The Short and Puzzling Life of the "Implicit Minority Discount" in Delaware Appraisal Law

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ABSTRACT

The "implicit minority discount," or IMD, is a fairly new concept in Delaware appraisal law. A review of the case law discussing the concept, however, reveals that it has emerged haphazardly and has not been fully tested against principles that are generally accepted in the financial community. While control share blocks are valued at a premium because of the particular rights and opportunities associated with control, these are elements of value that cannot fairly be viewed as belonging either to the corporation or its shareholders. In corporations with widely dispersed share holdings, the firm is subject to agency costs that must be taken into consideration in determining going concern value. A control block-oriented valuation that fails to deduct such costs does not represent the going concern value of the firm. As a matter of generally accepted financial theory, on the other hand, share prices in liquid and informed markets do generally represent that going concern value, with attendant agency costs factored or priced in. There is no evidence that such prices systematically and continuously err on the low side, requiring upward adjustment based on an "implicit minority discount."

Given the lack of serious support for the IMD in finance literature, this Article suggests that the Delaware courts may be relying on the IMD as a means to avoid imposing upon squeezed-out minority shareholders the costs of fiduciary misconduct by the controller. Where either past or estimated future earnings or cash flows are found to be depressed as a result of fiduciary misconduct, however, or where such earnings or cash flows fail to include elements of value that belong to the corporation being valued, the appropriate way to address the corresponding reduction in the determination of "fair value" is by adjusting those subject company earnings or cash flows upward.

This approach to the problem of controller opportunism is more direct, more comprehensive in its application, and more in keeping with prevailing financial principles, than the implicit minority discount that the Delaware courts have applied in the limited context of comparable company analysis. The Delaware courts can therefore

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comfortably dispense with resort to the financially unsupported concept that liquid and informed share markets systematically understate going concern value.

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I. INTRODUCTION

Our recent article on the subject of share valuation began with the observation that the 1983 *Weinberger*[1] decision "revolutionized appraisal law."[2] One of *Weinberger*'s critical (although perhaps long overdue) contributions was its recognition that in assessing share value in appraisal cases, the courts should be guided by "proof of value by any techniques or methods which are generally considered acceptable in the financial community … ."[3]

The Delaware courts have for many decades embraced a standard of valuation in appraisal cases that awards dissenting stockholders their proportional share of the value of the "going concern."[4] In the years after *Weinberger* admonished that valuation should employ techniques generally acceptable in the financial community, Delaware's "going concern" standard has had a largely happy and fruitful marriage with modern principles of finance. Under those principles, the value of the firm, of which the dissenting stockholders receive a proportionate share, is represented by the net present value of the firm's future free cash flows.[5] With *Weinberger*'s salutary blessing, this approach to valuation has come to dominate Delaware valuation proceedings.[6] Most commonly identified as the "discounted cash flow" or "DCF" approach, this valuation approach fits comfortably with the legal parameters of appraisal proceedings. Under those parameters, stockholders in appraisal proceedings, who by statute may not share in the benefits arising from the transaction giving rise to the appraisal proceeding,[7] do not receive a value that includes synergies or benefits of control,[8] nor do they receive a value that fails to take into account the agency costs that are part of the corporation's "operative reality"[9]

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[1] Weinberger v. UOP, Inc.., 457 A.2d 701 (Del. 1983).
[2] Lawrence A. Hamermesh & Michael L. Wachter, *The Fair Value of Cornfields in Delaware Appraisal Law*, 31 J. CORP. L. 119, 121 (2005) [hereinafter *Cornfields*].
[3] *Weinberger*, 457 A.2d at 713.
[4] *E.g.*, Paskill Corp. v. Alcoma Corp., 747 A.2d 549, 553 (Del. 2000), (citing Tri-Continental Corp. v. Battye, 74 A.2d 71 (Del. 1950)); *Cornfields*, *supra* note 2, at 132 n. 56 (citing cases using the term "going concern value").
[5] *See* discussion *infra* Part III.A.
[6] *Cornfields*, *supra* note 2, at 125 n. 30 (citing appraisal cases relying on DCF analysis); *see also In re* PNB Holding Co. S'holders Litig., 2006 Del. Ch. LEXIS 158, at *95 (Aug. 18, 2006) [hereinafter *PNB Holding*] (selecting DCF valuation approach over comparable company and comparable acquisition methods); Del. Open MRI Radiology Assoc's v. Kessler, 898 A.2d 290, 331 (Del. Ch. 2006) (using DCF valuation method when both experts did); and Andaloro v. PFPC Worldwide, 2005 Del. Ch. LEXIS 125, at *34 (Aug. 19, 2005) (noting frequent use of DCF method in Delaware valuation proceedings).
[7] DEL. CODE ANN. tit. 8, §262(h) (2006) .
[8] *E.g., Andaloro*, 2005 Del. Ch. LEXIS 125, at *70 ("going concern value" standard requires excluding synergies attributable to business combination); Union Ill. 1995 Inv. Ltd. P'ship v. Union Fin. Group, Ltd., 847 A.2d 340, 356 (Del. Ch. 2003) ("court must endeavor to exclude from any appraisal award the amount of any value that the selling company's shareholders would receive because a buyer intends to operate the subject company, not as a stand-alone concern, but as a part of a larger enterprise, from which synergistic gains can be extracted.").
[9] Cede & Co. v. Technicolor, Inc., 684 A.2d 289, 298 (Del. 1996).

and that are therefore a component of the anticipated free cash flows of the going concern.[10]

As sometimes happens in rapidly developing bodies of law, however, a doctrinal weed sprung up in the late 1990's in what was otherwise a largely harmonious, well-tended garden of finance and law. In a rapid succession of cases over a period of less than ten years, there developed what is now known in the Delaware case law as the "implicit minority discount," or "IMD."[11] It is this recently sprouted concept that is the central focus of this paper.

The financial/empirical assertion of the IMD is quite simple: it posits that, no matter how liquid and informed the financial markets may be, all publicly traded shares persistently and continuously trade in the market at a substantial discount relative to their proportionate share of the value of the corporation.[12] This discount, it is said, arises because the stock prices on national security markets represent "minority" positions, and minority positions trade at a discount to the value of the company's equity.[13] The consequence of the IMD in appraisal proceedings is limited in scope, but substantial in scale: in applying a valuation technique (known as "comparable companies analysis," or "CCA"[14]) that estimates subject company value by reference to market trading multiples observed in shares of comparable publicly traded firms, the result must be adjusted upward by adding a premium to offset the "implicit minority discount" asserted to exist in the comparable companies' share prices.[15] In the last several years, the size of this upward adjustment (and the supposed discount that it "corrects") has been routinely fixed, even without supporting expert testimony, at 30 percent.[16]

As we show below,[17] however, not a single piece of financial or empirical scholarship affirms the core premise of the IMD that public company shares systematically trade at a substantial discount to the net present value of the corporation. To the contrary, the one treatise on which the Delaware courts have repeatedly relied in invoking the IMD has, in its most recent edition, explicitly warned against routinely applying an upward adjustment in order to offset some supposed IMD.[18]

Moreover, the Delaware courts' application of the IMD has rendered their valuation jurisprudence internally inconsistent. Even as they have recently come to insist

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[10] *Cornfields*, *supra* note 2, at 139-40.
[11] *See infra* Parts II.C-D.
[12] *E.g.*, Agranoff v. Miller, 791 A.2d 880, 897 (Del. Ch. 2001) (use of public company share price data gives rise to "an equity value that includes an inherent minority trading discount, because the method depends on comparisons to market multiples derived from trading information for minority blocks of the comparable companies.").
[13] *Id.*; *see also infra* Part II.D.
[14] *See, e.g.,* Borruso v. Commc'ns Telesystems Int'l, 753 A.2d 451, 458 (Del. Ch. 1999) (applying the IMD to "the comparable company method of analysis.").
[15] *Id; see also infra* Part II.D.
[16] *E.g.,* Doft & Co. v. Travelocity.com Inc., 2004 Del. Ch. LEXIS 75, at *48 (May 20, 2004, *revised* May 21, 2005).
[17] *Infra* Part IV.
[18] *Infra* Part IV.B (citing S.P. PRATT, ET AL., VALUING A BUSINESS (4th ed. 2000)).

on adjusting for the putative IMD when using a comparable companies analysis (CCA), the Delaware courts have consistently (and properly) declined to make any such upward adjustment to the results of DCF analysis. That position stems from the courts' correct recognition that discounted cash flow (DCF) analysis can provide the best measure of the value of the enterprise and that the value of the enterprise, after deducting off the value of the debt, measures the value of the firm to its equity holders and thus its going concern value. No adjustments are necessary to the DCF method to offset any implicit minority discount. And indeed, the courts make no such adjustment, even when the DCF analysis relies on market multiples – in substance, a CCA approach – to estimate terminal value.[19]

Fortuitously, in some cases, where allegations of incumbent board wrongdoing are combined with the appraisal case, the IMD may result in the correct answer when it offsets an incumbent controller's wrongful acts. But, as we have argued previously,[20] that result can be achieved more directly, by accepting petitioner's evidence that the respondent's anticipated cash flow projections or other operational performance measures are too low. In short, our core submission is that the Delaware courts, in their valuation of shares (particularly in squeeze-out mergers), should abandon the IMD and rely instead on a more direct approach to addressing concerns about past or future abuse by controlling stockholders. The arsenal of corporate finance techniques available to measure going concern value, correctly applied, would award shareholders the correct amount.

We reach this conclusion in the following steps. In Part II, we review the fortuitous and haphazard means by which the IMD sprouted in Delaware valuation law. Part III outlines the finance principles that generally underlie Delaware valuation law, and Part IV argues that while such law is generally consistent with those finance principles in both concept and application, the IMD is not. Finally, Part V suggests how the IMD can easily and fairly be excised from Delaware appraisal law, and how alternative, financially supportable valuation methodology can address controlling stockholder opportunism, as long as the Delaware courts remain true, as we expect they would, to *Weinberger*'s admonition to remain open to evidence from the financial community.

II. WHENCE IMD?

As previously noted, the target of our inquiry is the Delaware courts' recent assertion of the IMD – *i.e.*, the proposition that share prices in reasonably active markets

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[19] Neal v. Alabama By-Products Corp., 1990 WL 109243, at *7-8 (Del. Ch. Aug. 1, 1990), *aff'd*, 588 A.2d 255 (Del. 1991); Gray v. Cytokine Pharmasciences, Inc., 2002 WL 853549, at *11 (Del. Ch. 2002); Cavalier Oil Co. v. Harnett, 1988 WL 15816, at *29 (Del. Ch. 1988), *aff'd*, 564 A.2d 1137 (Del. 1988); *cf. PNB Holding*, 2006 Del. Ch. LEXIS 158, at *114 (describing, without citation "an exit multiple based on minority trading data from … dubious comparable companies" as "a less favored technique that raises questions about whether it embeds a minority discount.") It appears that Vice Chancellor Strine, the author of the *PNB Holding* opinion, has recognized the inconsistency we point out.

[20] *Cornfields*, *supra* note 2, at 164-65 (urging application of a more robust conception of future cash flows as a check on controlling shareholder opportunism).

systematically and substantially *understate* the pro rata present value, net of debt, of the firm's free cash flows. In this Section, we examine the background and relatively recent development of that puzzling embrace.[21] We turn first to a review of the foundational antecedents of Delaware share valuation law. We next review the Delaware courts' initial – and emphatically negative – reaction to IMD-type adjustments. Thereafter, we review the critical juncture, less than 15 years ago, at which the Delaware courts first adopted a share valuation premised upon the IMD adjustment. Finally, we review how that initial acceptance rapidly evolved so that, by 2004, it had become essentially a rule of law that requires no evidentiary support and, therefore, is unconstrained by contrary evidence of generally accepted financial practice.

A. The Doctrinal Soil of the IMD: The Backdrop of Delaware Supreme Court Precedent

Delaware appraisal law has never been excessively friendly to the idea that stock market prices always accurately represent a proportional share of the value of the enterprise as a going concern. In *Chicago Corp. v. Munds*, one of the earliest appraisal cases, decided in the depths of the Great Depression, the Court of Chancery vividly outlined its distrust of financial market prices as exclusive measures of firm value:

> When it is said that the appraisal which the market puts upon the value of the stock of an active corporation as evidenced by its daily quotations, is an accurate, fair reflection of its intrinsic value, no more than a moment's reflection is needed to refute it. … The experience of recent years is enough to convince the most casual observer that the market in its appraisal of values must have been woefully wrong in its estimates at one time or another within the interval of a space of time so brief that fundamental conditions could not possibly have become so altered as to affect true worth. … The numerous causes that contribute to their nervous leaps from dejected melancholy to exhilarated enthusiasm and then back again from joy to grief, need not be reviewed. … Even when conditions are normal and no economic forces are at work unduly to exalt or depress the financial hopes of man, market quotations are not safe to accept as unerring expressions of value.[22]

There are two aspects of this superficially hostile view of the abilities of financial markets, however, that suggest compatibility with modern financial theory. First, the court's analysis merely rejects the use of share market prices as the *exclusive* measure of "fair value;" it certainly does not prohibit consideration of market prices in assessing fair

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[21] Richard Booth has made a similar effort to trace the source of the IMD, and shares our disagreement with that aspect of Delaware appraisal law. Richard A. Booth, *Minority Discounts and Control Premiums in Appraisal Proceedings*, 57 BUS. LAW. 127, 148-51 (2001). Carney and Heimendinger also criticize the IMD (noting that "[u]nfortunately, it is the current operative assumption of the Delaware courts") and suggest that the IMD "is offered without any attempt at a theory," but they conclude that responding to the IMD is therefore "impossible and probably not worthwhile." William J. Carney & Mark Heimendinger, *Appraising the Nonexistent: The Delaware Courts' Struggle With Control Premiums*, 152 U. PA. L. REV. 845, 863 (2003).

[22] Chicago Corp. v. Munds, 172 A.2d 452, 455 (Del. Ch. 1934).

value. Second, and more importantly, the court's references to "extreme moods" and "nervous leaps from dejected melancholy to exhilarated enthusiasm" are quite consistent with more recent and modest assertions about the force of the efficient capital markets hypothesis.[23] In particular, the court's understandably skeptical view of contemporaneous share markets is aligned with those who appreciate that prices in reasonably efficient markets suffer from "noise" trading from time to time. On the other hand – and this is a critical point – there is nothing in *Munds* that begins to assert that market prices systematically err on the low side relative to firm value or, to use the court's words, "inherent worth." In short, *Munds* does not stand for the proposition that publicly traded shares suffer from a persistent "dejected melancholy" or, in modern language, an inherent *discount* relative to firm value.

When the Delaware Supreme Court first addressed the appraisal statute's concept of "fair value" in *Tri-Continental Corp. v. Battye*, its holding was much more sympathetic with the efficiency theme in modern finance theory and the importance of share prices in establishing "fair value."[24] In that case, the court addressed the valuation of shares of a leveraged closed-end investment company (General Shareholdings), in which Tri-Continental Corp. held a controlling ownership stake. In this case, the corporation's net asset value (NAV) significantly exceeded (by around 25%) the aggregate market value of its outstanding shares.[25] In this setting, the Supreme Court correctly articulated the "proportionate interest in a going concern" as "the basic concept of value under the appraisal statute" that has guided Delaware appraisal law ever since.[26]

With that concept as a guide, one might have expected the Delaware Supreme Court to uphold the lower court's insistence on giving at least partial weight to an estimate of the firm's NAV free of any discount associated with the trading price of the shares. In more recent parlance, the court might have simply explained that the discount was "at the shareholder level," and not "at the corporate level," and might therefore have declined to give any valuation effect to the discount.[27]

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[23] *E.g.*, Michael L. Wachter, *Takeover Defense when Financial Markets Are (Only) Relatively Efficient*, 151 U. PA. L. REV. 787 (2003) (discussing studies indicating that at least temporary mispricing occurs regularly even in well developed securities markets); Fredrick C. Dunbar & Dana Heller, *Fraud on the Market Meets Behavioral Finance*, 31 DEL. J. CORP. L. 455 (2006) (same).

[24] *Tri-Continental Corp. v. Battye*, 74 A.2d 71 (Del. 1950).

