THE DEATH OF APPRAISAL ARBITRAGE:
ENDING WINDFALLS FOR DEAL DISSENTERS

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ABSTRACT

In this article, we take note of a new and positive development in Delaware's law of appraisal: more robust enforcement of Section 262(h), which expressly excludes from fair value in appraisal litigation the value that is uniquely associated with the deal from which the shareholders seeking appraisal are dissenting. For public firms, this implies that deal dissenters are entitled to no more than the price that prevailed prior to the deal's announcement.

In a salutary development, the Delaware Chancery Court took this approach in its recent appraisal decision in Verition Master Fund Partners, Ltd. v. Aruba Networks, Inc., awarding to the deal dissenters the pre-announcement price and striking a blow against "appraisal arbitrage"—a trading and litigation strategy that is predicated on deal dissenters receiving appraisal remedies in excess of the deal prices from which they dissent.

We explore here the historical and economic rationales for limiting the appraisal remedy in this fashion. And we conclude with some recommendations for ending or limiting appraisal windfalls in the context of private firms as well via contractual and corporate bylaw valuation mechanisms that would replace judicial with market valuation in appraisal litigation as well as select litigation fora that would be amenable to enforcement of such mechanisms.

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INTRODUCTION

“Appraisal proceedings have hardly been the Delaware courts' finest moments.”¹

The Delaware courts have recently been swamped with a wave of appraisal actions, even as other forms of merger and acquisition litigation have abated, due to the increasingly clear bright lines and safe harbors for fiduciary behavior that these courts have evolved in recent years.² The earlier litigation was inspired by opaque standards of behavior that left the courtroom door open for plaintiffs to file complaints and remain in court long enough to drag settlements out of many corporate defendants. This uncertainty was criticized and discussed by many scholars and lawyers.³

Now the opaque nature of legal standards has turned to appraisal cases. Dissenting shareholders are entitled to dissent and be awarded the “fair value” of their shares, without consideration of any value resulting from anticipation or realization of the merger.⁴ In many areas of law, there is a simple standard applied—what a reasonable and informed seller and buyer would agree upon—each being fully informed and under no constraints. But that contemplates a “deal,” which is exactly what the appraisal remedy allows shareholders to avoid. In real life markets, involving sufficient information and trading activity, investors must accept the market price as the only one available, whether buying or selling. That price is the result of hundreds if not thousands of “deals” by reasonable investors.⁵ But in Delaware, valuation of a dissenter’s shares

² As other forms of merger litigation decline, appraisal filings in Delaware have increased from 20 cases in 2012 to 48 in 2016, a 240% increase in four years. Appraisal Risk in Private Equity Transactions, PRIV. EQUITY DIG. (Paul, Weiss, Rifkind, Wharton & Garrison LLP), May 2017, https://www.paulweiss.com/media/3977122/may-2017-pe-digest-r15.pdf. A recent study showed that appraisal petitions increased from about 2% of deals in the early 2000s to around 25% in the 2010s. The top seven hedge funds seeking appraisal accounted for over 50% of the dollar value in all appraisals. Wei Jiang, et al., Appraisal: Shareholder Remedy or Litigation Arbitrage?, 59 J. L. & ECON. 697, 698 (2016). Another study shows that multiple petitions are being filed in these cases, with 77 petitions in 2016. Michael Greene, Dealmakers Eye Safeguards Amid Rising Valuation Challenges, BLOOMBERG BNA, (Apr. 18, 2017), https://www.bna.com/dealmakers-eye-safeguards-n57982086799/.
³ We only cite one of these criticisms here: See e.g., William J. Carney & George B. Shepherd, The Mystery of Delaware Law’s Continuing Success, 2009 U. ILL. L. REV. 1 (2009).
⁴ DEL. CODE ANN. tit. 8, § 262(h) (Supp. 2016).
⁵ “In such circumstances, a company's stock price ‘reflects the judgments of many stockholders about the company's future prospects, based on public filings, industry information, and research conducted by equity analysts.’ In these circumstances, a mass of investors quickly
ignores the realities of the market\(^6\) and, in the words of Chief Justice Strine, fair value has become “a jurisprudential, rather than purely economic, construct.”\(^7\) Frank Easterbrook and Daniel Fischel had a more jaded view of fairness: “an empty vessel into which lawyers and judges can pour whatever content suits them and their clients from time to time.”\(^8\)

