up method when beta is unavailable:

*[N]ot all public companies have a sufficient public float for trading in their shares to provide a reliable beta for use in calculating their cost of capital, forcing a resort to the use of data from the industry or so-called comparable companies.*

...

*The industry return data that Mitchell uses is an acceptable substitute for that adjustment in this situation when a beta cannot be estimated [emphasis added]. (Delaware Open MRI, 2006)*

# Mid-Year Convention

- When WACC has been used in DCF calculations, the mid-year convention has been accepted in every Delaware case where the Court stated that a testifying expert had used it
  - Several other jurisdictions have explicitly accepted the mid-year convention
    - New York: *United States Dredging*, 2008
    - Virginia: *U.S. Inspect*, 2000

# Reliance on Current Practice in the Profession

- Strine emphasized the court’s “duty” to recognize newly accepted practices
- When he rejected Historic ERP, he explained:  
*[W]hen the relevant professional community has mined additional data and pondered the reliability of past practice and come, by a healthy weight of reasoned opinion, to believe that a different practice should become the norm, this court's duty is to recognize that practice if, in the court's lay estimate, the practice is the most reliable available for use in an appraisal. (Global GT, 2010)*
- He stated that it should be left to valuation professionals to resolve the debate:  
*[T]he relevant academic and professional community and not this court should develop the accepted approach. (Id.)*

# Where Are We Heading? Controversy re CAPM

- Several recent articles have questioned the usefulness of the Capital Asset Pricing Model, *e.g.*:

Pablo Fernandez, “CAPM: an absurd model,”  
<http://ssrn.com/abstract=2505597> (Oct 6, 2014)

Mike Dempsey, “The Capital Asset Pricing Model (CAPM): The History of a Failed Revolutionary Idea in Finance?” *ABACUS, Vol. 49, Supplement* (2013)

Eric Nath, “The Biggest Business Valuation Myth,”  
*30 Business Valuation Review* 88 (2011)

# Fernandez's Criticisms

- Prof. Fernandez cites numerous articles criticizing both ERP and beta
  - In 2013, he empirically criticized beta in his articles: “ $\beta=1$  does a better job than calculated betas” and “Are Calculated Betas Good for Anything” ([ssrn.com/abstract=1406923](http://ssrn.com/abstract=1406923) and [ssrn.com/abstract=504565](http://ssrn.com/abstract=504565))
  - He posits that CAPM users err in assuming that the market has an expected market risk premium
  - He cites the wide ranges of risk premiums in financial textbooks and in the responses to a broad survey he recently conducted

# Fernandez's Conclusion

- Prof. Fernandez believes that each of the following basic assumptions that underlie CAPM are flawed:
  - × All investors have equal expectations about asset returns
  - × Investors only care about expected return and volatility of their investments
  - × All investors use the same beta for each stock
  - × All investors have equal expectations as to the market risk premium
  - × The market risk premium is the difference between the expected return on the market portfolio and the risk-free rate

# Dempsey's Criticisms

- Dempsey observes that “returns on stocks with higher betas are systematically less than predicted by the CAPM, while those of stocks with lower betas are systematically higher”
- He points to studies that have shown that:  
*[C]haracteristics such as firm size, earnings yield, leverage, the firm's ratio of book value of equity to its market value, stock liquidity, and stock price momentum appear to be important in describing the distribution of asset returns at any particular time*

# Dempsey's Conclusion

- Dempsey concludes:

*The capital asset pricing model (CAPM) captures the idea that markets are essentially rational and are an appropriate subject for scientific inquiry. Unfortunately, the facts do not support the CAPM. The additional variables brought in to describe the distribution of asset returns generally resist interpretation as contributing to a risk-return relation. For this reason, we cannot interpret more recent models as refinements of a fundamentally robust risk-return relation. [emphasis added]*

- He cuttingly adds:

*A good deal of finance is now an econometric exercise in mining data either for confirmation of a particular factor model or for the confirmation of deviations from a model's predictions as anomalies.*