[25] *Id.* at 73. Benjamin Graham, the well-known expert on security analysis, gave a lecture in early 1947 in which he suggested that General Shareholdings (the firm that merged into Tri-Continental the following year) was a bargain in the market, and that the discount created an opportunity for "intelligent speculation." Benjamin Graham, Lecture No. 10, *in* THE REDISCOVERED BENJAMIN GRAHAM: SELECTED WRITINGS OF A WALL STREET LEGEND 151 (Janet Lowe ed. 1999), *available at* http://www.wiley.com/legacy/products/subject/finance/bgraham/benlec10.html. As suggested below, however, the market may have been wiser that Mr. Graham gave it credit for.

[26] 74 A.2d at 72.

[27] Cavalier Oil Co. v. Harnett, 564 A.2d 1137, 1144 (Del. 1988). Professor John Coates explains at length and with considerable force why *Tri-Continental* and *Cavalier* are essentially inconsistent, and why the "shareholder level" and "corporate level" discount parlance is largely meaningless. *See* John C. Coates, *"Fair Value" as an Avoidable Rule of Corporate Law: Minority Discounts in Conflict Transactions*, 147 U. PA. L. REV. 1251, 1269-72 (1999) ("if a 'no-discount' rule is to be taken seriously, then a stronger rationale is needed – one that focuses less on the 'level' at which discounts are imposed and more on the working

That was not the approach, however, that the Delaware Supreme Court took. To the contrary, it restored the result reached by a court-appointed appraiser, in which estimated NAV was reduced by the observed 25% market price discount in order to arrive at "fair value."[28] The court explained that failing to give full effect to this discount would "fail to face the economic facts" – specifically, the facts that "the only way in which a stockholder of a going closed-end company with leverage can obtain the value of his stock is by the sale of it on the market," and that "whenever he seeks to do so, he, by force of circumstances, must sell at a discount, whenever this is an operating element."[29]

Superficially, then, the analysis in *Tri-Continental* is friendly to advocates of share market prices as evidence of "fair value." On the other hand, there is a not so subtle implication in the case that even in an active market, shares trade at a substantial discount relative to the current value of the firm.[30] As we will see, this implication – that net asset value could be persistently above market value – may well have contributed to the Delaware courts' eventual receptivity to the IMD concept. Indeed, *Tri-Continental*'s failure (understandable, to be sure) to appreciate and comment on the unusual nature of closed-end funds may in the long run have made the IMD concept easier to accept.

In hindsight, however, there are several ways in which the court in *Tri-Continental* could have readily explained the observed discount without implying that share market prices in general are inherently discounted relative to firm value. First, the float of shares of General Shareholdings was small, and the shares were not actively traded.[31] It is now well established that such thin trading and relative lack of

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mechanics of the valuation methodologies employed and the sources of discounts, particularly on the existence of absence of control.").

[28] *Tri-Continental,* 74 A.2d at 75.

[29] *Id.*at 76.

[30] The closed-end fund discount has been cited in support of challenges to the ECMH. *See, e.g.*, WILLIAM W. BRATTON, CORPORATE FINANCE: CASES AND MATERIALS 157-58 (5th ed. 2003) (citing J. Bradford DeLong et. al., *Noise Trader Risk in Financial Markets*, 98 J.POL.ECON. 703, 728 (1990)). For an explanation suggesting that the ECMH is consistent with observed closed-end fund discounts, however, see *infra* Part III(E)(2).

[31] ARTHUR WIESENBERGER, INVESTMENT COMPANIES 152 (1948) ("The 1,602,466 shares outstanding [at December 31, 1947] (held by 2,937 stockholders) are relatively inactive on the New York Curb Exchange. The floating supply is obviously small because Tri-Continental owns 60% … ."). Just 39,000 shares of General Shareholdings were traded in 1947, the year before the merger that gave rise to the *Tri-Continental* case. *Id.* at 153. In contrast, many other closed-end investment companies had much more active trading in the same time frame. *Id.* at 119 (Adams Express Co., 232,000 shares), 129 (American Superpower Corp., 865,000 shares), 131 (Atlas Corp., 545,000 shares), 141 (Chicago Corp., 706,000 shares), 145 (Equity Corp., 413,000 shares), 169 (Pennroad Corp., 439,000 shares), 177 (Tri-Continental Corp., 647,000 shares), 179 (United Corp., 1,980,000 shares). These annual trading volume figures are dwarfed by the levels reflected in today's equity markets, where the *daily* trading volume of the New York Stock Exchange's most active stocks is typically in the tens of millions of shares. *E.g.*, NEW YORK TIMES, *Most Actives, Gainers and Losers*, Feb. 9, 2007, at C8 (reporting trading volumes from 18.7 to 88 million shares for each of the 25 most active issues).. It is perhaps therefore not surprising that most of the closed end fund shares reflected discounts relative to net asset value that were similar in scale to the discount applicable to General Shareholdings. WIESENBERGER at 94 (Pennroad/42%, Tri-Continental/38%, Adams Express/35%, Equity Corp./32%, Atlas/25%). Discussing the closed-end fund discount phenomenon, the source of these statistics reports that such discounts "have shown a characteristic tendency to narrow in

marketability will result in a trading price that may be discounted relative to the value of the firm.[32] Second, and as we discuss below, the discount may to some extent simply have been a function of the market's perception that the fund's management might extract compensation or fail to manage the fund's assets effectively in the future.[33] Finally, and while we do not associate this with a discount to "fair value," General Shareholdings had a controlling shareholder,[34] a circumstance that some say results in trading at some discount relative to what the shares would have traded at in the absence of a controlling shareholder.[35] As we observe below, however, that discount may not be a discount relative to "fair value," but may simply reflect agency costs associated with the controlling shareholder that affect the value of the firm and only indirectly affect the value of the shares.[36]

In any event, the next major Delaware Supreme Court decision affecting the discount issue did not come until 35 years after *Tri-Continental*. In the meantime, in the rubric of the "earnings value" component of the so-called "Delaware block method," the Delaware courts repeatedly used a result derived from comparable company share prices with no adjustment for any discount at all.[37] It was therefore notable when the Delaware Supreme Court announced in 1985 in *Smith v. Van Gorkom*[38] -- without citation and

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rising markets and widen in declining markets," but also notes that "Lehman, a leader in the non-leverage field, sold at small premiums in the final months of 1947 and its closing price was the same as its asset value." *Id*.

[32] *E.g.*, Coates, *supra* note 27, at 1262 n.35; PRATT, *supra* note 18, at 392.

[33] *Infra* Part III.F.2 (discussing Jonathan Berk & Richard Stanton, *A Rational Model of the Closed-End Fund Discount* (NBER Working Paper No. W10412, Apr. 2004), *available at* http://ssrn.com/abstract=528993).

[34] WIESENBERGER, *supra* note 31, at 152 ("Tri-Continental owns 60%, Selected Industries 19% and Central States Electric about 6%" of General Shareholdings).

[35] *See* Alexander Khutorsky, Note, *Coming in from the Cold: Reforming Shareholders' Appraisal Rights in Freeze-Out Transactions*, 1997 COLUM. BUS. L. REV. 133, 160 n.169 ("The theoretical existence of a control premium suggests that [the] price of minority shares held in a company controlled by a majority shareholder should be lower than the price of shares held in the same company but with a more dispersed ownership structure."); Coates, *supra* note 27, at 1278 ("*Ceteris paribus*, the presence of a control person will reduce the value of publicly held minority shares …"). Coates wisely cautions, however, that in some instances "[t]he presence of a controlling shareholder may improve managerial monitoring and thus reduce the expropriation value relative to a firm without a controlling shareholder." *Id.* at 1279 n.87. Coates also cites empirical evidence in support of his general assertion. *Id.* at 1280 n.93 (citing Roger C. Graham, Jr. & Craig E. Lefanowicz, *Valuation of Companies for Estate and Gift Tax: Evidence of Minority Interest Discounts*, ADVANCES IN TAX'N).

[36] *Infra* Part III(E)(2). Of course, as discussed previously, we would agree that "fair value" should not be burdened by agency costs that stem from demonstrable past or anticipated breaches of fiduciary duty.

[37] *See, e.g.*, Associated Imports v. ASG Indus., 1984 Del. Ch. LEXIS 483, *44 (Del. Ch. 1984) ("As to an appropriate price/earnings rating, the leading companies in the industry trade in a five to seven range. Given Fourco's modest share of the market and its relatively brief period of success, I find that a multiple of five is appropriate to capitalize annualized earnings."); Francis I. Du Pont & Co. v. Universal City Studios, Inc., 312 A.2d 344 (Del. Ch. 1973), *aff'd* 334 A.2d 216 (Del. 1975) (selecting an earnings multiple derived from "the average price earnings ratio of nine motion picture companies"); David J. Greene & Co. v. Dunhill International, Inc., 249 A.2d 427, 433-434 (Del. Ch. 1968) (referring to price earnings ratios for comparable companies); Felder v. Anderson, Clayton & Co., 159 A.2d 278, 285 (Del. Ch. 1960) (multiple "obtained by averaging the earnings-price ratios of representative stocks for the five year period before the merger").

[38] 488 A.2d 858 (Del. 1985).

relying solely on the parties' agreement -- that a "publicly-traded stock price is solely a measure of the value of a minority interest and, thus, market price reflects only the value of a single share."[39] The thrust of this observation was that the directors could not legitimately rely exclusively on the fact that the merger price exceeded the stock market price as a basis for concluding that the corporation should enter into the merger agreement at issue.[40]

We have no literal quarrel with the court's observation or its ensuing legal conclusion. Undoubtedly in many if not most cases the company can be sold to a third party at a price greater than its share market price, because share market transactions do not involve sales of corporate control. Therefore, if a director's obligation is to achieve the highest reasonably available value in a sale of the company,[41] it was certainly appropriate for the court in *Van Gorkom* to insist that director approval of a merger not rest entirely on the mere fact that the deal price exceeds the current market price of the company's shares. Unfortunately, however, one could also take *Van Gorkom*'s admonition that the "publicly-traded stock price is solely the value of a minority interest" as a sweeping suggestion that all publicly traded shares suffer from a "minority" discount;[42] and as we will soon see, that is exactly what the courts said when they subsequently began to embrace the IMD. Nevertheless, even after *Van Gorkom* it still could be maintained that no Delaware court had squarely adopted the proposition that share prices in active markets inherently understate firm value.

Four years after *Van Gorkom*, the Delaware Supreme Court decided *Cavalier Oil Corp. v. Harnett*,[43] perhaps the leading Delaware case on the subject of determining "fair value." And like *Van Gorkom*, *Cavalier* did not squarely embrace the IMD. To the contrary, its principal relevant holding was simply that "application of a discount to a minority shareholder violated the valuation standard that the company be viewed as a going concern."[44] The valuation to which the "minority discount" was unsuccessfully

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[39] *Id*. at 876. To be fair, the opinion recites that "several of the directors testified that, as a general rule, most chief executives think that the market undervalues their companies' stock." *Id.* This recitation does not disclose, however, whether the subjectively perceived undervaluation was relative to the present value of the future free cash flows of the firm, or simply what the firm could be sold for as a whole to a third party. It has been suggested in any event that the directors' judgment suffered from "cognitive bias [and therefore was] entitled to little or no credence." Carney & Heimendinger, supra note 21, at 854 n.48.

[40] 488 A.2d at 875 ("in the absence of other sound valuation information, the fact of a premium alone does not provide an adequate basis upon which to assess the fairness of an offering price").

[41] Revlon, Inc. v. MacAndrews & Forbes Holdings, Inc., 506 A.2d 173 (Del. 1986).

[42] Indeed, *Van Gorkom*'s terse remand instruction (directing an award of damages "to the extent that the fair value of Trans Union exceeds $55 per share [the market price]") only reinforces the notion that "fair value" generally exceeds share price. *See* Lawrence A. Hamermesh, *Why I Do Not Teach* Van Gorkom, 34 GA. L. REV. 477, 483, 488-89 (2000) (suggesting that this damages formula relying on "fair value" does not accord with *Revlon*'s subsequently expressed requirement of achieving the highest currently available third party sale value – a value that, unlike "fair value," may include synergies arising from the combination).

[43] 564 A.2d 1137 (Del. 1989).

[44] *Id.* at 1145. The court also stated that "to fail to accord to a *minority* shareholder the full proportionate value of his shares imposes a penalty for lack of control, and unfairly enriches the majority shareholders." *Id.* (emphasis added). To the extent, therefore, that *Cavalier* expresses concern about a "penalty for lack of control," it does so only in the limited context where "majority shareholders" are squeezing out a "minority shareholder," and it does not hold that share market prices *always* penalize a noncontrolling holder.

sought to be applied was a DCF analysis.[45] As we explain below, any such application of a "minority discount" would be double-counting if the DCF analysis already accurately nets out the firm's agency costs associated with the presence of a controlling shareholder.[46] We therefore fully concur in the holding in *Cavalier* that "fair value" determined on a DCF basis should not be burdened by an additional discount relating to the fact that shares being appraised are shares of a company with a controlling stockholder. In any event, nothing in *Cavalier* stands for the proposition that all publicly traded shares are "minority" shares, or that *all* share prices are therefore subject to a "minority discount."

The first direct attempt to persuade the Delaware courts to accept the IMD emerged in the Court of Chancery in the 1991 case of *In re Radiology Associates.*[47] We defer attention to that important case, however, until after we review the one other principal background decision of the Delaware Supreme Court: its 1992 opinion in *Rapid-American Corp. v. Harris*.[48] We consider the *Rapid-American* opinion to be controversial, to say the least. Its core relevant holding was that in determining the "fair value" of shares of a conglomerate with wholly-owned subsidiaries, "Delaware law compels the inclusion of a control premium" associated with ownership of those subsidiaries.[49] The trial court's failure to include such a control premium, the court explained, "artificially and unrealistically treated Rapid as a minority shareholder."[50]

It takes little imagination to see that this rationale, carried to its logical conclusion, compels the inclusion of a control premium, measured by a hypothetical third party sale value, in *all* share valuation cases, not just in situations where the corporation owns its operating assets through controlled subsidiaries. A corporation's control of directly owned assets is at least as great as where those assets are held through controlled subsidiaries. If the going concern itself must be valued on the basis of the hypothetical third party sale value of its controlled subsidiaries, it is therefore hard to see why it should not also be valued on the basis of the hypothetical third party sale value of its directly owned operating assets as well. To fail to do so would, to paraphrase *Rapid*, artificially and unrealistically treat the corporation as the minority owner of its operating

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[45] *See* Cavalier Oil Corp. v. Harnett, 1988 Del. Ch. LEXIS 28, *69-70 (Del. Ch. Feb. 2, 1988), *aff'd*, 564 A.2d 1137 (Del. 1989).
[46] *Infra* Part III.C.
[47] 611 A.2d 485 (Del. Ch. 1991).
[48] 603 A.2d 796 (Del. 1992).
[49] *Id.* at 806; *see also* M.G. Bancorporation, Inc. v. LeBeau, 737 A.2d 513, 524 (Del. 1999) ("in valuing a holding company in a statutory appraisal proceeding, pursuant to Section 262, it is appropriate to include a control premium for majority ownership of a subsidiary as an element of the holding company's fair value of the majority-owned subsidiaries."). The court in *Rapid* addressed a valuation in which Rapid's operating subsidiaries were appraised using a comparable company analysis based on share market multiples, and insisted upon the addition of a "control premium" that was derived from observed premiums in acquisitions of companies comparable to Rapid's subsidiaries. Harris v. Rapid-American Corp., 1990 Del. Ch. LEXIS 166 at *36 (Oct. 2, 1990), *aff'd in part and rev'd in part*, Rapid-American Corp. v. Harris, 603 A.2d 796 (Del. 1992) ("petitioners arrived at a control premium of 45% after looking at control premiums paid for companies during 1980.").
[50] 603 A.2d at 806.

assets. Of course, we do not advocate this approach, which we believe is contrary to other Delaware case law, both recent and of long standing.[51]

We are much more inclined to view *Rapid* as a results-driven ruling, aimed at checking an opportunistic acquisition of control by financier Meshulam Riklis. The merger was the culmination of a scheme by Riklis to acquire 100% ownership of Rapid, without paying a control premium, through open market purchases and through his subsequent use, as CEO and Chairman, of corporate assets to repurchase shares and thereby increase his ownership to 46.5% of Rapid's outstanding shares.[52] If the Delaware courts continue to hold, as we agree they should, that "fair value" is not to be determined by reference to the hypothetical third party sale value of the firm, they would promote doctrinal integrity by limiting *Rapid* to its facts and completely reject a generalized application of its literal holding.[53]

Of greater present relevance, in any event, is the question of what *Rapid* does *not* say about the IMD. In that case, the Delaware Supreme Court insisted that controlled subsidiaries be valued on a basis that included a control premium. Naturally, then, the court declined to accept, without upward adjustment, a methodology for valuing the subsidiaries that was based on share market prices that do not include a control premium. And given the court's insistence on applying a control premium measured by hypothetical third party sale value, we would agree that share market prices of comparable companies, which do not generally reflect such hypothetical sale value, cannot be used for the purpose demanded by the court. Once again, however, the court in *Rapid* did not hold that the comparable companies' share market prices were discounted relative to the firms' "going concern value." Rather, on our literal reading of *Rapid,* the Supreme Court was merely insisting, correctly, that such prices did not reflect the putatively required element of a control premium. Thus, at least through 1992 not a single Delaware case had held that share prices in active markets necessarily understate "going concern value."