For most investors, determining value is as simple as looking at the current price of a stock, and applying whatever analytical skills they may have, deciding whether the price is “fair” (a word they would not generally use) and acting upon it. Sophisticated investors understand how much knowledge and analysis have gone into determining that price, and understand that relative to other price estimates, it is “fair” in the sense of an unbiased assessment of value by market participants. The Delaware courts’ departure from (or discounting of) this commonly accepted evidence has led to extensive litigation and interminably long opinions in many cases. In this Article, we explore how this has happened, and what should be done about it. We also observe a major step in the right direction by the Court of Chancery in *Verition Partners Master Fund LTD v. Aruba Networks, Inc* (“Aruba”).\(^9\)

Part I discusses the history and purpose of the appraisal remedy and shows that it was merely intended to provide an exit to avoid the

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\(^6\) See *In re Appraisal of Dell, Inc.*, No. 9322-VCL, 2016 WL 3186538, at *23 (Del. Ch. May 31, 2016) (“Requiring the Court of Chancery to defer – conclusively or presumptively – to the merger price, even in the face of a pristine, unchallenged transactional process, would contravene the unambiguous language of the statute and the reasoned holdings of our precedent”) (citing Golden Telecom, Inc. v. Glob. GT LP, 11 A.2d 214, 217-18 (Del. 2010)). On the other hand, for reasons we expand on below, accepting the deal price over the preannouncement market price also contravenes the unambiguous language of the same statute, which excludes consideration of anticipated or realized effects of the transaction.

\(^7\) DFC Global Corp. v. Muirfield Value Partners, 172 A.3d 346, 367 (Del. 2017).


(presumably negative) consequences of a merger for a nonconsenting shareholder.

Part II discusses the history of valuation in the Delaware courts, which involved deep suspicion of the fairness and rationality of even highly developed and well-informed markets. This evolved, as recently characterized by the Supreme Court, into a question, not of economic fact, but of “jurisprudence.”

Part III briefly reviews modern knowledge about the value of publicly traded stocks, much of which has been recited by the Supreme Court in its opinion in DFC Global Corporation v. Muirfield Value Partners, L.P., and in Dell. Much of this knowledge is explored in a theoretical fashion in appraisal litigation, with opposing experts usually making different assumptions to produce sometimes wildly varying results, with little or no relationship to pre-deal market prices. All this, we assert, is much ado about nothing, when there is an established and efficient market that has valued the stock immediately before a deal announcement.

Part IV notes that while the Delaware courts have moved closer to respect for deal values, they have repeatedly declined to give up their broad “jurisprudential” discretion in determining value. Ironically, while relying on a statutory command to consider “all relevant factors” as authority for this discretion, the courts have largely ignored the limitation in the preceding sentence of the statute to exclude “elements of value arising from the accomplishment or expectation of the merger . . . .” The courts have too often begun with the deal price, if determined in good faith after a search for the highest price. In many cases the analysis stops there—ignoring the value attributable to the merger—the gains from trade. In others the experts on each side attempt to guess what portion of the deal price is attributable to the synergies reflected in the deal price. All of this is done in the face of a plain answer—the difference between the pre-announcement market price and the deal price.

Part V explores possible solutions to the inefficiency of appraisal litigation, which consumes judicial resources and the public purse, adds uncertainty to buyers’ cost calculations, and in some cases chills deals or reduces the prices that buyers are willing to agree to, given the risk of litigation costs and awards that appraisal litigation would entail. While

10 DFC Global, 172 A.3d 346; Dell, Inc., 177 A.3d 1, 45.
11 DEL. CODE ANN. tit. 8, § 262(h).
our analysis mainly addresses appraisal in cases where an efficient capital market exists, much of what we criticize in those cases is sometimes necessary, though perilous, where there is no market price.

Our core proposal is for courts called upon to value shares of public firms in appraisal litigation to rely exclusively and conclusively on the unconflicted, arms’ length pre-deal market price (if one exists) in determining fair value. Secondarily, we consider other market-based and market mimicking reforms for appraisal litigation in the case of closely held firms, where no pre-deal market price is available for the court to consider.

I. THE HISTORY AND PURPOSE OF THE APPRAISAL REMEDY

The concept of appraisal of the shares of dissenters in mergers arose in an era when corporate charters were regarded as contracts between and among the state and shareholders.\(^\text{12}\) As a result, important mergers in railroads and other developing industries generally required the consent of all shareholders to proceed.\(^\text{13}\) It became apparent that allowing a single dissenter to block otherwise valuable transactions was neither good judicial nor legislative policy. The courts moved first: in *Lauman v. Lebanon Valley R.R.*, the court analogized a merger to the sale of assets and dissolution of a company, which did not require unanimity, and allowed the proposed merger to proceed, provided the dissenter was provided the same value he or she would receive in an asset sale, and issued an injunction until the corporation gave security for the payment “when its value shall be ascertained.”\(^\text{14}\) *Lauman* expressly stated the contractual rationale for an exit: that the shareholder had contracted to be in one corporation for a specific purpose, and could not be forced into another without his consent.\(^\text{15}\) The court analogized this shareholder