# Nath's Criticisms

- Nath posits that private equity investors do not use CAPM when buying businesses
- His *Business Valuation Review* article faults CAPM as being backward-looking and “not provid[ing] anything close to a reasonable estimate for the required rate of return on equity capital for most investments”

# Nath's Alternative

- Nath suggests an alternative:

*[Rather than guessing, and using impenetrably elaborate, indirect, historical data-mining methods, perhaps one solution to the required rate of return question is to just simply go out and ask investors what rates of return they actually do use, and how they go about pricing investments when they are putting their own money on the line.]*

- Nath points out that there is a source of data based on a survey of market participants – Pepperdine University's *Private Cost of Capital* study

[[http://bschool.pepperdine.edu/appliedresearch/research/pcmsurvey/content/ppcmp\\_2014\\_report.pdf](http://bschool.pepperdine.edu/appliedresearch/research/pcmsurvey/content/ppcmp_2014_report.pdf)]

- However, this source currently is helpful for speculative companies but not stable ones

# Valuators Should Consider Alternative Approaches

- Pratt & Grabowski say in the 2014 edition of *Cost of Capital: Applications and Examples*:

*[G]iven that empirical data conflicts with the pricing of risk as hypothesized by CAPM, the analyst must understand the issues and consider the benefits of adjusting the pure CAPM and of using alternative[s] ...*

*Analysts should in many instances use multiple methods of estimating the cost of capital ... rather than relying on a single method such as CAPM.*

# Conclusion

- Our goal as valuers is to arrive at an appropriate value for our subject company
- To do so, we need the essential elements of our valuation method to be rational and reliable
- The presentation has tried to inform you as to which elements are well-established and accepted by the Courts and the profession and which are current areas of concern
- The controversy over CAPM is lively, with suggested alternatives but no consensus
- The challenges to CAPM have not yet been addressed in the courts

## Cases discussing cost of capital in appraisal and/or fairness cases

### DELAWARE

*Andaloro v. PFPC Worldwide, Inc.*, 2005 Del. Ch. LEXIS 125 (Aug. 19, 2005)

*In re AT&T Mobility Wireless Operations Holdings Litig.*, 2013 Del. Ch. LEXIS 201 (June 24, 2013)

*Cavalier Oil Corp. v. Harnett*, 1988 Del. Ch. LEXIS 28 (Feb. 22, 1988)

*Crescent/Mach I Partnership, L.P. v. Turner*, 2007 Del. Ch. LEXIS 63 (May 2, 2007)

*Delaware Open MRI Radiology Associates v. Kessler*, 898 A.2d 290 (2006)

*In Re Emerging Communications, Inc. Shareholders Litigation*, 2004 Del. Ch. LEXIS 70 (May 3, 2004)

*Gearreald v. Just Care, Inc.*, 2012 Del. Ch. LEXIS 91 (Apr. 30, 2012)

*Gesoff v. IIC Industries Inc.*, 902 A.2d 1130 (Del. Ch. 2006)

*Gholl v. eMachines, Inc.*, 2004 Del. Ch. LEXIS 171 (July 7, 2004)

*Gilbert v. MPM Enterprises, Inc.*, 709 A.2d 663 (Del. Ch. 1997)

*Gilbert v. MPM Enterprises, Inc.*, 1998 Del. Ch. LEXIS 60 (April 24, 1998)

*Gotham Partners, L.P. v. Hallwood Realty Partners, L.P.*, 855 A.2d 1059 (Del. Ch. 2003)

*Gray v. Cytokine Pharmasciences, Inc.*, 2002 Del. Ch. LEXIS 48 (Apr. 25, 2002)

*Global GT LP v. Golden Telecom, Inc.*, 993 A.2d 497 (Del. Ch. 2010)

*Henke v. Trilithic Inc.*, 2005 Del. Ch. LEXIS 170 (Oct. 28, 2005)

*Hintmann v. Fred Weber, Inc.*, 1998 Del. Ch. LEXIS 26 (Feb. 17, 1998)

*Cede & Co. v. JRC Acquisition Corp.*, 2004 Del. Ch. LEXIS (Feb. 10, 2004)