B. The Initial Appearance (and Rejection) of the IMD

The term "implicit minority discount" surfaced for the first time in the Delaware case law in *In re Radiology Assoc.*, a 1991 case in which shares of a closely-held medical services provider were appraised for purposes of assessing the fairness of a squeeze-out merger.[54] Having rejected the comparable company/market multiple analysis presented by the plaintiff's expert witness (Anne Danyluk – a name that will return later in this story), the court relied on her valuation based on a discounted cash flow analysis.[55]

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[51] *See* cases cited in *Cornfields*, *supra* note 2, at 152 n.128.
[52] 603 A.2d at 799-800.
[53] At least one attempt to limit *Rapid* to its facts failed, however. *See* LeBeau v. M.G. Bancorporation, Inc., 1998 Del. Ch. LEXIS 9, *38-39 (Jan. 29, 1998), *aff'd* 737 A.2d 513 (Del. 1999) (rejecting argument that *Rapid*'s addition of a control premium was limited to situations involving subsidiaries in different lines of business).
[54] 611 A.2d 485, 487-88 (Del. Ch. 1991).
[55] *Id.* at 498.

Plaintiff's expert, however, contended that her DCF result was understated because it "include[d] an implicit minority discount."[56] More specifically, she claimed that she had derived a discount rate from rates of return demanded on a "minority interest," and that the DCF analysis therefore "fail[ed] to value the company as a whole with a premium over market price."[57] Accordingly, she applied a 30% increment to her DCF result "to represent a fair estimate for premiums over market price."[58]

The Court of Chancery readily rejected plaintiff's expert's adjustment, agreeing with the defendants' argument that the adjustment was inappropriate "no matter if the plaintiff labels the 30% as a premium or recompense for a discount."[59] Acknowledging that the DCF approach "may have left out a premium that normally accrues when shareholders sell a company," the court concluded that "[p]laintiff is not entitled to the proportionate sales value of Radiology, … [and] the discounted cash flow analysis ... fully reflects this value without need for an adjustment."[60]

The IMD fared no better in its next outing in the Delaware courts. In *Salomon Brothers Inc. v. Interstate Bakeries Corp.*,[61] petitioner's expert added a 15% upward adjustment to the result of a comparable company market multiple analysis, "to compensate for what he called an 'implicit minority discount.'"[62] The defendant's expert, however, testified that he "never heard of the expression 'implicit minority discount,'" and disputed the "premise that market value is inevitably less than intrinsic value."[63] According to the vice chancellor, the petitioner's expert had failed to demonstrate why his 15% adjustment "yielded a fair value for the entire company on a going concern basis rather than a premium value, as is often encountered in an acquisition."[64] Simply deciding that "15% was a reasonable figure" was not, according to the vice chancellor, a "level of analysis … sufficiently reliable to form the basis of a decision on fair value."[65]

If the Delaware courts' treatment of the IMD had ended here, this article would have never been written. As we will see momentarily, however, the IMD was introduced into Delaware jurisprudence in separate cases in 1992 and 1995, and in neither case was its existence contested by an expert witness. In the next two sections we trace the progress of the IMD in those cases and its subsequent evolution into a legal rule.

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[56] *Id.* at 494.
[57] *Id.* Presumably, a "minority" share requires a higher return and, therefore, implies a higher cost of equity and, accordingly, a higher discount rate, tending to reduce the valuation derived from the DCF approach.
[58] *Id.*
[59] *Id.*
[60] *Id.*
[61] 1992 Del. Ch. LEXIS 100 (May 1, 1992). Professor Hamermesh represented the petitioner in this litigation, and enjoys the dubious privilege of criticizing the argument he made in that case. The fact that the argument was unsuccessful, at least in that case, is of some comfort.
[62] *Id*. at *14.
[63] *Id*. at *15.
[64] *Id.* at *16-17.
[65] *Id.* at *17.

C. The IMD Takes Root

In late 1992, the same vice chancellor who had rejected the IMD in the *Salomon* case earlier in the year approved a valuation *using* the IMD. What could possibly have accounted for this change of position? As it turns out, the answer is not revised thinking, but simply fortuitous accident. In *Hodas v. Spectrum Technology, Inc.*,[66] Anne Danyluk – the same person who had served as the expert for the plaintiff in *Radiology* – served as the valuation expert for the respondent. Perhaps to avoid a charge of opportunistic inconsistency, Ms. Danyluk, despite acting on the side advocating the lower valuation, added a 30% premium to the result she derived from analysis of share market multiples of EBITD,[67] similar to what she had done (unsuccessfully) in *Radiology*. Once again, she explained this choice as necessary "to adjust for the fact that the EBDIT multiple reflects a stock price for a single share on a public stock exchange and, thus, includes a minority discount."[68]

In proffering the upward IMD adjustment on behalf of the respondents, however, Danyluk of course met no opposition from the petitioner, and the court did not reject the adjustment *sua sponte*. To the contrary, the adjustment was incorporated in the final valuation result without comment or evaluation by the vice chancellor. Thus, the IMD was first planted in Delaware valuation doctrine not by adversarial process and judicial evaluation, but by default.

The next sprouting of the IMD in Delaware law occurred three years later, just as it did in *Hodas*, in a case in which none of the valuation experts contested the existence of an IMD in public market share prices. In *Kleinwort Benson Ltd. v. Silgan Corp.*,[69] the court heard from three valuation experts: one presented by the petitioners, one presented by the respondent, and a neutral expert retained by the court.[70] Petitioner's expert added an 86% premium to the result he reached using a comparable company share market multiple analysis.[71] At trial, respondent's expert testified that "'the preponderance of opinion is that there is some minority interest that's implicit in a publicly traded company's price.'"[72] The court-appointed expert also asserted that some premium was "necessary to remove the minority discount inherent in publicly traded stock … ."[73] Thus, while respondent's counsel had instructed its expert that application of a premium

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[66] 1992 Del. Ch. LEXIS 252 (Dec. 7, 1992). Once again, it must be noted that Professor Hamermesh acted as counsel for the petitioner in this case. In this case, petitioner did not so much advocate the IMD as omit, in his self-interest, to oppose the respondent's expert's use of it.
[67] Earnings before interest, taxes and depreciation.
[68] *Id.* at *5. On the other hand, Danyluk also applied a 40% discount for lack of marketability, a discount that the vice chancellor rejected as inconsistent with Delaware law. *Id*. at *6, *14-15.
[69] 1995 Del. Ch. LEXIS 75 (June 15, 1995).
[70] The use of a court-appointed expert, while a well-known possibility, has been an unusual step in Delaware appraisal proceedings, suggesting that the courts have not found it to be of substantial assistance. *See* Cede & Co. v. Technicolor, Inc., 758 A.2d 485, 496-497 (Del. 2000) (rejecting trial court appointment of valuation expert to conduct "quasi-judicial functions").
[71] 1995 Del. Ch. LEXIS 75, at *6.
[72] *Id.* at *8.
[73] *Id*. at *11-12.

to compensate for IMD was contrary to Delaware law,[74] no expert testified unequivocally against the existence of an IMD. The court therefore had no choice, "[u]pon the record presented," but to "conclude that both experts should have adjusted market value to compensate for an inherent minority discount."[75] Acknowledging that this conclusion squarely contradicted the 1992 ruling in *Salomon*, the chancellor simply chalked up the difference to the fact that the records in the two cases were different, and that the record in the case at hand – including undisputed testimony that the IMD existed – "compels me to find that the market price for publicly traded stock includes a minority discount."[76]

That left the chancellor to determine the magnitude of the adjustment required by the IMD. Petitioner's expert had pegged it at 86%, an amount derived more or less from observed control premiums paid in recent mergers.[77] The chancellor rejected that number, however, as impermissibly including "value arising from synergies or new management plans," and ruled that the adjustment based on control premium data should have been reduced "so that it reflected just the minority discount."[78] Respondent's expert, despite having been instructed by respondent that the IMD was improper as a matter of law, allowed at trial that "a reasonable estimate of the minority discount is around 10-15%."[79] And the court-appointed expert concluded that "setting an exact figure for the minority discount comes down to an arbitrary determination."[80] Rather than take the approach adopted in *Salomon*, however, where the vice chancellor found a conclusory estimate to be insufficiently reliable as a basis for an upward IMD adjustment, the chancellor in *Kleinwort* concluded that choosing a zero adjustment was "more arbitrary than endeavoring to find its true value," and simply chose the midpoint (12.5%) of the range proffered in conclusory fashion by the respondent's expert.

Therefore, as matters stood after *Kleinwort* the IMD had not yet taken root as a legally mandated principle; it was simply a matter to be determined on the strength of the expert testimony in the case. It was at least theoretically possible for a respondent-engaged valuation expert to assert that the IMD did not truly exist as a general proposition, and for a court to accept that testimony if it were better substantiated than any contrary testimony from the petitioner. For better or worse, however, the Delaware courts' next encounter with the IMD occurred in a case in which the respondents' expert had co-authored a book stating that the "comparative publicly traded company valuation technique produce[s] a minority discounted valuation"[81] – a proposition that the courts took to support the existence of an IMD.[82]

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[74] *Id.* at *12.
[75] *Id.* at *8.
[76] *Id.* at *9.
[77] *Id.* at *10-11.
[78] *Id.* at *11
[79] *Id.* at *12. The opinion does not recite any analysis or empirical support underlying this estimate.
[80] *Id.*
[81] *M.G. Bancorporation, Inc. v. LeBeau*, 737 A.2d 513, 522 n. 26 (Del. 1999) (referring to S.P. PRATT, ET AL., VALUING A BUSINESS 194-195, 210 (3rd ed. 1996)).
[82] We explain below that this reading of PRATT is flawed, and that the so-called "minority" valuation approach described in PRATT includes the kind of DCF analysis that the Delaware courts routinely and appropriately accept as a basis for determining "fair value." *Infra* Part IV.B.

D. The IMD Goes From Permissible to Mandatory

In *LeBeau v. M.G. Bancorporation, Inc.*,[83] the respondents' expert analyzed the value of the company's two subsidiaries on the basis of comparable company share market multiples. The petitioners attacked that analysis as improper because "it include[d] a built-in minority discount."[84] The vice chancellor concurred, because "[t]he valuation literature, including a treatise co-authored by [respondents' expert] himself, supports that position, and Respondents have introduced no evidence to the contrary."[85] On appeal, the Delaware Supreme Court affirmed this ruling, finding that the vice chancellor's conclusions were "fully supported by the record evidence that was before the Court of Chancery and [by] the prior holdings of this Court construing Section 262."[86] In short, in a case where one expert declined to use an IMD adjustment to a comparable company share market multiple analysis, his view was rejected because of outside "literature" (including in particular a book which he had co-authored) and because of "prior holdings" of the Delaware Supreme Court. Thus, the courts' acceptance of the IMD was no longer purely an evaluation of expert testimony in the record; now, just seven years since the IMD was rejected in the Delaware courts, outside "literature" and prior judicial acceptance took on the imprimatur of authority for use of the IMD.

After *LeBeau*, the IMD's momentum accelerated, with several Delaware valuation decisions routinely reciting the existence of the IMD and applying an upward adjustment to a comparable company share market multiple valuation approach.[87] This occurred when respondents failed to offer contrary expert testimony, or to contest the existence of an IMD at all.[88] In one those cases, *Agranoff*, the vice chancellor described

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[83] 1998 Del. Ch. LEXIS 9 (Jan. 29, 1998), *aff'd* 737 A.2d 513 (Del. 1999).

[84] *Id.* at *25.

[85] *Id.* The "valuation literature" cited by the court was just the Pratt treatise, and C.Z. MERCER, VALUING FINANCIAL INSTITUTIONS 198-200, ch. 13 (1992). As explained below, neither of these authorities, properly understood, asserts the existence of an IMD. *Infra* Part IV.B.

[86] 737 A.2d at 523. Citing its earlier opinion in *Rapid*, the Supreme Court similarly upheld the vice chancellor's acceptance of an analysis of the subsidiaries' value that was based on premiums paid in acquisitions of comparable companies. *Id.* at 525.

[87] *E.g.,* Borruso v. Commc'ns Telesystems Int'l, 753 A.2d 451, 458 (Del. Ch. 1999) ("the comparable company method of analysis produces an equity valuation that inherently reflects a minority discount, as the data used for purposes of comparison is all derived from minority trading values of the comparable companies. Because that value is not fully reflective of the intrinsic worth of the corporation on a going concern basis, this court has applied an explicit control premium in calculating the fair value of the equity in an appraisal proceeding. ... It would seem to me to be particularly appropriate to do so where, as is true here, the comparable company method is the only method available to me to value the shares in question.); Bomarko v. Int'l Telecharge, Inc., 794 A.2d 1161, 1185 (Del. Ch. 1999) (accepting a comparable company analysis to which a 30% premium had been applied in order "to account for the minority discount inherent in the comparable companies analysis"); Agranoff v. Miller, 791 A.2d 880, 892-93, 897 (Del. Ch. 2001) ("[t]he comparable companies analysis generates an equity value that includes an inherent minority trading discount, because the method depends on comparisons to market multiples derived from trading information for minority blocks of the comparable companies.").

[88] In *Borruso*, the court recites that "[t]here is no dispute between [the parties] that the comparable company method produces a minority valuation of the shares subject to appraisal, as has been recognized in

the IMD adjustment – then less than ten years old – as "a rigid, formulaic correction," and he declined to apply it in his preferred valuation approach in the unusual circumstances of the case.[89] Nevertheless, the vice chancellor indicated that had he been bound to apply the "fair value" standard developed in statutory appraisal proceedings, the result would have given effect to an upward IMD adjustment.[90]

By 2004, in any event, it became clear that Delaware's IMD doctrine no longer depended upon expert testimony, and that it had become established as an element of valuation law. *Doft & Co. v. Travelocity.com Inc.*[91] represents the culmination of this doctrinal development. The experts in that case both had formidable credentials.[92] Both experts developed a comparable company share market multiple valuation.[93] Neither expert, however, urged that the result should be augmented to eliminate a putative IMD: as the vice chancellor explained, "[t]he parties are silent on the proper application of a control premium."[94] At this point, however, the absence of expert testimony no longer mattered: according to the court, "Delaware law recognizes that there is an inherent minority trading discount in a comparable company analysis … [and] the court, in appraising the fair value of the equity, 'must correct this minority trading discount by adding back a premium designed to correct it.'"[95] The expert witnesses offered essentially no support for this view: to his considerable credit, petitioners' expert testified simply that "if the court is to accept the theory that 'some minority discount from going concern value' is appropriate in a comparable company analysis, then the correct valuation would be above his stated value."[96] Thus left with no expert testimony about the magnitude of the now legally required adjustment, the vice chancellor set the

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decisions of this court."). 753 A.2d at 457. In *Bomarko*, the defendants did "not dispute that the value derived by comparable companies method of analysis reflects an imbedded minority discount." 794 A.2d at 1186. In *Agranoff*, the expert witness for the party arguing for a low "fair value" appears to have challenged only the size of the IMD adjustment, and not the proposition that such an adjustment was appropriate. 791 A.2d at 899-900.

[89] *Agranoff*, 791 A.2d at 893.

[90] That IMD adjustment was calculated by means of what the vice chancellor candidly described as "a necessarily rough approach that simply involves shaving some percentage off the top of the available information about premiums paid." *Id.* at 899.

[91] 2004 Del. Ch. LEXIS 75 (Del. Ch. May 20, 2004, revised May 21, 2005).

[92] Petitioners' expert was William Purcell, an investment banker with over 35 years of experience in significant mergers and acquisitions. *Id.* at *14. Respondent presented the testimony of Professor Paul A. Gompers of the Harvard Business School. *Id.* at *15. Salomon Brothers, which had counseled the special board committee involved in the transaction, was also a source of valuation expertise. *Id*. at *12.

[93] *Id.* at *32.