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\(^\text{14}\) Lauman v. Lebanon Valley R. Co., 30 Pa. 42, 49 (1858); Accord State *ex rel.* Brown v. Bailey, 16 Ind. 46, 51–52 (1861) (citing Lauman, 30 Pa. at 47).
\(^\text{15}\) *Lauman*, 30 Pa. at 45–46 (“If the principle of the association is violated by a majority of its members, by a departure from its original purposes, or by a refusal, or voluntarily produced inability to proceed, any stockholder may treat such a matter as equivalent to a dissolution, at least as regards him, and for such a case the law provides a means of securing to him his share of the property, or its value. . . . Then, what valid objection can a dissenting stockholder of a private corporation have to such an arrangement as the one now proposed? . . . He may object that his co-corporators have no power to make a new contract for him, and thereby constitute
action to a suit in partition of jointly owned real property. Where a statute authorized a majority to approve a merger, objecting shareholders were presumed to have consented to the merger, as they purchased their shares under this rule.\(^{16}\) Throughout the 19th century and into the early 20th century, this approach became accepted: where the majority was granted the power of approval, some states granted appraisal rights to dissenters.\(^{17}\)

Manning observed that appraisal statutes became the norm over time.\(^{18}\)

Why grant dissenting shareholders an exit remedy when the majority has approved a transaction, presumably on the basis of net benefits that they reasonably expect? One explanation might be the fear of majority self-dealing in mergers or other combinations, a well-known issue even by the early 20th century.\(^ {19}\) Requiring appraisal values to exclude the potentially adverse effects of a merger on the value of a company’s stock provides protection for minorities from being exploited. Recent Delaware opinions seem to have recognized this principle.\(^ {20}\) One might have thought that it would provide a disincentive for quarreling over whether the upside gains from a majority-approved merger were large enough, but it has generally failed to do so.

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\(^{16}\) Victor Morawetz, 2 A Treatise on the Law of Private Corporations § 951, at 909 (2d ed. 1886).


\(^{19}\) See Carney, supra note 13, at 71–72. Until 2016 the Model Business Corporation Act followed this approach for public companies, denying appraisal rights in publicly traded corporations where exit was simple, but restoring them where the merger was an “interested transaction.” Model Bus. Corp. Act §13.02(b)(4) (2016). Indeed, Lauman was such a case where the surviving corporation owned a majority of the shares of the acquired corporation. Lauman, 30 Pa. at 43.

\(^{20}\) In Dell, the Delaware Supreme Court stated that “the key inquiry is whether the dissenters got fair value and were not exploited.” 177 A.3d at 24. As Vice Chancellor Laster stated in Aruba, referring to this statement in Dell, “the reference to ‘dissenters’ in this sentence strikes me as odd because the dissenters have opted not to receive the merger consideration. By seeking appraisal, they avoided the possibility of being ‘exploited’ by the deal.” Verition Partners Master Fund Ltd. v. Aruba Networks, Inc., No. 11448–VCL, 2018 WL 922139 at *36 n.338 (Del. Ch. Feb. 15, 2018). He also stated that “[w]ith a reliable market price as the baseline, an arm’s-length deal at a premium is non-exploitive. By definition, it provides stockholders with ‘fair compensation for their shares’ defined as ‘what they deserve to receive based on what would be fairly given to them in an arm’s-length transaction.’” Id. at *40 (quoting DFC, 172 A.3d at 371).
A. The Purpose of the Remedy

1. Exit

Bayless Manning described appraisal remedies as a way of giving the majority permission to act, rather than protection for the minority. He described this as the “willingness to play for the rebound in history.” It also had the effect of allowing dissenters to exit from newly combined enterprises in which they did not intend to invest, providing some liquidity in an era when markets were limited in depth and liquidity. Manning described appraisal statutes as “bail-out provisions; when certain events occur, some shareholders are given a put against the corporation.” The Delaware Chancellor agreed with this analysis in *Chicago Corp. v. Munds*, stating that:

[S]tatutes were enacted in state after state which took from him [the stockholder] the right theretofore existing to defeat the welding of his corporation with another. In compensation for the lost right a provision was written into the modern statutes giving the dissenting stockholder the option completely to retire from the enterprise and receive the value of his stock in money.

In many of today’s cash mergers, the structure of the merger itself assures that right.