*Laidler v. Hesco Bastion*, 2014 Del. Ch. LEXIS 75 (May 12, 2014)

*Lane v. Cancer Treatment Centers of America*, 2004 Del. Ch. LEXIS 108 (July 30, 2004)

*LeBeau v. M.G. Bancorp., Inc.*, 1998 Del. Ch. LEXIS 9 (Jan. 29, 1998)

*M.G. Bancorp., Inc. v. LeBeau*, 737 A. 2d 513 (Del. 1999)

*Maric Capital Master Fund, Ltd. v. Plato Learning, Inc.*, 11 A.3d 1175 (Del. Ch., 2010)

*Cede & Co. v. MedPointe Healthcare, Inc.* 2004 Del. Ch. LEXIS (Sept. 10, 2004)

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## Cases discussing cost of capital in appraisal and/or fairness cases [p. 2]

***Merion Capital, L.P. v. 3M Cogent, Inc.***, 2013 Del. Ch. LEXIS 172 (July 8, 2013)  
***MPM Enterprises, Inc. v. Gilbert***, 731 A.2d 790 (Del. 1999)  
***ONTI, Inc. v. Integra Bank***, 751 A.2d 904 (Del. Ch. 1999)  
***In re Orchard Enterprises, Inc.***, 2012 Del. Ch. LEXIS 165, (July 18, 2012)  
***In Re PNB Holding Co. Shareholders Litigation***, 2006 Del. Ch. LEXIS 158 (Aug. 18, 2006)  
***In Re Radiology Associates, Inc. Litigation***, 611 A.2d 485 (Del. Ch. 1991)  
***Ryan v. Tad's Enterprises, Inc.***, 709 A.2d 682 (Del. Ch. 1996)  
***In Re Sunbelt Beverage Corp. Shareholder Litigation***, 2010 Del. Ch. LEXIS 1 (Jan. 5, 2010)  
***Taylor v. American Specialty Retailing Group, Inc.***, 2003 Del. Ch. LEXIS 75 (July 25, 2003)  
***Cede & Co. v. Technicolor, Inc.***, 1990 Del. Ch. LEXIS 259 (Oct. 19, 1990)  
***Cede & Co. v. Technicolor, Inc.***, 684 A.2d 289 (Del. 1996)  
***Cede & Co. v. Technicolor, Inc.***, 2003 Del. Ch. LEXIS 146 (Dec. 31, 2003)  
***TV58 Limited Partnership v. Weigel Broadcasting Co.***, 1993 Del. Ch. LEXIS 146 (July 22, 1993)  
***Union Illinois 1995 Inv. Ltd. Partnership v. Union Financial Group, Ltd.***, 847 A.2d 340 (Del. Ch. 2003)  
***In Re United States Cellular Operating Company***, 2005 Del. Ch. LEXIS 1 (Jan. 6, 2005)  
***Wacht v. Continental Hosts, Ltd.***, 1994 Del. Ch. LEXIS 171 (Sept 16, 1994)

### OTHER JURISDICTIONS

***Ex parte Baron Services, Inc.***, 874 So.2d 545 (Ala. 2003)  
***In re Shares of Madden***, 2005 Vt. Super. LEXIS 112 (May 16, 2005)  
***Steiner Corp. v. Benninghoff***, 5 F.Supp.2d 1117 (D. Nev. 1998)  
***Swope v. Siegel-Robert, Inc.***, 243 F.3d 486 (8th Cir. 2001)  
***Albert Trostel & Sons Co. v. Notz***, 2010 U.S. Dist. LEXIS 108778, at \*40-41 (E.D. Wis. Sept. 28, 2010);  
***U.S. Inspect, Inc. v. McGreevy***, 57 Va. Cir. 511 (2000), 2000 Va. Cir. LEXIS 524 (Nov. 7, 2000)  
***Shareholders in United States Dredging Corp. v. United States Dredging Corp.***, slip op., Index No. 002640/2006 (N.Y. Supr., Nassau Cty., May 19, 2008)