[94] *Id.* at *46.

[95] *Id*. (citing Agranoff v.Miller, 791 A.2d 880, 892 (Del. Ch. 2001)). In 2003, however, the same vice chancellor relied in part on a comparable company market multiple analysis but declined to impose an upward IMD adjustment, noting that "the petitioner's expert made no such adjustment because he assumed it would be roughly offset by a marketability discount related to [the firm's] status as a privately held company." Taylor v. Am.Specialty Retailing Group, Inc., 2003 Del. Ch. LEXIS 75 at *23 n.24 (July 25, 2003).

[96] *Travelocity.com*, 2004 Del. Ch. LEXIS 75, at *46.

IMD adjustment at 30%, relying exclusively on "recent appraisal cases that correct the valuation for a minority discount by adding back a premium."[97]

So matters stood as of 2004. Both in existence and scale, the IMD had been established as a matter of Delaware law, and it has continued to be used to support an upward adjustment to valuations derived from share market multiples observed in comparable publicly traded companies.[98] At the same time, the Delaware courts continue to resist (appropriately, we believe) the application of a similar upward adjustment to discounted cash flow valuations.[99] Indeed – and in a striking instance of internal inconsistency – the Delaware courts have accepted DCF valuations using terminal values estimated using an exit multiple approach, without making any IMD-type upward adjustment to the terminal value.[100] An IMD adjustment to DCF valuation analysis remains today, then, where such an adjustment to comparable company market multiple analysis stood in 1992. While the courts remain open to "the intellectually interesting argument in support of the proposition that the DCF analysis necessarily introduces

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[97] *Id.* at *46-47*, (*citing *Agranoff*, 791 A.2d at 887; Borruso v. Commc'ns Telesystems Int'l, 753 A.2d 451, 459 (Del. Ch. 1999); Bomarko v. Int'l Telecharge, Inc., 794 A.2d 1161, 1186 n.11 (Del. Ch. 1999), *aff'd,* 766 A.2d 437 (Del. 2000)).

[98] *See, e.g.*, Andaloro v. PFPC Worldwide, Inc., 2005 Del. Ch. LEXIS 125, at *65, *70-71 (Aug. 19, 2005) (applying a 30% upward adjustment in order "[t]o honor the Supreme Court's teaching that plaintiffs should receive their pro rata share of the entity as a going concern, this court's decisions adjust minority trading multiples to account for the implied discount, in order to accurately arrive at a fair value of the entire equity."); Dobler v. Montgomery Cellular Holding Co., 2004 Del. Ch. LEXIS 139, at *65-66 (Sept. 30, 2004, revised Oct. 4, 2004) (accepting a comparable company valuation to which a "control premium" had been added); Lane v. Cancer Treatment Centers of America, Inc., 2004 Del. Ch. LEXIS 108 at *129-30 (July 30, 2004) ("[c]omparable company analysis … suffers from an inherent minority discount" and a "premium must be added to adjust for the minority discount."). Interestingly, in *Andaloro* the court thought it would be "appropriate" to reduce the 38% adjustment proffered by defendants' expert witness to 30% because the 38% figure "did not seek to exclude any portion of the average premia … to account for the sharing of synergies by the buyer with the seller." 2005 Del. Ch. LEXIS 125, at *69 , *70 n.74. Also, the vice chancellor did acknowledge that "[t]here is some academic dispute about whether all companies' shares trade at a discounted level." *Id.* at *69.

[99] *Dobler*, 2004 Del. Ch. LEXIS 139, at *72 ("A DCF is a final valuation that does not need any additional correction, such as a control premium"); *Lane*, 2004 Del. Ch. LEXIS 108, at *117-18 (citing *In re* Radiology Assoc*.,* 611 A.2d 485, 491 (Del. Ch. 1991); SHANNON PRATT, BUSINESS VALUATION DISCOUNTS AND PREMIUMS 30 (2001) ("The streams of income here do not require any adjustment for an impermissible minority discount.")). According to Pratt, "There is little or no difference in the rate of return that most investors require for investing in a public, freely tradable minority interest versus a controlling interest." PRATT, *supra*.

[100] *E.g.*, *In re* U.S. Cellular Operating Co*.,* 2005 Del. Ch. LEXIS 1, at *67 (Jan. 6, 2005) (selecting "terminal value multiple of 10 times EBITDA"); Gray v. Cytokine Pharmasciences, Inc., 2002 WL 853549, at *33 (Del. Ch. 2002) ("revenue multiple of 4.0X should be applied to PSI's projected revenues in 2008 to determine most accurately the Company's terminal value"); Neal v. Alabama By-Products Corp., 1990 WL 109243, at *7-8 (Del. Ch. Aug. 1, 1990), *aff'd*, 588 A.2d 255 (Del. 1991); Cavalier Oil Co. v. Harnett, 1988 WL 15816, at *21 (Del. Ch. 1988), *aff'd*, 564 A.2d 1137 (Del. 1988). In fairness, it should be pointed out that Vice Chancellor Strine has anticipated this inconsistency. *In re* PNB Holding Co. S'holders Litig.., 2006 WL 2403999, at *31 (Del. Ch. 2006) (characterizing the exit multiple approach as "a less favored technique that raises questions about whether it embeds a minority discount.").

something of a minority discount,"[101] they have not yet accepted it as a matter of law and continue to reject it in the absence of persuasive evidence.[102]

III. THE FINANCE BEHIND DELAWARE APPRAISAL LAW

Having shown how the IMD was planted and then nurtured in case law, it is time to turn back to examining whether finance theory and empirical evidence support the IMD. We argue that they do not. Before reviewing how the Delaware courts might have come to a contrary view, we need to examine five core finance concepts: going concern value; third-party sale value and synergies; the incidence of agency costs; the nature of the benefits of control; and market discounts. We discuss each of them in turn.

A. The Value of the Firm

The first concept is the value of the firm as that term is understood in corporate finance. In valuing a company it is generally accepted that discounting the firm's free cash flows provides the best measure of value. More specifically, for a firm with both debt and equity, the accumulated future cash flows to all claim holders in the firm are discounted using the weighted average cost of capital.[103] Using the cost of capital approach, the enterprise value of the firm is thus the following:

$$V_F = \frac{FCFF_1}{(1+WACC)} + \frac{FCFF_2}{(1+WACC)^2} + \cdots + \frac{FCFF_H}{(1+WACC)^H} \qquad (1)$$

where V_F is the value of the firm financed using both debt and equity, $FCFF_t$ is the free cash flow in year t, WACC is the weighted average cost of capital, and H is equal to infinity.[104] In the appraisal setting the court's function is to value the equity of the firm. This can be done by calculating V_F and subtracting off the value of the debt.

Since appraisal is about valuing equity, and since the problem of this paper is to analyze the implicit minority discount, the exposition is simplified by assuming that the above steps have been accomplished, and that we are then left with the value of the equity (V_E). An even more important simplifying assumption is to assume hereafter that the firm being appraised is financed entirely with equity. In this case $V_F = V_E$.[105]

For the all equity firm, its value is the discounted value of the free cash flows that the corporation's assets will produce over the indefinite life of the corporation. Both

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[101] *Lane*, 2004 Del. Ch. LEXIS 108, at *118 n.160.
[102] *Id*.
[103] ASWATH DAMODARAN, DAMODARAN ON VALUATION 193 (2nd ed. 2006).
[104] *Id.*
[105] There are many interesting problems involved in the determination of the cost of capital, but these are beyond the scope of the present paper.

Delaware appraisal law and finance textbooks typically divide the calculation of V_E into three steps.[106] The first step is to determine the annual free cash flows (FCF) over a horizon period (H), for which forecasts are available. The second is to determine a terminal value (P_H) representing the value of the free cash flows beginning with the first year after which annual forecasts are available. Finally, since future free cash flows and the terminal value have to be discounted to their present value, the court must determine the company's cost of equity capital (r_E).

$$V_E = \frac{FCF_1}{(1+r_E)} + \frac{FCF_2}{(1+r_E)^2} + \cdots + \frac{FCF_H}{(1+r_E)^H} + \frac{P_H}{(1+r_E)^H} \qquad (2)$$

The starting point for FCF estimates is incumbent management's estimates for the forecast period.[107] In the adversarial setting of an appraisal, these forecasts will be challenged by the petitioners. Since the petitioners believe that the fair value of the corporation is higher than the price offered by the respondent, they will offer their own evidence that free cash flows within the forecast period are higher, the terminal value is higher, and/or the discount rate is lower.[108]

In most cases, a great deal of the value of the company is captured by the terminal value. The terminal value is calculated using one of two approaches. First, using the Gordon growth model, equation (2) can be rewritten in the following form:[109]

$$V_E = \frac{FCF_1}{(1+r_E)} + \frac{FCF_2}{(1+r_E)^2} + \cdots + \frac{FCF_H}{(1+r_E)^H} + \frac{FCF_{H+1}}{(r_E - g)} \times \frac{1}{(1+r_E)^H} \qquad (3)$$

where g is an estimate of the firm's future growth rate, and $\frac{FCF_{H+1}}{(r_E - g)}$ is P_H, the non-discounted terminal value.

The second method used by the appraisal court and by finance experts in calculating the terminal value is the comparable company method. This is implemented

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[106] *E.g.*, *Henke v. Trilithic Inc*., 2005 Del. Ch. LEXIS 170 *20 (Del. Ch. 2005); *ONTI, Inc. v. Integra Bank*, 751 A.2d 904, 917 (Del. Ch. 1999); RICHARD A. BREALEY, STWEART C. MYERS & FRANKLIN ALLEN, PRINCIPLES OF CORPORATE FINANCE 508-12 (8th ed. 2006).

[107] *E.g.*, Cede & Co. v. Technicolor Inc., 2003 Del. Ch. LEXIS 146, at *24-25 (2003), *aff'd in part and rev'd in part on other grounds*, 875 A.2d 602 (Del. 2005), (quoting Agranoff v. Miller, 791 A.2d 880, 892 (Del. Ch. 2001)).

[108] Sometimes the respondents in valuation proceedings, seeking a lower result, challenge the application of what they consider to be inapplicable or unduly optimistic forecasts. *E.g.,* Prescott Small Cap, L.P. v. Coleman Co., 2004 Del. Ch. LEXIS 131, at *22-39 (2004).

[109] DAMODARAN, *supra* note 103, at 158.

by recognizing that P_H from equation (2) can also be estimated using financial market multiples, or "exit multiples,"[110] where P_H is represented by:

$$P_H = FCF_H \times market\ \ multiple\ \ for\ FCF \qquad (4)$$

Therefore, we have:

$$V_E = \frac{FCF_1}{(1+r_E)} + \frac{FCF_2}{(1+r_E)^2} + \cdots + \frac{FCF_H}{(1+r_E)^H} + \frac{FCF_{H+1}}{(1+r_E)^H} \times market\,multiple\,for\ FCF \qquad (5)$$

The market multiple is the average multiple that the financial markets assign to the comparable companies. For example, suppose comparable companies trade at a free cash flow multiple of 8. A company that has free cash flow of (say) $5 a share will be assigned a terminal value of $40 a share. Numerous market multiples can be used and are used instead of a free cash flow multiple. Other market multiples include the ratio of stock price to earnings (P/E ratio), stock price to book value, and stock price to EBITDA (earnings before interest, taxes, depreciation, and amortization). The choice of the multiple depends on what data are most reliable.

Equations (3) and (5) are mathematically equivalent, and the courts refer to the valuation technique using either of these equations as the income approach, or discounted cash flow (DCF) approach.[111] We agree, but we also note that equation (5) uses a comparable company method in determining the terminal value. The choice between the two methods to estimate terminal value depends on data reliability and availability. When data are available for both methods, equation (3) is the preferred method since it depends entirely on company-specific data.[112] In appraisal cases, however, in which relevant company-specific data may be either unavailable or unverifiable, the virtue of using equation (5) is that its use of comparable company analysis (CCA) to estimate terminal value bypasses the need to have an estimate for the company-specific future growth rate (g).[113] The downside of using the CCA, on the other hand, is that its accuracy depends on the availability of comparable companies.

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[110] The Delaware courts regularly describe this method of estimating terminal value as the "exit multiple" approach. *See, e.g.*, Gholl v. eMachines, Inc., 2004 Del. Ch. LEXIS 171, at *50 (Nov. 24, 2004).

[111] *E.g., Gholl v. eMachines, Inc.*, 2004 Del. Ch. LEXIS 171 *50 n.87 (Del. Ch. 2004) (describing a DCF analysis and noting the use in such analysis of both approaches to estimating terminal value). The expert may estimate g and r in equation (2) using average rates for comparable companies, either to justify her estimate of V_E or to provide a range.

[112] Damodaran states that the relative valuation method, which relies on comparable companies, is inferior to the use of what we call the pure discounted cash flow method because of the difficulties in determining comparables. DAMODARAN, *supra* note 103, at 231.

[113] Future growth is notoriously difficult to forecast. In particular, to forecast g, the expert needs to estimate the company's future marginal return on equity, which can be highly problematic.

The Delaware courts typically refer to the appraisal as relying on a comparable company analysis only when comparable company data are used without a near-term forecast period.[114] The approach looks just like the approach to estimating terminal value in the DCF method (see equation (4)), except that in the expression P_H, H = 1; in other words, if free cash flow is the operative performance criterion to which comparable company trading multiples will be applied, the near-term is only one year and the terminal value (now the entire measure of value) is a multiple of a one year estimate of free cash flow. In this case, the only datum provided by the company is the next year FCF. Therefore,

$$V_E = \quad FCF_1 \times market\ \ multiple\ \ for\ FCF \qquad (6)$$

Perhaps because of the simplicity of this formula, it might be concluded that this CCA approach (equation (6)) to estimating value is conceptually distinct from equation (5). But, this is not the case: they differ only with respect to the value of H. Equation (6) is a pure CCA with no variation in FCF in future years, while equation (3) is a mixed version.

It is also the case that the pure CCA approach of equation (6) is very much a DCF-type methodology. One way to show this is to make the point again that equations (6) and (5) differ only with respect to the value of H; and therefore, since equations (5) and (3) are conceptually the same, equation (6) is also a DCF-type methodology.

Alternatively, we point out that equation (6) (the pure CCA approach) can be restated in a way that is visually and conceptually identical to the DCF approach:

$$V_E = \frac{FCF_1}{(1+r_E)} + \frac{FCF_2}{(1+r_E)^2} + \cdots + \frac{FCF_H}{(1+r_E)^H} \qquad (7)$$

In this equation, H is infinity, and the various FCF's are the same in each and every future year. Although equations (6) and (7) may look very different, we note that the market multiple of equation (6) captures the value of a perpetuity in the annual amount of FCF, discounted at the rate, r_E.

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[114] *E.g., Andaloro* at *64 ("The comparable companies method of valuing the company's equity involves several steps including: finding comparable, publicly-traded companies that have reviewable financial information; calculating the ratio between the trading price of the stocks of each of those companies and some recognized measure reflecting their income such as revenue, EBIT or EBITDA; correcting these derived ratios to account for differences, such as capital structure, between the public companies and the target company being valued; and finally applying the average multiple to the relevant income measurement of the target company, here PFPC. The methodology rests on the reasonable assumption that, after making the appropriate adjustments, the subject company would tend to have its free cash flows valued at the same multiples as its industry peers."); *Agranoff*, 791 A.2d at 892; *Bomarko*, 794 A.2d at 1186 n.11.

Thus, the CCA technique is just as much a DCF form of analysis as what the courts usually describe as DCF analysis. The significant difference is simply that, (a) anticipated future cash flows are the same for all future years, and (b) unlike the Gordon growth model approach reflected in equation (3), but like the exit multiple variation reflected in equation (5), the CCA approach also depends upon the use (explicit or implicit) of a discount rate estimated from the discount rate of comparable companies.[115]

We recognize and share a preference, however, for the use of whatever good, company-specific forecast data are available. Consequently, the terminal value should be pushed as far back into the future as forecasting ability reliably permits. For example, when company-specific forecasts are available for 10 years, then the market multiple is applied to the free cash flow in year 11. The more years reliable, company-specific forecast data are available for, the further out the horizon value can be pushed. At some point the company's future forecasts become unacceptable because of diminishing reliability. At that point, and in the absence of a reliable estimate of the subject company's future growth rate, the comparable company analysis should be inserted. That can be where H = 1, H = 10, or any other value.