2. Value Protection

As Manning famously put it, “permissions and protections have a way of getting scrambled in corporation law.” An appraisal right that

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21 See Manning, *supra* note 18, at 226–27; see also Norman D. Lattin, *Remedies of Dissenting Stockholders Under Appraisal Statutes*, 43 HARV. L. REV. 233, 237 (1931–1932) (the purpose has been “[t]o placate the dissenting minority and, at the same time, to facilitate the carrying out of changes of a desirable and extreme sort. . . .”); JAMES D. COX & THOMAS LEE HAZEN, 4 TREATISE ON THE LAW OF CORPORATIONS § 22.24 (3d ed. 2010) (“It appears the purpose is even more to aid and protect the majority.”).

22 Manning, *supra* note 18, at 229.


24 Manning, *supra* note 18, at 226.

25 *Chicago Corp. v. Munds*, 172 A. 452, 455 (Del. Ch. 1934).

26 Manning, *supra* note 18, at 228.
began as permission for majorities to proceed without unanimous consent ended as a right for minorities to attack deal prices and seek favored financial treatment. As a result, instead of being permission for the majority it has morphed into a potent weapon for the minority, and, in many cases, a late arriving minority—appraisal arbitrageurs—who buy after the deal announcement and seek a higher price than other shareholders would receive.

Early statutes authorizing the appraisal remedy did not specify how value was to be determined, but relied in many cases on outside experts to serve as appraisers, as did Delaware. New Jersey, upon whose statute Delaware’s was originally based, called for three appraisers to determine “full market value” of the dissenter’s shares. For a long time this meant “fair market value” in Delaware as well as elsewhere. As Manning observed, “[n]one of the statutes attempts to go much further in assigning content to the word ‘value,’ though a few seek to reassure the shareholder by providing that he is entitled to the ‘fair value.’” One can assume that

27 J. Ernest Smith, The Law of Private Companies: Relating to Business Corporations Organized Under the General Corporation Laws of the State of Delaware, § 56 at 69 (Philadelphia, T. & J. Johnson & Co. 1899); In other cases it was left to the court. Thompson & Thompson, supra note 17, at 884. See 21 Del. Laws 462–63 (1899).

28 Section 108 of the New Jersey General Corporation Act of 1896, P.L. 1896, p. 312, P.L. 1902, p. 700, as amended by P.L. 1920, p. 284. Delaware followed this approach in the General Code of 1899, §56 and in §61 of the General Corporation Law, Del. Rev. Code 1935, §2093, the latter of which reads in part: If any stockholder in any corporation of this State consolidating or merging as aforesaid, who objected thereto in writing, shall within twenty days after the date on which the agreement of consolidation or merger has been filed and recorded, as aforesaid, demand in writing from the corporation resulting from or surviving such consolidation or merger, payment of his stock, such resulting or surviving corporation shall, within three months thereafter, pay to him the value of his stock at said date, exclusive of any element of value arising from the expectation or accomplishment of such consolidation or merger.

29 Rather than look to markets, fair market value was defined by the courts to mean the “price which would be agreed upon by a willing seller and a willing buyer under usual and ordinary circumstances, without any compulsion whatsoever on the seller to sell or the buyer to buy”. Poole v. N. V. Deli Maatschappij, 243 A.2d 67, 70, n. 1 (Del. 1965) (citing Wilmington Housing Authority v. Harris, 93 A.2d 518, 521 (1952)). Because of the abstractions that blurred the importance of evidence of actual transactions, and reliance on various hypothetical models of value, the powerful evidence of actual market prices was ignored. It was only in 1976 that “fair value” was added, 60 Del. L. c. 371, §7, and in 1981 the instruction to take “all relevant factors” into account, 63 Del. L. c. 25, §14 was added. We assume that this was merely a reflection of the judicial gloss already placed on the statute. See, e.g., Tri-Continental Corp. v. Battye, 74 A.2d 71, 72 (Del. 1950) (finding that the definition of “value” under the appraisal statute included “all factors and elements which reasonably might enter into the fixing of value”); Francis I. duPont & Co. v. Universal City Studios, Inc., 312 A.2d 344, 348 (Del. Ch. 1973), (hereinafter “duPont”).

30 Manning, supra note 18, at 231.
in the early stages of these cases, the appraiser’s judgments were based on crude tools of valuation, especially in the absence of the more sophisticated markets of modern times, although where active markets existed, appraisers may have relied upon them. As we show, primitive techniques, implicitly conceding considerable uncertainty about the validity of separate methodologies, continued through much of the twentieth century. If the purpose of appraisal is to allow shareholders to escape the consequences of a deal they didn’t bargain for, it becomes clear that the “value” involved is the value of shares of the firm from which they exit (now clarified to exclude the anticipated effects of an announced merger). Modern liquid securities markets now have much more to say about this subject.

The Delaware Supreme Court recently reiterated this principle, quoting an earlier opinion to the effect that the purpose of appraisal is to “make sure that [stockholders] receive fair compensation for their shares in the sense that it reflects what they deserve to receive based on what would fairly be given to them in an arm’s-length transaction.” All transactions in efficient markets qualify for that measure; bilateral negotiations between a single buyer and seller provide indeterminate results, depending on the skills, preferences, and relative knowledge of each party.

3. Conflicting Interest Protections and Universal Shareholder Protection

Note that compensating dissenting shareholders for what they give up protects them, among other things, from the deleterious effects of any conflicts of interest that might affect the merger terms in favor of a controlling shareholder. Prior to the merger, shareholders are protected from conflicts by the fiduciary duties of the officers and board, which are enforceable in a derivative action. The courts have erred in looking at the conflicts involved in setting a deal price, because the deal price is not the issue, and indeed is expressly excluded from consideration by Section 262(h) of the General Corporation Law of the State of Delaware (“Section


32 For a discussion showing that equilibrium may be reached at any point along a contract curve, see Armen A. Alchian & William R. Allen, UNIVERSITY ECONOMICS: ELEMENTS OF INQUIRY 47–49 (3d ed. 1972).
262(h”), which enjoins consideration of “any element of value arising from the accomplishment or expectation of the merger or consolidation.”

As Judge Wolcott observed in *Tri-Continental Corp. v. Battye*:

> The meaning of the word “value” under this section of the Corporation Law has never been considered by this court.

* * * The basic concept of value under the appraisal statute is that the stockholder is entitled to be paid for that which has been taken from him, viz., his proportionate interest in a going concern.

Other authorities read this as clearly excluding any value created by or expected from the merger. As Ernest Folk, the author of the report prepared for the 1967 revision of the Delaware Corporation Act, stated, “[i]n all instances, shares are to be valued on a going-concern, rather than on a liquidation basis, ‘by which of course is meant as if the merger had never been conceived.’” (emphasis added).

Consider the benefits of this exclusion: (1) it allows dissenters to exit from any deal they wish, and (2) it protects against an abusive conflicted interest deal with a controlling shareholder. It has one more benefit that is perhaps more cogent today: it prevents speculation over what price a court might set above the deal price, or even at the deal price. In short, a dissenter would bear the risk (or strong probability) of getting less than the deal price, but would always get the previous market price, which would be fair even to appraisal arbitrageurs, provided they paid no more than the pre-announcement market price (an unrealistic assumption, but one that precludes post-deal speculation).

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33 *In re Appraisal of Orchard Enters.*, No. 5713-CS, 2012 Del. Ch. LEXIS 165, at *15–16 (Del. Ch. July, 16, 2012). The error of looking at deal price rather than preceding market value where a company’s stock is widely followed and continued in *In re Appraisal of Dell, Inc.*, where Vice Chancellor Laster stated that LBO models of valuation are unreliable because “[w]hat the sponsor is willing to pay diverges from fair market value because of (i) the financial sponsor’s need to achieve IRRs of 20% or more to satisfy its own investors and (ii) limits on the amount of leverage that the company can support and the sponsor can use to finance the deal.” Any investor that owned Dell stock was aware that Michael Dell was the controlling shareholder, so the price paid for shares was fair, and the market price before the deal was equally fair - unless one ignores the exclusion of Section 262(h).


35 Ernest L. Folk, III, *THE DELAWARE GENERAL CORPORATION LAW: A COMMENTARY AND ANALYSIS* 380 (1972) (citing Chicago Corp. v. Munds, 172 A. 452, 455 (Del. Ch. 1934)) (citation omitted). Later decisions have ignored the statutory language, either paying lip service to it or ignoring it entirely. *See infra* Appendix A.
Because of abstractions away from true market prices, courts have generally ignored the command to exclude these elements of value. Where this provision of Section 262(h) was cited, it was only as a matter of quotation of the entire section, rather than as providing any guidance. In short, it was only given lip service, not respect. It was not until 1990 that Chancellor Allen recognized and applied the significance of this provision, and even then, it remained an exception.

II. THE HISTORY OF JUDICIAL VALUATION IN APPRAISAL DECISIONS

Here we recount some history of appraisal in Delaware to illustrate the difficulties facing courts in determining “fair value.” In fairness, the Delaware courts have not been alone.