Invariably, in either appraisal cases or in standard financial practice, several methods are used either to confirm the results from equation (2) or to provide a range for the valuation. As explained earlier, however, DCF and CCA are not conceptually distinct methods for calculating the company's going concern value. Both are rooted in the observation that the value of the company depends on its discounted free cash flows. Equations (3), (5), and (6) are thus merely different algorithms for calculating the value of company's future discounted free cash flows.

Since all of the different equations are simple transformations of each other, the choice of methods is driven by what reliable data are available. All of these methods should, or could if the correct data were available, lead to the same result. In finance textbooks, all of these methods are taught as being alternative algorithms that are consistent with determining the V_E of a firm from discounting its future free cash flows.[116]

There is one other lesson to be learned from finance textbooks, and this may be the most crucial lesson of all. In finance textbooks, the above formulas for calculating the value of the firm are taught in the context of how to value the common stock of the firm. That is, the value of the stock is calculated to be the pro rata net present value of all

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[115] When the CCA technique is used in appraisal proceedings, the discount rate is effectively selected through the choice of a market multiple; the discount rate implied in these applications of the CCA technique is the reciprocal of the selected market multiple. PRATT, et al., *supra* note 18, at 244 ("Multiples of economic income variables (price/earnings multiples, price/cash flow multiples, and so on) are the reciprocals of the capitalization rates applicable to those variables.").

[116] Brealey, Myers, and Allen discuss the use of multiples as a good method for checking the validity of what we call the pure DCF approach in calculating the horizon value of the firm. BREALEY, MYERS & ALLEN, *supra* note 106, at 511. Damodaran refers to the use of multiples as "relative valuation:" "In relative valuation, we value assets based on how similar assets are priced. We begin … by noting that most valuations in practice are relative valuation." DAMODARAN, *supra* note 103, at 231.

future free cash flows. There are no adjustments. No discounts are assumed, and no premiums are added. The textbook equation for the value of a stock is essentially the same as equation (3), *supra*, which measures the value of the firm. To move from V_E to the value of the stock, one need only divide V_E by the number of shares.[117] We return to this point on several occasions below, because if the finance textbooks are correct, there cannot be a persistent and continuously occurring implicit minority discount in all traded stocks.

B. Third-Party Sale Value and Synergies

The value of the firm is not its third party sale value (V_{3PS}). In an arms-length transaction, an acquirer will pay a premium to V_E in purchasing the firm.[118] The premium largely reflects synergies arising from the merger, but it can also reflect benefits of control (to be discussed below). Assuming that the directors of the firm being acquired (the "target" firm) bargain at arms length with the acquirer (the "bidder" firm), the target's shareholders will capture some of the synergies in the sale price. Hence, in true arms-length transactions, third-party sale value will generally be above the going concern value of the firm. Since the appraisal remedy awards going concern value, shareholders will approve third-party deals and take the merger price rather than use the appraisal remedy.

It might be argued that V_{3PS} should be the accepted Delaware definition of fair value, rather than V_E, because it appears to be consistent with the economic concept of value. But the reasoning here is flawed. There are multiple definitions of value, and some definitions are more consistent with the case law's use of going concern value than others. Economists define the term "value" as the opportunity cost of the asset, where the opportunity cost measures the cost of the inputs (e.g., labor and capita) used in producing the asset. The term opportunity cost is used because, if the inputs were not used by the firm, they could be deployed elsewhere. That value of the firm's inputs in an alternative

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[117] *See* BREALEY, MYERS & ALLEN, *supra* note 106, at 61-65. Ross, Westerfield and Jaffe define the value of common stocks in an identical fashion. STEPHEN A. ROSS, RANDOLPH W. WESTERFIELD & JEFFREY JAFFE, CORPORATE FINANCE 109 (6th ed. 2002). These textbooks define the value of a stock as the discounted value of dividends and elsewhere define the value of the firm as the discounted value of future free cash flows. As Damodaran points out, these values measure the same thing – cash flows to equity holders. DAMODARAN, *supra* note 103, at 175. Damodaran discusses scenarios in which dividend discounting and free cash flow discounting could lead to different valuations, namely when free cash flows are neither paid as dividends nor reinvested in the firm. *Id.* at 188. However, these scenarios may represent a form of agency cost which, as discussed in detail below, are appropriately reflected in (a reduced) going concern value. *Infra* III.C. To the extent that these scenarios involve breaches of fiduciary duty, on the other hand, it can be argued that they should be addressed by an offsetting upward adjustment in determining fair value. *Infra* Part V. In any event, Damodaran notes that his analysis switches freely between a per share and aggregate valuations. He makes no mention of a need to include a discount when moving from a value of the firm as a whole to the value of individual shares. DAMODARAN, *supra* note 103, at 191-92.

[118] The term third-party sale value is reserved for those transactions where the target and the bidder are unrelated and the negotiations over the transaction are conducted at arms-length without conflict of interest.

use represents its opportunity cost. The opportunity cost concept is *not a measure of going concern* value, but a measure of *next best use* value.

This argument becomes further confused when its proponents point to acquisition data as a measure of opportunity cost (V_{OC}). Opportunity cost is an equilibrium measure, and in equilibrium, all assets are already in their best use. Consequently,

$$V_E > V_{OC}$$

that is, the opportunity cost is actually below the current use value of the assets. In equilibrium, there are no third-party offers for the company since its concern value is higher than any alternative use.

When a change in the environment occurs and synergistic gains become available to a bidder, the firm's assets' next best use is temporarily higher than its going concern value, reflecting these synergistic gains that will occur if the bidder succeeds in taking over the company. In other words, prior to the consummation of the merger,

$$V_{3PS} > V_E \text{ (going concern value)}$$

that is, the bidder values the firm at a value greater than its going concern.

Companies merge today and not a year ago because new opportunities have arisen that make the company undervalued in its current use. Assuming no further third-party offers for the now merged company, the transaction returns the company to equilibrium.

$$V_E > V_{OC}$$

Consequently, acquisition data should show that firms are bought at a premium to their going concern value. However, it is incorrect to make the jump that these premiums reflect some kind of implicit minority discount. The fallacy is obvious, and the "dogs that don't bark" metaphor is appropriate. There are lots of dogs and most of the time most dogs are not barking. The vast majority of companies are not involved in a change of control transaction in any given year. If all trading in non-controlling shares actually reflected a discount to a firm's V_E or going concern value, then all companies would have ready buyers all of the time. The companies in the acquisition data set are not a representative sample. Instead, they are likely to represent the relatively few companies whose common stock does trade at a discount to V_E or where synergies have emerged which make the combined company more valuable than the two companies operated separately.[119]

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[119] In cases involving a third-party purchaser, the negotiations involving the sale of the company typically result in the synergistic gains being shared by the buyer and the seller. *See* TIM KOLLER ET AL., VALUATION 435 (4th ed. 2005). Consequently, shareholders in a merger or asset sale may actually achieve a premium for their stock. However, they are not required by law to be paid the premium. *See, e.g.,* Abraham v. Emerson Radio Corp., 901 A.2d 751, 761-62 (Del. Ch. 2006) ("pure control premium envy is not a cognizable claim for a minority stockholder under Delaware law.") (citing Hollinger Int'l Inc. v.

The legal rule that provides shareholders with going concern value is efficiency promoting. Value is created in change of control transactions, and the value belongs to the party that creates it. It is counterproductive to force a third-party acquirer to pay the entire acquisition premium to the acquiree's shareholders. The result would be to reduce the number of transactions that achieve a premium price for minority shareholders.[120] We are, however, not making the stronger normative claim that this is the optimal rule. We could only make this claim if the case law could reliably differentiate between going-private transactions that are truly wealth creating from those that merely transfer wealth from the minority shareholders to the controller. While the courts are sensitive to this problem and can address it when plaintiffs allege a breach of fiduciary duty, under-deterrence of the misuse of inside information by controllers is possible. This is particularly true in cases of a short-form merger, where appraisal is the exclusive remedy. All that said, as we describe below, the implicit minority discount does not address this problem, while other solutions that are consistent with financial theory are available.

C. Agency Costs

The third key concept is agency costs. To develop this concept, it is useful to differentiate between two types of firms – those where the owners are the managers, and those where there is a separation of ownership and control. The former are privately owned companies, while the latter may be either close corporations or publicly traded.

Adolf Berle and Gardiner Means were among the first to point out that the separation of ownership and control provides managers with discretion to further their own interests rather than the interests of shareholders.[121] The result of this separation is agency costs (AC), which create a wedge between the values of the same firm when it is owner-managed and when the managers are not the owners.

Since publicly traded (and many closely held) corporations have a separation of ownership and control, we will continue to use the term V_E to represent the value of the equity when the firm has dispersed ownership. For contrast, we designate the value of the equity in the firm where the owners are the managers as V_{OM}.

We therefore have:

$$V_E = V_{OM} - AC$$

Black, 844 A.2d 1022 (Del. Ch. 2004), *aff'd* 872 A.2d 559 (Del. 2005)); Mendel v. Carroll, 651 A.2d 297, 306-07 (Del. Ch. 1994); Ronald J. Gilson & Jeffrey N. Gordon, *Doctrines and Markets: Controlling Controlling Shareholders*, 152 U. PA. L. REV. 785, 793-96 (2003).

[120] It is similarly counterproductive to force a controller to pay a third-party sale price when exercising the right of control in purchasing the remaining shares. In particular, there is no reason to assume that such transactions are being driven by the controller's idea that the corporation's assets sell at a discount to their true value. Not every corporation is a logical acquisition candidate.

[121] *See* ADOLF A. BERLE JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY 357 (1932).

Since the work of Jensen and Meckling, it has been recognized that in transactions that disperse ownership (such as initial public offerings), the burden of the agency costs fall on the owner-managers who are separating ownership from control. As they wrote:

> "…the owner will bear the entire wealth effects of these expected costs as long as the equity market anticipates these effects. Prospective minority shareholders will realize that the owner-manager's interests will diverge somewhat from theirs, hence the price which they will pay for shares will reflect the monitoring costs and the effect of the divergence between the manager's interest and theirs."[122]

The agency costs thus reflect the assumption that managers will maximize their own welfare, which will not be entirely consistent with the interest of the shareholders. In its simplest terms, the owner-manager may be willing to work 24-7, while the CEO with a 1 percent ownership stake may work more civilized hours. This divergence also explains why owner-managers are willing to sell the company at a price which discounts the agency costs. After the transaction, the original owner-managers can work a less hectic schedule. In addition, the original owners are willing to bear the agency costs because they benefit from the ability to diversify their wealth with the cash received from the sale.[123]

Management actions that give rise to agency costs do not in any way necessarily involve a violation of fiduciary duties. Agency costs are as real a cost as any other. For example, an agency cost is the compensation of the CEO that exceeds the labor market clearing compensation of comparably skilled managers. While such compensation may at times be viewed as excessive, it is not necessarily or even ordinarily a breach of fiduciary duty. In general, the existence of agency costs does not imply the taking of a corporate opportunity, the use of corporate assets for private purposes, or engaging in conflicted transactions without board approval. This is not to deny that agency costs may include the effects of breaches of fiduciary duty. In *Cornfields* we discuss how violations of fiduciary duty should be treated in the appraisal setting, and we discuss this point in more detail in a later section.[124] In general, however, agency costs are an inevitable burden on publicly held companies, and largely involve no breach of fiduciary duty at all.

One immediate implication of this analysis is that if the ownership-dispersing transaction is reversed, by means of a transaction that aggregates share ownership, the shareholders do not have to be compensated for the agency costs. This is true as a matter of both finance and appraisal law. The shares sold by the original owner were discounted by the amount of the agency costs and thus the manager re-taking the firm private should

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[122] Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305, 313 (1976).

[123] The agency costs are costs above the market prices required to hire the comparably skilled managers. The salary and benefits paid to managers for their services as set by the labor market are regular costs, and are not agency costs. Those labor market costs exist whether the firm is publicly or privately owned.

[124] *Cornfields*, *supra* note 2, at 145-48, 158, discussed more fully *infra* Part V.

pay V_E and not V_{OM} in the going private transaction. In the appraisal setting, the now cashed out shareholders receive the going concern value of the holdings that they sell, which are net of the agency costs.

Another implication is that the agency costs of the firm with dispersed ownership are reflected in the free cash flows of the firm. The agency cost concept includes the full cost of the managers' compensation, including that part of the compensation which is above what the firm needs to pay to hire the managers in the competitive labor market. It also includes any higher supplier costs, employee labor costs, etc., that the managers allow to creep into the cost structure because they bear relatively little of the loss. The agency cost concept may also include whatever revenue sources are lost if the managers are less attentive to customer needs once they are no longer the owner-operators of the firm. Finally, agency costs include the high bonding costs associated with the disclosure and other requirements of publicly traded companies.

Agency costs are thus another factor, aside from synergies, that contributes to change in control transactions. In a corporation with dispersed ownership, the agency costs show up as costs in the profit and loss statements. These costs go into the pockets (financial and psychological) of the managers. As costs to the firm, the agency costs are a deduction from the corporation's going concern value. Nor do they necessarily represent breaches of fiduciary duty. In the cash-out transaction, the reduction in agency costs accrues to the benefit of the new owner-managers. The reason is that their actions produced the reduction in agency costs, whether it was caused by lower filing requirement costs, reduced labor or other costs, or any revenue gains.

In our discussion below, we address the normative question whether V_{OM} is superior to going concern value as a valuation standard in appraisal proceedings, particularly in transactions where a controller squeezes out minority shareholders. For now, however, we again make a more limited normative claim, namely that reductions in agency costs arising from going private transactions are generated by the controller, not the firm, and a going concern value standard that denies the minority a share of such reductions is efficiency promoting.

D. The Benefits of Control

In the earlier section on third-party transactions, we focused on the potential for synergies as the primary gain from a change in control.[125] That is certainly the case for arms-length, third-party transactions. But many transactions that trigger the appraisal remedy are transactions involving a controller who cashes out the minority shareholders in a going-private transaction. Do control-related benefits arise in this situation? Exploring this question helps identify benefits in third-party transactions in addition to the synergies mentioned above.

[125] *Supra* Part III.B.

We believe that the finance evidence firmly supports a conclusion that there are benefits of control. That is, in an acquisition context, control shares can sell at a premium to non-control shares. This finding, however, does not logically imply that there is an implicit minority discount, as the term is used in Delaware appraisal cases. That finding merely indicates that control shares are more valuable than non-control shares. It does nothing to establish that non-control shares trade at a value less than V_E, a proposition that is the essence of the implicit minority discount claim. What we claim, however, is that the observed gap between the values of control shares and non-control shares is attributable to the value of control, a value that, as we explain directly below, is not appropriately considered part of the going concern value of the firm.

In their text Valuing a Business, Pratt et al. remark that a control block has a greater value than a noncontrolling interest because of the greater ability of the controller to direct the strategy of the firm.[126] Pratt lists five factors that are likely to determine the size of a control premium: They are the following: (1) nature and magnitude of nonoperating assets; (2) nature and magnitude of discretionary expenses; (3) perceived quality of existing management; (4) nature and magnitude of business opportunities which are not currently being exploited; and (5) the ability to integrate the acquiree into the acquirer's business or distribution channels.[127]

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The items in this list of causes of control premiums tell us a great deal about why control premiums are not components of the fundamental or intrinsic value of the firm. At least four of the five elements that determine the size of the differential between control shares and non-control ("minority") shares are not elements that a dissenting shareholder can or should recover from a cash-out transaction. Item (5) (the value of integrating acquirer and acquiree operations) is clearly a synergy, and not a component of value of the acquiree on a going concern basis. Item (3) (the potential for improved management) is less a synergy, but is certainly one of the potential benefits of the change of control that cannot be attributed to the firm as a continuing concern. Why? Because improved management would not happen but for the change in control. Put another way, "existing management" (Pratt's term) is part of the company's "operative reality" (*Technicolor*'s term) at the time of the merger. Since shareholders choose the directors who choose the managers, the shareholders do not get the value brought by a new controller who squeezes out the shareholders in order to make the management improvement.

Item (2) (the potential to reduce discretionary expenses) is simply a component of agency costs and, for reasons discussed above should not be included in fundamental or going concern value. Item (1) (nonoperating assets) may also fall into the agency cost category since nonoperating assets are presumably potential private benefits to whoever

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[126] PRATT, *supra* note 18, at 349. We follow Pratt's treatment of the benefits of control because of the Delaware courts' regular reliance on his treatise. For recent examples of the Delaware courts' reliance on Pratt's works in their valuation analyses, *see, e.g., PNB Holding* at *76 n. 105; *Gesoff v. IIC Indus., Inc.*, 902 A.2d 1130, 1158 n.159 (Del. Ch. 2005); *Delaware Open MRI Assoc's, P.A.. v. Kessler*, 898 A.2d 290, 337 n. 125, 339 n. 130, 340 nn. 134, 136 (Del. Ch. 2006); *Henke v. Trilithic, Inc.* at *41 n. 110; *Andaloro* at *65 n.68; *NBC Universal Inc. v. Paxson Communications Corp.*, 2005 Del. Ch. LEXIS 56 *28 n.33.