A. Rejecting Market Value

The journey of the Delaware courts away from appraisal on the basis of market value where a stock was traded actively, began in 1934 with Chicago Corp. v. Munds. There, the Chancellor distinguished the


37 Cede & Co. v. Technicolor, No. 7129, 1990 Del. Ch. LEXIS 259, at *106 (Del. Ch. Oct. 19, 1990). See also Verition Partners Master Fund Ltd. v. Aruba Networks, Inc., No. 11448–VCL, 2018 WL 922139, at *54 (Del. Ch. Feb. 15, 2018). It was only within the past decade that courts sometimes used the statute’s caution, but this was based on theoretical models of value and theoretical models of the value of synergies, rather than on pre-announcement market prices to determine value. See, e.g., Highfields Capital, Ltd. v. AXA Fin., Inc., 939 A.2d 34, 36 (Del. Ch. 2007). In Gonsalves v. Straight Arrow Publishers, Inc., No. 8474, 1996 Del. Ch. LEXIS 144, 13–14, n.9 (Del. Ch. Nov. 27, 1996), reprinted in DEL. J. CORP. L. 1215, the court obliquely addressed the complications introduced through theoretical measures of value, such as sales of comparable companies: “[T]his technique masks a complex issue: whether in an appraisal action ‘fair value’ of the corporation as a going concern, exclusive of [speculative] elements of value arising from a merger, includes a pro rata share of a control premium. (By determining a multiple by reference to sales of companies, Mr. Kobak implicitly includes a control premium). That question is especially interesting when, as here, the corporation itself has had a controlling block of stock.” Application of Vision Hardware Grp., 669 A.2d 671, 673 (Del. Ch. 1995) held that “the common stock of Better Vision had essentially no financial value at the time of the merger; the amount paid in the merger represented ‘nuisance value’ and exceeded the fair value of the public shares prior to the merger.”

Delaware statute from New Jersey’s version, which, while based on the New Jersey act, omitted the words “full market,” and referred only to “value.” In justifying his rejection of reliance on “market value,” the Chancellor stated:

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. There are too many accidental circumstances entering into the making of market prices to admit them as sure and exclusive reflectors of fair value. 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 in time so brief that fundamental conditions could not possibly have become so altered as to effect true worth. Markets are known to gyrate in a single day. 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. It would be most unfortunate indeed either for the consolidated corporation or for the objecting stockholder if, on the particular date named by the statute for the valuation of the dissenter’s stock, viz., the date of the consolidation, the market should be in one of its extreme moods and the stock had to be paid for at the price fixed by the quotations of that day. 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. The relation of supply to demand on a given day as truly affects the market value of a stock as it does of a commodity; and temporary supply and demand are in turn affected by numerous circumstances which are wholly

39 Fair market value meant the "price which would be agreed upon by a willing seller and a willing buyer under usual and ordinary circumstances, without any compulsion whatsoever on the seller to sell or the buyer to buy". State ex rel. Smith v. 0.15 Acres of Land, 169 A.2d 256, 258 (Del. 1961).
disconnected from considerations having to do with the stock’s inherent worth.\footnote{\textit{Chicago Corp.}, 172 A. at 455. We now know now that stock prices are a random walk, depending upon the flow of new information about the companies. Eugene F. Fama, \textit{Random Walks in Stock Market Prices}, FIN. ANALYSTS J., Sept.–Oct. 1965, at 55, 56. Relative prices will change only upon the revelation of new information, which flows constantly and keeps stock prices in a state of flux. Thus, a statement that a price is “fair” is true at the moment of purchase but is no guarantee that a security will hold its value relative to the market as news about the issuer develops.}

The \textit{Munds} Court wrote of its distrust of market prices in the wake of the great stock market crash of 1929. While observers at the time appeared to have no rational explanation beyond excessive speculation and stock manipulation that caused a bubble to burst, later scholarship by Milton Friedman demonstrated that the crash was caused by the Federal Reserve’s drastic reduction of the money supply.\footnote{\textit{Milton Friedman \& Anna Jacobson Schwartz}, A \textsc{MONETARY HISTORY OF THE UNITED STATES} 1867–1960 (1963) (discussing the contraction of economic activity between 1929—1933).} A similar explanation may account for the 2008 drop. After the Lehman Brothers bankruptcy in the Fall of 2008 regulators quickly increased bank capital requirements from 4\% of total assets to 7\%.\footnote{See Jack Foster, \textit{Changes in US Banking Regulation – Tier 1 Capital Requirements}, N.Y. INST. FIN., https://www.nyif.com/articles/changes-in-us-banking-regulation-tier-1-capital-requirements (last visited Oct. 20, 2018).} Given depressed stock prices, banks chose not to issue new shares but to reduce loans outstanding, which ultimately denied credit to businesses that depended on a reliable stream of credit.\footnote{Tim Congdon and Steve H. Hanke, \textit{More Bank Capital Could Kill the Economy}, WALL ST. J. (Mar. 13, 2017), https://www.wsj.com/articles/more-bank-capital-could-kill-the-economy-1489446254.}