[127] PRATT, *supra* note 18, at 349.

is in control since their use does not affect earnings and other measures of business success.

The synergy-related control factors are excluded as a matter of statute, and properly so from an incentive perspective. The party that recognizes the potential synergies should benefit from them. The agency cost factors are excluded as a matter of case law, and appropriately so since agency costs are a cost to the dispersed-ownership firm and thus reduce the V_E of the firm.

The last of the five control premium elements described by Pratt et al. (item (4), unexploited business opportunities), may be different, at least in part. In one sense, a failure to exploit business opportunities might be chalked up to poor management, and be treated just like other agency cost components of a control premium. To the extent, however, that business opportunities are unexploited before the merger but are reasonably expected to be exploited thereafter, their value is appropriately viewed as part of fundamental or going concern value, and should be recoverable by minority shareholders in most circumstances. As we explained in *Cornfields*, assuming that the current corporate policy of the firm anticipates exploiting a business opportunity, then its value belongs to the firm and all the shareholders regardless of whether it has been exploited at the time of the merger.[128] To this extent, then, item (4) should be included in the value of the existing firm as the value of the firm's corporate policy. [129]

Consequently, of the five factors mentioned by Pratt et al. as affecting the size of the control premium, only item (4) can be said to include an element of value that should be included in the amount received by dissenting shareholders.

E. Summing Up – The Pratt Diagram

In the text by Pratt et al, there is a useful diagrammatic treatment that graphically expresses the four finance concepts developed thus far (the value of the firm, third party sale value, agency costs, and the benefits of control). [130] Pratt's diagram also introduces another concept – "discounts" – that we explore here and more fully below.[131]

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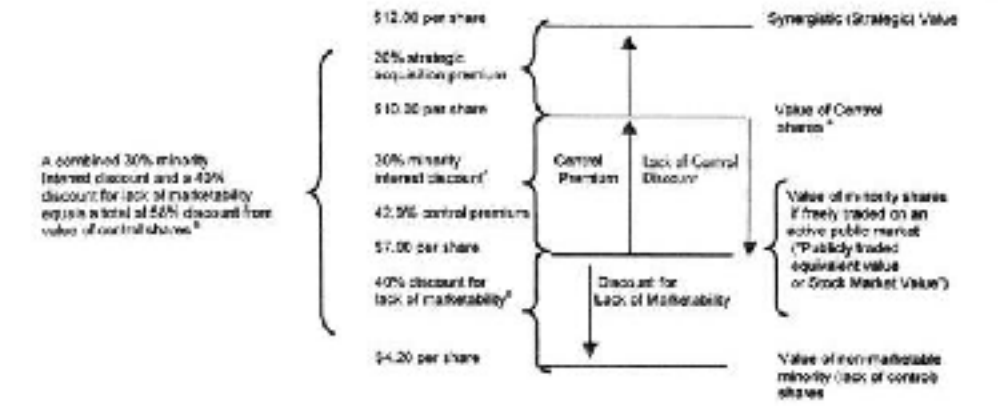
[128] *Cornfields*, *supra* note 2, at 145-48.
[129] *Id.* at 165.
[130] PRATT, *supra* note 18, at 347.
[131] *Infra* Part III.F.

Levels of Value in Terms of Characteristics of Ownership



Notes:

a. Control shares in a privately held company may also be subject to some discount for lack of marketability, but usually not nearly as much as minority shares.

b. Minority and marketability discounts normally are multiplicative rather than additive. That is, they are taken in sequence:

$10.00	Control value
−2.86	Less minority interest discount (0.30 × $10.00)
$7.00	Marketable minority value
−2.80	Less lack of marketability discount (0.40 × $7.00)
$4.20	Per share value of nonmarketable minority shares

c. Note that neither the minority/control nor the marketability issue are "all or nothing" matters. Each covers a spectrum of degrees.

Specifically, in this example, there is a marketability discount of $2.80 per share; a "lack of control discount" of $3.00 per share; and a synergies or third-party sale effect of $2.00 per share. These three discounts reflect, respectively: (1) market illiquidity creating a lack of marketability; (2) the value of control; and (3) the synergies created in a third-party sale.

For reasons to be discussed immediately below, under Delaware law a premium of $2.80 is added in appraisal to offset the illiquidity discount.[132] Put another way, the Delaware case law prohibits applying a discount for lack of marketability in order to arrive at the fair value to be awarded to the dissenters.[133] On the other hand, the synergies of $2.00 per share are not added, as a matter of law.

So far, none of this is controversial. The controversial part involves the so-called "minority" discount or control premium. In this example, the discount is 30 percent, which means that the shares to the controller (absent the synergies) are worth $10.00 per share, while to noncontrollers they are worth $7.00. The question is whether, under Delaware appraisal law, the extra 30 percent belongs to the controller or is a component of fair value to be shared with the minority shareholders.

As discussed above, the shares should be appraised at a value of $7.00 and not $10.00. The 30 percent "minority discount" includes the agency costs and the additional

[132] PRATT, *supra* note 18, at 347.

[133] Cavalier Oil Corp. v. Harnett, 564 A.2d 1137, 1144 (Del. 1989) (in determining the dissenting shareholder's proportionate interest in the value of the going concern, "the Court of Chancery is not required to apply further weighting factors at the shareholder level, such as discounts to minority shares for asserted lack of marketability.").

value brought by any change in the value of management. As we explain more fully below,[134] Pratt's use of the term "minority discount" can be somewhat misleading. It is evident from context that Pratt is simply contrasting a valuation that is premised on possession of control (the $10 "value of control" shares, in his diagram) and that therefore gives effect to "changes that only a control owner would (or could) make" from a valuation based on "income projections that merely reflect the continuation of present policies … ."[135]

Pratt's treatment of the minority discount is on par with other leading valuation textbooks. Damodaran discusses the control premium entirely as value brought by changes in management. He differentiates between the present value of the corporation and its optimal value, where the difference reflects the changes in policy brought by management.[136] In a recent article, Damodaran is more explicit, stating "that the value of controlling a firm has to lie in being able to run it differently (and better).[137] To the same effect is Mercer, who presents a diagram, similar to the one presented by Pratt et al, in which (1) the "control premium" and the "minority interest discount" are identical, (2) those adjustments equally explain the difference between "control value" and "freely tradable" "minority interest value," and (3) the so-called "minority interest value" can be derived from a DCF analysis, *i.e.* a valuation generated "by build-up methodologies that develop capitalization rates by estimating required rates of return in relation to public markets."[138]

Having now seen that the so-called "minority discount" as expressed by Pratt and others is simply a discount that eliminates the benefits of control, we now turn back to the question of identifying other forms of discount, namely, discounts for lack of marketability and market related discounts more generally.

F. Discounts

The topic of discounts from fair value is a complex subject, and perhaps more confusing than enlightening. Some of the complexity is generated by the informal manner in which discounts are described in appraisal cases and law review articles. Considerable mud has been added to the water, moreover, by the somewhat haphazard introduction of the implicit minority discount into Delaware appraisal law.[139] We think it can be greatly simplified in the context of our paper.

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[134] *Infra* Part IV.B.

[135] The quoted language is from Pratt's treatment of the subject in the third edition of his treatise on business valuation, where he discusses whether a DCF analysis produces a "control value" or a "minority value." PRATT, et al., VALUING A BUSINESS 194-195 (3rd ed. 1996).

[136] DAMODARAN, *supra* note 103, at 457.

[137] Aswath Damodoran, *The Value of Control: Implications for Control Premia, Minority Discounts and Voting Share Differentials*, (Stern School of Business, June 2005), *available at* http://pages.stern.nyu.edu/~adamodar/pdfiles/papers/controlvalue.pdf.

[138] Z. CHRISTOPHER MERCER, VALUING FINANCIAL INSTITUTIONS 199 (Business One Irwin 1992).

[139] The haphazard development of the IMD in Delaware appraisal law is documented in Part II *supra*.

We have noted three different measures of firm value: third-party sale value (V_{3PS}); the fundamental value of the firm as a going concern (V_E); and the value of the firm where the owners are the managers (V_{OM}).

The short answer to the discount/premium question is the following: The shareholders should always receive the pro rata value of V_E. They do not by law and should not by finance theory receive the pro rata value of V_{OM} or V_{3PS}. When financial markets do not price the shares of the company so that the sum of the share value equals V_E, then adjustments need to be made. In such cases, the market has created a shareholder level discount to the company level V_E. Since shareholders receive the pro rata value of the corporation (the V_E), such discounts have to be offset by an adjustment.

We now turn to a brief review of market discounts that sometimes cause shares to trade at a discount to their going concern value.

1. Illiquidity Discounts

The one key type of discount is the one we already discussed – the discount involving illiquid securities. Indeed, once the obscurities are removed, this may be the only discount worth considering.

In a perfectly efficient capital market there are no discounts from a firm's value (V_E). But not all corporate common stock trades in efficient capital markets. Indeed, close corporations do not trade at all on a public exchange and there is no reason to assume that the sales that are made between a willing buyer and a willing seller are at the correct price.

It is widely accepted that illiquid financial securities will sell at a discount to their proportional share of V_E to reflect investors' preference for liquidity.[140] In such cases, the aggregate sum of the value of the shares does not equal the value of the firm calculated using discounted cash flow analysis. If all dissenting shareholders in illiquid stock were paid the value of the stock, their payment would be lower than the pro rata value of the corporation.

The result would be a windfall for the controller. Fair value is the pro rata value of the corporation's V_E. If this were not the case, then squeeze-outs of illiquid positions would always generate profitable transactions for the controllers or managers who triggered the squeeze-out.[141]

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[140] DAMODARAN, *supra* note 103, at 508.

[141] This assertion is settled as a matter of Delaware law. *E.g.*, *Cavalier Oil*, 564 A.2d at 1145. In commenting on this paper, however, several finance professors took a position less favorable to minority shareholders: specifically, they not only challenged the claimed existence of an "implicit minority discount," but made the further (and not inherently implausible) claim that shares that are purchased at a discounted price due to a lack of marketability should be valued in a manner that gives effect to a discount for lack of marketability, and that the contrary Delaware law standard gives minority shareholders a windfall.

The illiquidity discount needs to be corrected, and it is, under Delaware appraisal law. In calculating the appraisal award, the value awarded to petitioning shareholders is not reduced to reflect the illiquidity of the shares they held. Instead, they receive their pro rata value of the company which correctly prices their shares.

2. Closed-End Funds

Many closed-end funds trade at a discount to their net asset value (NAV) and the discount can be both persistent and material. The source of the discount has been long debated in the finance literature without a consensus being reached. Given the lack of consensus on why closed-end funds frequently trade at a discount to their NAV, it is unfortunate that one of the formative cases in the Delaware Supreme Court's appraisal jurisprudence concerns the going-private transaction of Tri-Continental, a closed-end mutual fund.[142]

In *Tri-Continental*, the Supreme Court explained the discount as caused by "the inability of the common stockholder to withdraw his proportionate interest in the assets of the company."[143] The explanation is at best confusing. It is true that investors in open-end mutual funds can cash out at NAV. Hence, the Supreme Court's utterance is true with respect to the difference between open and closed-end funds. The confusion occurs because closed-end funds are much more like ordinary corporations with respect to the lack of a cash-out option. If shareholders wish to terminate their investment in a corporation, they have to sell their shares in the financial market. The corporation does not ordinarily have to redeem the shares at the company's going concern value.[144]

Tri-Continental may thus be one of the inspirations for the implicit minority discount. Once the Court accepted the argument that financial markets persistently under price closed-end funds because of the lack of cash-out option, then it is a simple, if faulty, logical jump to conclude that all corporations trade at a persistent discount. As discussed above, the Court in *Tri-Continental* did not itself make this error.[145]

Some have suggested that the observed share price discount in closed-end funds is related to the illiquidity of the assets held by the fund. If the securities held by the closed-end fund do not trade freely in liquid financial markets, then one of the equilibrating mechanisms of market efficiency is blunted. In such a case arbitrageurs

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[142] Tri-Continental Corporation v. Battye, 74 A.2d 71 (Del. 1950).
[143] *Id.* at 73.
[144] Edward B. Rock & Michael L. Wachter, *Waiting for the Omelet to Set: Match-Specific Assets and Minority Oppression in Close Corporations*, 24 J. CORP. L. 913, 921 (1999).
[145] We do not want to push this theory too far because the court's explanation is incoherent. On the one hand, the court emphasizes that the problem facing Tri-Continental's shareholders is that they have to sell their shares in the market in order to be cashed out. At the same time, the court does not appear to believe that the securities of stock, preferred stock, and bonds held in the portfolio, suffer from the same problem. The court offers another explanation for the discount as well, this turning on the leverage involved in closed-end funds. But here again, what is true for Tri-Continental is true for General Electric.

cannot buy the under-priced closed-end fund and sell the basket of securities held by the fund.[146] However, the empirical evidence to support the illiquidity causal argument is weak.[147] Moreover, here again, what is true for closed-end funds is true for corporations in general, indeed even more so. The assets of most corporations are plant, equipment, intellectual property, etc, and these assets are certainly more illiquid than are the securities—even illiquid securities—held by closed-end funds.

So what does explain the puzzle? To some, the discount, and the fact that it varies inexplicably over time, reflects irrationality. Others, however, offer rational explanations. For example, Berk and Stanton attribute the discount to the tradeoff between managerial ability and fees.[148]

What is to be made of the different explanations? Suppose that Berk and Stanton are correct in their assessment of the closed-end fund puzzle. Their explanation is equivalent to an agency cost explanation – managers may take in fees more than they deliver in performance. Closed-end funds in this way are like regular corporations with managers who may have better or worse than average ability to manage. Unlike open-end funds where the number of shares outstanding contract when they do poorly, the closed-end funds have a fixed number of shares, so only the value of the shares changes. Hence, the badly performing closed-end fund managers are like badly performing managers of corporations. If the market anticipates that poor management will continue, then the discount appears and can persist.[149]

Because the Berk and Stanton explanation is generally true for corporations then the closed-end story fits squarely with the agency cost explanation developed above. The only difference is that agency costs may be more visible in the closed-end context because the performance of closed-end managers – their ability to outperform the markets

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[146] *See* Berk, *supra* note 33, at 3 ("If a fund owns a lot of restricted stock or other illiquid assets, which do not trade freely, its NAV may not accurately reflect its true value, in which case the fact that it does not trade at its NAV is not particularly surprising."). *Tri-Continental* appears to be such a case. Tri-Continental's portfolio consisted of bonds and preferred stock equaling 60.8 percent of the portfolio. The remaining 39.2 percent were in common stock. The Supreme Court explained the discount as caused by "the inability of the common stockholders to withdraw his proportionate interest in the assets of the company." 74 A.2d at 73. The explanation is confusing. Shareholders in any corporation have to sell their shares if they wish to monetize their proportionate interest in the corporation. What was true for Tri-Continental is true of any corporation.

[147] Berk, *supra* note 33, at 3. Moreover, while the securities held by Tri-Continental may have been illiquid, the assets of most operating companies are even more illiquid. Assets of operating companies are heavily plant and equipment related and these assets rarely trade freely in secondary markets.

[148] *Id.* at 2.

[149] The method for calculating the V_E of the closed-end fund raises difficult empirical questions, but is conceptually the same as the problems normally confronting the appraisal court. The contending parties will present alternative calculations of the funds' V_E. Presumably, the respondent is the closed-end fund itself who is engaged in a going-private transaction. In that case, the respondent's expert will do what respondent experts normally do, which is to paint a bleak picture of the future return of the fund, and the petitioners' expert will argue the opposite. The difference from the traditional case is that the evidence will be based on the fund's market price which presumably incorporates the market's assessment of the costs and benefits of the fund manager.

versus the fee they charge for managing the portfolio – is more observable than the performance of corporate managers.

There are no new implications for Delaware appraisal law: shareholders receive the pro rata value of the corporation's V_E. In other words shareholders should receive an award that includes either the extra costs or the extra benefits created by management's performance. In neither situation should the effect be understood as a "discount" or a "premium." Any reduction in value, so explained, is not due to illiquidity or market inefficiency. The costs or benefits are real and should be included. Hence, in the case where value is reduced, the shareholders should receive the reduced amount. They paid (presumably less) for poor managers and they are charged for it.[150]

The agency cost explanation of the discount for closed-end funds contains an element of irrationality on the part of the original purchasers of the newly issued shares. The irrationality is that these closed-end funds are normally sold at their NAV and then open trading at a discount to their NAV. These original investors lose out.

But this does not pose a problem for appraisal analysis. Investors who buy shares at a premium to the corporation's V_E are not protected. Indeed, the irrationality argument on the part of the original investors is a small slice of a bigger story that emphasizes occasional market irrationality in the pricing of stocks, especially in initial public offerings.[151] In the broader context, irrationality is ambidextrous and can give rise to discounts or premiums. Appraisal law appropriately ignores both when it adheres to its standard of awarding the proportionate share of the corporation's V_E.

3. Nonvoting Stock

The question of how to treat nonvoting stock, restricted stock, and different classes of stock in general raises continuing problems. Different classes of stock have differential control or economic rights as well as different limits on market liquidity. While Delaware law has properly stated that there is no discount for market illiquidity, the position may be different with respect to voting and economic rights.

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[150] It is certainly conceivable, on the other hand, that a firm that is unusually *well* managed by a controlling shareholder may have minority shares that trade at a price greater than what the share price would be if the firm's ownership were widely dispersed and subject to control by a less capable management. Indeed, one suspects that this may be the case with respect to Berkshire Hathaway under management by Warren Buffett. While not asserting that Berkshire Hathaway's stock has been overvalued in relation to its intrinsic value (which he defines as "the discounted value of the cash that can be taken out of a business during its remaining life"), Warren Buffett has insisted that "fairness prevails when market price and intrinsic value are in sync" and that managers can help bring about this result through their policies and public communications. Warren Buffett, 1996 Chairman's Letter to Berkshire Hathaway Shareholders, *available at* http://www.berkshirehathaway.com/letters/1996.html; 2005 Berkshire Hathaway Annual Report to Shareholders, at 77, *available at* http://www.berkshirehathaway.com/2005arn/2005ar.pdf. At the very least, then, Buffett thus clearly rejects the IMD premise of inherent undervaluation in share market prices.

[151] *See generally Andrei Shleifer*, Inefficient Markets: An Introduction to Behavioral Finance (2000) (surveying psychological and institutional evidence that investors do not always behave rationally).

Take the case of a class of common stock that has no voting rights but does have the same dividend rights and a residual claim equal to that of the voting stock. In many such cases the voting stock sells at a premium to the nonvoting stock, perhaps reflecting the probability that the holders of the voting stock will exercise their rights to sell the stock at a premium in a change of control transaction.

Suppose, however, that in a cash-out merger, the voting stock is not cashed out at a premium and the holders of the voting stock perfect their appraisal rights. Should they be awarded a premium over their proportionate share of the corporation's aggregate V_E? Alternatively stated, should the nonvoting stock be discounted relative to V_E? In this case, the legal rule that the shareholders have a right to their pro rata going concern value provides one clear answer to the question. Specifically, since the two classes of stock enjoy equal residual claims to the corporation's free cash flow and share equally in any asset sale or liquidation, both should be accorded the same value in appraisal. A different rule would require recognizing and giving valuation effect to characteristics of the shares themselves, an approach that seems inconsistent with prevailing doctrine precluding premiums or discounts at the "shareholder level."[152]

The equal treatment rule suggested above, however, may prove too much. We do not discuss in this article the more complex problem that arises in the case where the classes of stock differ as to their dividend rights or residual claim in liquidation. In this case, the classes of stock could quite appropriately be accorded different values in appraisal, yet such differential treatment similarly offends a broad prohibition of taking into account characteristics that operate at the "shareholder level." Exactly how or whether that differential treatment might be implemented, however, is beyond the scope of this article.

IV. THE TREATMENT OF FINANCE IN DELAWARE'S APPRAISAL LAW

A. Consistent with Finance, but with One Exception

Delaware appraisal law is consistent with the modern finance that it implements[153] in most respects. In modern financial theory, the value of the corporation—the going concern value in legal terms—is calculated as the discounted future cash flows generated by the company's assets.[154] In the appraisal remedy, the favored method for calculating the fair value of the corporation is the preferred method in finance for calculating the value of the corporation; that is, the discounted future free cash flows or DCF.[155] In both finance theory and in the appraisal remedy, the value of a

[152] *See* Cavalier Oil Corp. v. Harnett, 564 A.2d 1137, 1144-45 (Del. 1989); Rapid-American Corp. v. Harris, 603 A.2d 796, 801, 804-06 (Del. 1992).
[153] As required in *Weinberger*.
[154] *Supra* notes 117 and 150.
[155] *Supra* note 6.

shareholder's stock is the pro rata value of the discounted future free cash flows (again using the simplifying assumption that the corporation's investment is entirely equity).[156]

In addition, the case law embeds the finance treatment of agency costs.[157] The DCF method calculates the value of the firm net of agency costs. Hence, the court awards shareholders the going concern value or V_E, which is net of agency costs. The same can be said for the value of control. As discussed above, the value of control includes both agency costs and the costs associated with synergies or gains that would occur in a change of control transaction. Once the case law adopts the DCF method to estimate the value of the company (equation (3)), implicit in the courts' conclusion is the recognition that what petitioning shareholders receive excludes the benefits of control and includes the effect of agency cost.

Delaware's appraisal law has also incorporated modern finance theories in determining the appropriate discount rate. The discount rate used in appraisal proceedings is typically estimated using the capital asset pricing model (CAPM) and the weighted average cost of capital (WACC).[158] Indeed, the Court of Chancery is so informed by current thinking that it applies a version of the Three-Factor CAPM theory. In particular, it will add to the discount rate an estimate of the excess returns experienced by small stocks.[159] It also attempts to adjust for the discount rate effects caused by the higher probability of bankruptcy in highly-levered firms.[160] Finally, when using comparable companies to estimate the company's cost of capital, the court dutifully adopts the mechanics of the unlevering-relevering process.[161] The problems that arise with respect to estimating the discount rate for the types of companies involved in

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[156] *See* PRATT, *supra* note 18, at 31 (defining intrinsic value as "based on the perceived characteristics inherent in the investment). The fundamental value of the firm is also close to the legal term "intrinsic value," although that term implies some value that is inherent in the assets themselves and, perhaps, suggests that there is a single number rather than a range of values. Indeed, if the required data were known precisely, the corporation being appraised would have a single value, representing its V_E. Of course, the required information, since it represents estimates of the future, cannot be known with precision. Informed individuals can have different views about the future free cash flows and the appropriate discount rate. Hence, the result, empirically speaking, is a range of values that define the corporation's V_E. This is the rationale behind the traditional practice of using a range of alternative methods and reasonable assumptions to create a range for the company's going concern value. BREALEY, MYERS & ALLEN, *supra* note 106, at 253-56 (describing the Monte Carlo simulation method, which produces a range of values to accommodate forecasting error).

[157] *See supra* Part III(C).

[158] *E.g.*, *See, e.g., Delaware Open* MRI, 898 A.2d at 338-339 (discussing the role of CAPM, and its tensions with the "build-up model," in estimating WACC); *Lane v. Cancer Treatment Ctrs. of Am.*, 2004 Del. Ch. LEXIS 108 *114 (Del. Ch. 2004) (describing the CAPM method of deriving cost of equity in estimating WACC).

[159] *E.g., Gesoff v. IIC Indus., Inc.*, 902 A.2d at 1159-1160 ("The small-size premium, although somewhat controversial, is a generally accepted premise of both financial analyses and of this court's valuation opinions."); *Delaware Open MRI*, 898 A.2d at 338-339 n. 129; *ONTI*, 751 A.2d at 920 ("this court has traditionally recognized the existence of a small stock premium in appraisal matters").

[160] Union Ill. 1995 Inv. L.P. v. Union Fin. Group, Ltd., 847 A.2d 340, 362-63 (Del. Ch. 2000) (applying the three-factor Fama and French CAPM model because it "helps capture the risk associated with possible insolvency and other problems in highly leveraged firms").

[161] *Andaloro*, 2005 Del. Ch. LEXIS 125 at *58.

appraisal are well beyond the scope of the present paper, but it is clear that the Delaware courts attend studiously to financial expertise in identifying and resolving those problems.

So far so good, generally accepted finance principles and the Delaware valuation case law are consistent. Data limitations prevent the courts from exactly replicating modern finance's valuation theory, but otherwise they are reasonably tracking any of the textbooks. But then the remarkable divergence occurs. In adopting the IMD, the Delaware courts explicitly or implicitly assert, *as a matter of finance*, that while the value of the firm is the discounted free cash flows, the common stock of corporations—even in the most informed and liquid financial markets— is persistently and consistently priced at values below the pro rata value of the free cash flows.[162]

If this were true, then the courts would be correct in mistrusting the comparable company analysis for valuing firms. There is no finance textbook, however, that stands for this proposition. To the contrary, most textbooks assume that for companies that trade in informed and liquid markets, the value of the stock is the pro rata value of the company.[163] No discounts or premiums need to be added or subtracted from the equation. If the IMD were correct as a matter of finance, the textbooks would say that the common stock is first valued at the pro rata value of the company's free cash flows, but then discounted by approximately 30 percent since only minority shares are being traded. But we are unaware of any textbooks that make such a claim.

Consequently, the only weed in this otherwise beautiful garden of finance methods is the IMD. How can the courts, after dutifully following the dictates of *Weinberger* to apply current methods of finance, have latched onto the IMD? As we discussed in the section on case law,[164] the courts believe (or have been led to believe) that they are being faithful to finance theory when applying the IMD. That is, the courts believe that they are applying finance theory when they recognize the implicit minority discount and adjust for it. How is it that they arrived at this position?

B. The Supposed Finance behind the Implicit Minority Discount

To be fair, the Delaware courts did not invent the IMD; some of the experts who testified in appraisal proceedings presented the IMD concept to the courts, as we have already reviewed.[165] What was their reference point? The main reference point is the case history discussed above, which emphasizes the happenstance involving the expert testimony that allowed the IMD concept to take root. Certainly aiding this process was the courts' long standing distrust of market prices, a perspective also emphasized above.

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[162] *Supra* Part II(D). The IMD is thus, put mildly, in tension with the observation by the Delaware Supreme Court that "a well-informed, liquid trading market will provide a measure of fair value superior to any estimate the court could impose." Applebaum v. Avaya, Inc., 812 A.2d 880, 890 (Del. 2002).
[163] *See supra* notes 116-117; *see also* Carney & Heimendinger, *supra* note 21, at 857-58 ("[t]he basic conclusion of the Efficient Capital Markets Hypothesis (ECMH) is that market values of companies' shares traded in competitive and open markets are unbiased estimates of the value of the equity of such firms.").
[164] *Supra* Part II.
[165] *Id.*.

A frequently cited academic reference for the implicit minority discount is John Coates. In his article, Coates says that if courts determine fair value using actual trading prices for comparable companies, then those trading prices include a financial discount.[166] The result is that a market multiple determined in this fashion will be too low because it reflects the discount. Consequently, the comparable company method will understate fair value. Coates, however, appears to accept the implicit minority discount as an empirical regularity, and does not present an analysis of the finance behind the IMD. Coates' only reference for this IMD claim is Pratt's assertion that:

> If conditions in the market for companies in the industry at the valuation date are such that controlling interests can be sold for more than the aggregate of the publicly traded minority shares, then a control premium probably is warranted if valuing a controlling interest.[167]

This assertion is unquestionably true. But it advocates application of a premium only when "a controlling interest" is being valued; it says nothing to the effect that noncontrolling shares necessarily trade at prices below the V_E of the firm. The only way one can conclude that it does suggest such an adjustment is because it uses the term "minority shares." In Delaware's jurisprudence, no discounts due solely to minority status are allowed because the shareholders should receive the pro rata value of the going concern. Like a number of other finance experts, however,[168] Pratt et al are using the term differently, purely to distinguish valuations of control blocks from valuations of shares generally. Thus, in Pratt et al.'s discussion the term "minority" as a basis for valuing shares is applied to valuations whether achieved through the use of discounted cash flow analysis or comparable company analysis.

By the Fourth Edition, Pratt et al.'s treatment is very different. Now, the authors are leaving nothing to chance. While the Third Edition was perhaps understandably misquoted to support the existence of an implicit minority discount, the Fourth Edition cannot be so used. First, they discuss that price/earning ratios, one of the key market multiples used in comparable company analysis, vary considerably over time and that takeover premiums vary inversely with P/E ratios. Specifically, they point out that share markets may *over*price as well as underprice:

> Many times individual stocks and even entire industries may be overpriced. … In such instances, a public market noncontrolling interest stock price may be equal to – or even greater than – a controlling interest stock price.[169]

Then the authors formally refute the rote addition of the implicit minority discount. Specifically, they state:

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[166] Coates, *supra* note 27, at1251 n.46.
[167] PRATT ET AL., *supra* note 81, at 304-05.
[168] *See supra* notes 135-6 and accompanying text.
[169] PRATT, *supra* note 18, at 355.

> Valuation analysts who use the guideline public-company valuation method and then automatically tack on a percentage 'control premium' … had better reconsider their methodology.[170]

In short, we submit that the Delaware courts, Coates and others[171] have mistakenly attributed to Pratt a claim – that the IMD systematically exists – that he never made, and that he now clearly disavows. If there is any other financial scholarship on which the courts or experts have relied to assert the existence of the IMD, it has not come to our attention.

C. *Why the Delaware Bench and Bar Fell Into Error.*

Before concluding that the Delaware courts should return to their initial rejection of the IMD, we consider it worthwhile to examine why those courts might be reluctant to abandon the concept, and why they might have been inclined to adopt it as they have.

Most directly, we suspect that the Delaware courts' embrace of the IMD has arisen from the following two-step syllogism. The first step is unexceptionable: a controlling block of shares ordinarily has a value in excess of V_E, or going concern value.[172] This value arises from legal rights enjoyed by a controller. The bundle of control rights includes the ability to squeeze out the minority at any time the controller chooses. It also includes the controller's right to sell control at a premium to the shares' market value.

The second step is the inference that shares that are *not* part of a controlling block therefore trade at a price less than their proportionate share of V_E. The acceptance of this second step was made much easier by the work of analysts, like Pratt, who characterized appraisals of non-control shares as "minority valuations."[173] The second step has also been helped along by the suggestion that minority shares of a corporation that has a controlling shareholder tend to trade at a discount relative to the V_E of the firm.[174] Accordingly, the characterization of a valuation as a "minority valuation" tended to lead practitioners and judges into thinking that shares lacking control necessarily trade at a discount to V_E.

But, the second step does not follow logically from the first. As discussed, the relevant question is "who owns the value that goes with control." The answer is that

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[170] *Id.* at 357 (citing Shannon P. Pratt, "Control Premiums? Maybe, Maybe Not—34% of 3rd Quarter Buyouts at Discounts," *Shannon Pratt's Business Valuation Update*, Jan. 1999, pp. 1-2).
[171] Professor Hamermesh was one of these "others." Commenting on *Kleinwort Benson v. Silgan Holdings, Inc.*, Hamermesh observed in 1995 that "the unadjusted use of comparative market analysis as a measure of 'fair value' improperly substitutes a market value approach for the 'proportionate share of enterprise value" approach, and will tend to understate 'fair value.'" BANK AND CORP. GOV. L. REP. 862, 862 (Aug. 1995).. The fatal flaw in this comment was its unsupported assumption that a share lacking control necessarily has a value substantially below the proportionate share of the going concern.
[172] *See supra* Part III(D).
[173] *See supra* note 167.
[174] *See supra* note 35.

control rights can only be owned by a controller. Take the case of a publicly traded company that has no controller. Efficient market theory states that the shares of this company trade at the pro rata value of the corporation as a going concern.[175] Without a controller, there is no value of control embedded in the stock price. Enter a would-be controller who bids for the stock. It is the entrance of the controller that creates any potential control value – by capturing synergies with the assets already owned by the new controller or by reducing agency costs through managing the company differently.

Non-controlling (so-called "minority") shares thus do trade for less than control shares involved in a change of control transaction. The reduction in agency costs means that the private corporation has a higher value (V_{OM} instead of V_E) than does the public company. But does this suggest a wrongful discount?