The October 1987 drop, however, which was reversed within two years,\footnote{Adam Hewison, \textit{It Takes a Long Time for a Market Recovery}, INO (Oct. 13, 2008), https://www.ino.com/blog/2008/10/it-takes-a-long-time-for-a-market-recovery/#.W8jpGntKjcs (“When the market crashed Oct. 19, 1987, sending the Dow Jones industrial average down 508 points to 1,738.34, the blue chips had lost 938 points, or 36.1 percent, since reaching a then-record close of 2,722.42 on Aug. 25, 1987. It took just over 15 months for the Dow to get back to its pre-crash level, and almost two years to the day — Aug. 24, 1989 — to reach a new closing high, 2,734.64.”)} had no such obvious explanation.\footnote{Richard A. Brealey \& Stewart C. Myers, \textsc{PRINCIPLES OF CORPORATE FINANCE} 365–66 (6th ed. 2000); Daniel R. Fischel, \textit{Efficient Capital Markets, the Crash, and the Fraud on the Market Theory}, 74 CORNELL L. REV. 907, 915–16 (1989). Recent work shows that once a decline began, the computers of institutional investors began to sell out their own holdings. Unfortunately, this massive simultaneous selling only exacerbated the decline. John A. Prestbo, \textit{A Surprising Legacy of the 1987 Crash: the ETF}, WALL ST. J. (Oct. 8, 2017), https://www.wsj.com/articles/a-surprising-legacy-of-the-1987-crash-the-etf-1507515300. See}
stocks fell in proportion to their beta factors, thus retaining relative relationships to each other, but that theory only avoids the larger issue of whether stocks were fairly priced with respect to other available investments. Since we can only value homogeneous things comparatively by their prices, it is an impossible task. More importantly, however, especially for an individual stockholder, a decline in the price of a stock he or she owns does not significantly reduce the investment alternatives for that investor, because all other shares have been similarly reduced in price. We cannot say the same for an investor who wants to sell shares to buy a home, however. What we can say is that stock market declines create a “wealth effect” where individuals feel less well off, and tend to curb some expenditures, and reduce the market value of the objects of those purchases. In that sense, all investment assets rise and fall together. So the premise of distrust for market valuations was flawed in Munds, as we now know, but persists to this day.

The Munds opinion introduced the requirement that the dissenter be paid the “intrinsic value” of his shares, a term that has created confusion for generations. It should be noted that the court’s “moment’s reflection” by a “casual observer” has now been replaced by generations of careful theory and evidence of markets and valuation by brilliant, and in some cases, Nobel Laureate financial economists, validating efficient capital markets in the scientific literature, but not in the courts. The notion that markets must be wrong on any given day is a common one, often held by such “casual observers.” It persisted in the Delaware Court of Chancery as late as 2016. It appears to exist in the decisions in other jurisdictions


46 See generally Jeffrey N. Gordon & Lewis A. Kornhauser, Efficient Markets, Costly Information, and Securities Research, 60 N.Y.U. L. Rev. 761 (1985) (discussing, among other things, that markets are efficient, but only in relatively).

47 Fischel, supra note 45, at 914–17. One qualification is required – all traded securities move in the direction of the overall market only to the extent of each stock’s beta – its correlation with the market.

48 Gordon & Kornhauser, supra note 46, at 765, 768–69.

49 See generally James M. Poterba, Stock Market Wealth and Consumption, 14 J. Econ. Persp. 99 (2000).

50 We will not belabor the truth of the capital asset pricing model (CAPM) here. See Brealey & Myers, supra note 45, at 375 (“Lesson 6: Seen One Stock, Seen Them All”).


as well. 53 This is a classic example of the Nirvana fallacy of comparing an imperfect world to a nonexistent perfect one—which assumes biased and polarized experts are wiser judges of value than informed market participants using their own funds (who have their own financial experts). 54 Given the strong preference for expert testimony or deal prices over solid market evidence prior to a deal’s announcement in Delaware appraisal cases, one is tempted to conclude that the Delaware courts have rarely seen a market that they liked or trusted.