The answer is that there is no discount to going concern value, let alone a wrongful discount. The gains from the transaction would not exist but for the going-private transaction and consequently, the gains belong to the acquirer by statute.[176] Similarly the gains in the going-private transaction are not double-dipping from the finance perspective. The initial owner-managers received a price in selling the shares that bore the burden of anticipated agency costs,[177] and hence owner-managers buying back the shares should be able to pay a price that likewise bears the burden of such agency costs. In both transactions, the shares trade at the firm's V_E with the firm constituted as a publicly held firm. So, the minority shareholders do not and should not get either the benefit of the newly private company's reduction of agency costs or the benefits of control.

What the implicit minority discount accidentally accomplishes is to introduce a "third-party sale value lite" standard in lieu of the traditional proportionate share of going concern value standard. Under this "third-party sale value lite" standard, courts invoking the IMD take a CCA result and add a premium based on company acquisition data, and from that result they deduct some estimate of synergies.[178]

Third-party sale value lite is thus similar to our V_{OM}. That is, while the dissenting shareholders do not get the synergies, they do get the benefits of control (in the form of reduced agency costs) that arise as a consequence of the transaction. However, V_{OM} is clearly not the valuation standard established in Delaware appraisal law because it awards not going concern value, but the additional value that is created by the transaction.

From an efficiency perspective, replacing going concern value with V_{OM} would promote some inefficiencies because it would de-incentivize value enhancing transactions because those who promote the efficiency gains would not be rewarded for their action. However, V_{OM} does have distributional aspects in terms of affording better protection of minority shareholders' interest. If one believed that the courts' use of the

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[175] Carney & Heimendinger, *supra* note 21, at 857-58.
[176] *Supra* note 7.
[177] *Supra* note 122.
[178] *Supra* note 98.

financial tools led them to systematically under-compensate minority shareholders, then V_{OM} would ameliorate the problem. We discuss this issue in greater detail in the next section.

There may be another explanation, based on the concept of asymmetric information, for the Delaware courts' willingness to embrace the idea (IMD) that market prices do not reflect the going concern value of the company. That is, managers know more than the market and can manipulate information to their advantage. Since managers are better off financially and enjoy greater job tenure when their publicly traded shares trade at a high value, the manager has an incentive to overstate the good information and to hide the bad information.[179] This then, it might be argued, leads to publicly traded shares trading at a discount.[180] The market overreacts, negatively, to the prospect of managerial over optimism or concealment of bad news.

While the argument is correct as to the existence of asymmetric information, it holds no obvious implications for the question as to whether market prices reflect going concern value. Suppose all corporations wear comparably rosy glasses. When the market learns the color, it will adjust all market prices accordingly. The market adjusts to systematic bias in the predictions of corporate managers.

Of course, the analysts and investors may incorrectly settle on a discount to apply to individual companies, but there is no reason to assume that the discount is always too low. In fact, the bias has to be unsystematic because the market can price in any systematic bias. In other words, the market may sometimes discount by too much or too little, and since there is no reason for the market to bias its incorrect estimates in either direction, the errors will not lead to a systematic underpricing of publicly traded shares.

Moreover, if one assumes that companies' public pronouncements are made with rose colored glasses, then the most suspect projections would be those of the company being appraised. This would cause the appraised company's own projections to be faulty. However, management projections prepared prior to the company's decision to squeeze out the minority shareholders are treated by the court as the most reliable evidence as to the going concern value of the company, and appropriately so.[181] Projections made in a neutral setting, prior to a decision to squeeze out minority shareholders, provide reliable evidence as to the firm's going concern value. In the implicit minority discount, however, it is the stock price of the comparable companies that is under a cloud of

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[179] *See, e.g.*, Donald C. Langevoort, *Resetting the Corporate Thermostat: Lessons from the Recent Financial Scandals About Self-Deception, Deceiving Others and the Design of Internal Controls*, 93 GEO. L. J. 285, 306-07 (2004) (describing managerial incentives affecting information reporting).

[180] Coates makes the asymmetric information argument. Coates, *supra* note 27, at 1275-1276, 1276 n.80 (citing Victor Brudney, *Efficient Markets and Fair Values in Parent Subsidiary Mergers*, 4 J. CORP. L. 63, 71 (1978)).

[181] *E.g., Travelocity.com*, 2004 Del. Ch. LEXIS at * 21-22 ("Delaware law clearly prefers valuations based on contemporaneously prepared management projections because management ordinarily has the best first-hand knowledge of a company's operations."); *Gilbert v. MPM Enters*., 709 A.2d 663, 669 (Del. Ch. 1997), *aff'd,* 731 A.2d 790 (Del. 1999) (accepting management forecasts for DCF purposes absent evidence of unreliability);

suspicion. Consequently, for the asymmetric information argument to serve as support for the IMD, the untenable premise has to be that financial markets are not only systematically biased, but are also biased in the same direction all of the time.

Alternatively, suppose that the courts want to buy into behavioral finance which suggests that stock market prices reflect human errors as well as discounted cash flow, or, indeed, any theory that allows for systematic market inefficiencies. Even with this supposition, the IMD fares no better. Behavioral finance does not at all suggest a systematic under pricing of stocks. Indeed, behavioral finance became more popular since 2000 as providing an explanation of irrationally exuberant stock prices.[182] The claim then was that stock prices were far in excess of any rational set of assumptions with respect to the growth rate or discount rate used to calculate the corporation's discounted free cash flows. The same is true of any theory of market inefficiencies. If markets are inefficient, as originally suggested by the Delaware courts in *Chicago Corp. v. Munds*, then "dejected melancholy," otherwise known as the IMD, gives way, from time to time to "exhilarated enthusiasm"[183]

In short, any theory with respect to market mispricing of stock with respect to going concern value has to allow for stock prices that are "too high" as well as "too low." The implication for appraisal law is that the court could never simply assert an IMD of 30 percent, or any other value. Instead, the court would have to adopt a case-by-case approach, with experts opining on whether they believe that market prices (i.e., market prices for comparable companies) are either higher or lower than the pro rata value of their equity. We think that these are not waters into which the Delaware courts will wish to plunge.

V. PULLING UP THE WEED: DOES REJECTING THE IMD IMPAIR THE UTILITY OR FAIRNESS OF THE APPRAISAL REMEDY?

We suspect that those who would advocate the continued use of the IMD, or, even more extreme, the adoption of a third party sale value standard, hold that conventional financial analysis is inadequate to the task of protecting against opportunistic conduct by controlling stockholders. We are sympathetic to this concern, but, as discussed in this Section, we believe that the IMD is the wrong tool, conceptually and practically, to deal with this concern.

First, we find this concern attenuated at best in cases involving a cash-out merger of a corporation without a controlling stockholder. In cases without a controlling shareholder, the law governing control transactions that cash out existing shareholders provides other sources of protection. The shareholder vote on the merger affords a considerable check on abuse,[184] as does the fiduciary duty of the board of directors, which requires the directors to obtain the highest current value reasonably available for

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[182] *See, e.g.*, ROBERT J. SHILLER, IRRATIONAL EXUBERANCE (2000).
[183] 172 A.2d 452, 455 (Del. Ch. 1934).
[184] *E.g.*, DEL. CODE ANN., tit. 8, §251(c) (merger requires approval of majority of outstanding shares).

the shares.[185] Indeed, assuming the board acts appropriately, the cashed-out shareholders are likely to receive some of the synergy value (in V_{3PS}) and some of the value of control inherent (in V_{OM}). More generally, any time that the squeeze-out transaction involves a firm without a controlling shareholder, the market for corporate control can work its magic as long as the board fulfills its fiduciary duty of maximizing the sale price.

The same is, or at least should be true, even in the case where the going-private transaction is initiated by the current management. By offering to buy the company for cash, the inside managers, turned buyer, have triggered *Revlon* duties.[186] Independent directors should shop the company, so that shareholders are likely to receive third-party sale value for their shares. This, then, is not a problem case.

The more troublesome case is where an existing controller chooses to take the company private. Any independent members of the board of directors can no longer shop the company because the controller can vote its shares and block any merger other than the one it is proposing.[187] This is a right of control, and it is not wrongful.

The board does have an obligation to secure a fair value for the shares, and any purchase price is subject to entire fairness scrutiny even if the decision is made by the disinterested board members.[188] In addition, dissenting minority shareholders can seek appraisal or quasi-appraisal in the case of successfully alleged wrongful behavior by the controller.[189]

Even so, we are concerned by the possibility for wrongdoing. The problem is that the additional check afforded by the market for corporate control does not exist. The only possible transaction is the one proposed by the controller, even if another bidder were to propose a more attractive offer. Consequently, we worry that the controller may try to steal the company from the minority shareholders by offering too little; that is, by offering less than the company is actually worth (V_E).

It is this problem of controller wrongdoing that focuses attention on the efficiency of the legal rule. If the controller can use its informational advantages, it may be able to take the company private without paying going concern value. How can this problem be offset? Does the IMD provide a solution? If the IMD provided a remedy to this problem, then perhaps its failings in finance theory could be overlooked.

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[185] Revlon, Inc. v. MacAndrews & Forbes Holdings, Inc., 506 A.2d 173, 182 (Del. 1986) (holding that in a sale of the company, directors have a duty to obtain highest reasonably available current value).
[186] *See, e.g.*, Mills Acquisition Co. v. Macmillan, Inc., 559 A.2d 1261, 1282 (Del. 1989) (noting directors' duty "to obtain the highest price reasonably available for the company," where two directors and senior officers were particpants in the challenged leveraged buy-out).
[187] *See, e.g.*, McMullin v. Beran, 765 A.2d 910, 919 (Del. 2000) (recognizing that the board is unable to seek alternative transaction opposed by majority shareholder).
[188] *Gesoff*, *supra* note 126, 902 A.2d at 1144; Kahn v. Lynch Communications Sys., 669 A.2d 79 (Del. 1994).
[189] *Gesoff, supra* note 126, 902 A.2d at 1155 (assessing fair value for purposes of determining damages for controller's breach of fiduciary duty).

The IMD, however, is not well tailored to deal comprehensively or rationally with the problem of controller opportunism. Its most obvious shortcoming in this regard is that it addresses only one algorithm—comparable company analysis—used to estimate going concern value. If the DCF analysis is used, then the IMD is not applied. Worse yet, the IMD is aimed at the wrong target, if information asymmetry is the perceived problem. It is a deep stretch to say that the CCA, compared to the DCF, is particularly susceptible to undetectable manipulation by the controller, and the courts make no such claim. If anything, the CCA method is more open to contestable claims since neither side has inside information with respect to the would-be comparables.

We claim that a solution that addresses the problem has to be specific to the potential opportunism of controllers. This problem is not rooted in the trading of publicly traded companies. Instead it is rooted in the behavior of the firm being appraised, and where this problem is most severe is in the case of a firm with an existing controller.

One standard that does potentially address this problem is the V_{OM} standard discussed above. Critically, and unlike the misdirected implicit minority discount, it focuses on the potential problem – namely that the minority shareholders are receiving less than the value of what is being taken from them. This could result from any of the agency cost factors discussed above, including a planned diversion of a corporate opportunity or excessive compensation for the managing controllers. While most agency costs are perfectly legitimate costs associated with public ownership, agency costs will also include those excessive costs of self-dealing that would be breaches of fiduciary duty if fully detected by shareholders and sanctioned by the court in a fiduciary duty suit.

The V_{OM} standard, if applied like a mandatory IMD, however, would be excessively restrictive of perfectly legitimate going-private transactions. Fortunately, there is no need to change valuation standards because the going concern standard already allows for the inclusion of the elements discussed above.

The adversarial appraisal hearing already allows the petitioners' expert to offer alternative forecasts for the horizon period for which annual forecasts are available or for the growth rate of the terminal value. In *Travelocity*, for example, the IMD was applied in a context where it largely offset the inferior market position and future growth prospects of the firm.[190] The court may appropriately have been concerned that Travelocity was being taken private as a prelude to the exploitation of opportunities already available to the firm to improve its market share.[191] If that were the concern, the IMD may well have led to a correct valuation result. Under the approach we suggested in *Cornfields*, however, the IMD adjustment is unnecessary: the potential to exploit opportunities available to the existing firm can be taken into account in determining fair value, because the squeeze-out transaction itself would not have been critical to the realization of the firm's potential. If these were the facts, then the *Travelocity* court

[190] 2004 Del. Ch. LEXIS 75 at *4-*6 (describing Travelocity's inferior market position relative to Expedia and its imited ability to develop the "merchant model business.").
[191] *See id.* at *22 -*23 (noting that management had dismissed its own favorable DCF projections as unreliable).

could reach the same valuation result, not by applying the IMD, but instead by accepting the petitioners' claims as to the prospects of the firm.[192]

Specifically, what we suggested in *Cornfields* is that there may be cases where the profit realized from the transaction occurs because of a diversion of a corporate opportunity, or other breaches of fiduciary duty.[193] Although these profits do not occur immediately, and are not already generating profits for the company, they are profits that arise from implementing a corporate plan that is already available to the managers and does not require the merger to implement. That is, the profits are not "but for" the merger, and cash flow projections can and should be adjusted to take such profits into account.[194] The controller accordingly does not and should not benefit, at the expense of the minority, by taking the value of what belongs to the corporation and its shareholders as a whole.[195]

VI. CONCLUSION

The "implicit minority discount," or IMD, is a fairly new concept in Delaware appraisal law. A review of the case law discussing the concept, however, reveals that it has emerged haphazardly and not has not been fully tested against principles that are generally accepted in the financial community – the principles that *Weinberger* has wisely called upon the courts to accept. In a body of jurisprudence that generally attends to the teachings of modern finance – particularly in its use of discounted future free cash flows as the appropriate measure of going concern value – the IMD stands out as a concept that is foreign to and inconsistent with finance theory.

Perhaps the introduction of the IMD concept into the Delaware case law was facilitated by the allure of misleading terminology. By correctly noting that control share blocks tend to be more highly valued than non-control ("minority") blocks, Delaware judges and lawyers may have been led to believe that shares even in liquid and informed markets trade at a "minority discount," and that this "discount" understates the going concern value of the corporation. That logic fails, however, because control share blocks are valued at a premium because of the particular rights and opportunities associated with control, elements of value that cannot fairly be viewed as belonging either to the corporation or its shareholders. In corporations with widely dispersed share holdings, the firm is subject to agency costs that must be taken into consideration in determining going concern value. A control block-oriented valuation that fails to deduct such costs does not represent the going concern value of the firm. As a matter of generally accepted financial theory, on the other hand, share prices in liquid and informed markets do generally represent that going concern value, with attendant agency costs factored or priced in. We acknowledge that share prices on any given day may fail to represent that value

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[192] *Id.* at *18, *48 (court's fair value determination of $32.76, using a 30% IMD adjustment, compared to petitioners' low-end DCF valuation of $33.70 based on management projections).
[193] *Cornfields*, *supra* note 2, at 158-63.
[194] Delaware Open MRI, 898 A.2d at 314.
[195] *Cornfields, supra* note 2, at 165.

accurately, but we claim that there is no evidence that such prices systematically and continuously err on the low side.

Given the lack of serious support for the IMD in finance literature, we suggest that the Delaware courts may be relying on the IMD for unstated policy reasons, namely as a means to avoid imposing upon squeezed-out minority shareholders the costs of fiduciary misconduct by the controller. That is a concern with which we sympathize. If that is the concern, the Delaware courts can address it in a manner that is both more comprehensive and more consistent with financial theory. Specifically, where either past or estimated future earnings or cash flows are found to be depressed as a result of fiduciary misconduct, or where such earnings or cash flows fail to include elements of value that belong to the corporation being valued, the appropriate way to address the corresponding reduction in the determination of "fair value" is by adjusting those subject company earnings or cash flows upward.

The Delaware courts have already expressed a willingness to make such adjustments on a case by case basis in determining fair value using a discounted cash flow analysis. Likewise, they have properly refused to adjust DCF valuations routinely upward on the basis of some perceived implicit minority discount associated with publicly traded shares. Therefore, because comparable company market multiple analysis is merely a simplified form of DCF analysis – the Delaware courts should be willing to adjust the subject company's earnings or cash flow measures prior to applying the market multiple so as to compensate for control shareholder or managerial misconduct, without routinely adjusting every observed trading multiple in comparable public companies on the basis of an implicit minority discount.

This approach to the problem of controller opportunism is more direct, more comprehensive in its application, and more in keeping with prevailing financial principles, than the implicit minority discount that the Delaware courts have recently applied in the limited context of comparable company analysis. We submit that the Delaware courts can therefore comfortably dispense with resort to the financially unsupported concept that liquid and informed share markets systematically understate going concern value.