B. The Analogy to Liquidation

As previously noted, the origins of appraisal lie in the Pennsylvania Supreme Court’s original analogy to a corporate liquidation, creating a basis for departure from unanimous consent requirements. 55 While Delaware has not expressed the same analogy, the Delaware Supreme Court rejected market value as a measure of value of shares in Tri-Continental Corp. v. Battye, with the court defining the value of shares, not as the publicly traded price, but “the value of the stockholder’s

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53 Fischel, supra note 45, at n.3; see also Rutherford B. Campbell, Jr., The Impact of Modern Finance Theory in Acquisition Cases, 53 SYRACUSE L. REV. 1, 22 tbl.5 (2003) (illustrating methodologies to calculate appraisal valuations accepted by non-Delaware courts).

54 Fischel, supra note 45, at 915. While experts may not have intentional bias, litigants do, and we can be certain that no expert who arrives at an unfavorable valuation for his or her client will be employed at trial.

55 Lauman v. Lebanon Valley R.R., 30 Pa. 42, 49 (Pa. 1858). In part the analogy was to an action in partition among co-owners of real property. The liquidation exception to unanimous consent lay in the concept of frustration of the purpose of an agreement, described by Morawetz as a corporation “becom[ing] hopelessly insolvent, or unable to carry on its business except at a loss . . . .” MORAWETZ, supra note 16, § 412, at 390. Note that current bankruptcy law allows individual creditors who dissent from a proposed corporate reorganization to block confirmation of a plan of reorganization only if the plan provides them with less than the liquidation value of their claims. Dissent by a minority does not entitle individual dissenting creditors to share in the firm’s going concern value in excess of the liquidation value or to participate in the gains to the going concern value that flow from the reorganization. See 11 U.S.C. § 1129(a)(7) (2012).
proportionate interest” as “the true or intrinsic value of his stock . . .”56
The court did not define intrinsic value, but discussed all imaginable elements that a court might consider, in essence giving courts wide discretion and no guidance about intrinsic value.57 Nor was there ever a mention of the relative materiality of various measures of value, a term that remains missing to this day.58

While one can infer that in this case of a closed-end mutual fund “intrinsic value” means to value the stock at the current market value of the fund’s investments rather than the typically discounted value of the fund (presumably on account of agency costs), none of this was explained by the court. The idea that market value is an unfair measure misses the point that most investors in closed-end funds invested at a discount reflecting these agency costs, so getting out at a discount reflecting these same costs is both fair and exactly what they bargained for. Obviously, there are agency costs in any mutual fund, part of which an investor can avoid only by doing his own stock-picking, which carries its own often higher costs.59

The term “intrinsic” has never been defined by the court, except perhaps tautologically as “going concern value,” which itself the court has never defined in economic terms.60 In Poole v. N. V. Deli Maatschappij,
the Supreme Court conceded (correctly) that “going-concern asset value is comparatively an ethereal concept, and the appraisal thereof is a highly speculative and conjectural process.”\(^6\)1 The use of this ethereal term continued in Smith v. Van Gorkom, where the court faulted the board for being “uninformed as to the intrinsic value of the Company.”\(^6\)2 Chief Justice Strine has recently tried to put lipstick on this financial pig by calling it a “jurisprudential” concept, without further detail about what that means.\(^6\)3

Indeterminacy has been an ongoing problem in Delaware corporate law.\(^6\)4 Multipart tests with weighting left to the discretion of each judge only exacerbate this problem. Stephen Bainbridge’s recent paper reviews the various interest group explanations for this phenomenon, and while he credits some of them, he adds one of his own: that “all judges have a powerful self-interest in maximizing their reputation. . . .” and that “the mandatory indeterminacy of Delaware’s judicially created corporate law likewise follows from judicial concern for reputation.”\(^6\)5 To paraphrase, the prominence of the judicial role is maximized under uncertainty because of the necessity to litigate similar issues with small distinctions repeatedly, and to turn to these judges time and again. Determinations of “intrinsic value” have become a magnet for such litigation. One might term “intrinsic value” little more than a judicial conceit rather than a clear principle for private compliance that is feasible to operationalize. Albert Choi and Eric Talley have argued for the current practice, on the theory that both parties to a merger will be influenced by the expected appraisal valuation.\(^6\)6 This ignores the indeterminacy of a

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\(^6\)1 Poole v. N. V. Deli Maatschappij, 243 A.2d 67, 72 (Del. 1965).
multi-part test with no guidelines for weighting. Our evidence reveals how difficult predicting appraisal valuation has been, and how generally profitable appraisal arbitrage has become. Scholars of law and economics have mistakenly focused on the deal, ignoring the fact that the statute instructs courts to ignore the deal and focus on the value of the company exclusive of the effects of anticipation or realization of the deal. This leads to ex post experts second-guessing the ex-ante experts employed by selling firm directors who must deal with the realities of the existing market.

C. Leaving the Term “Value” Open

As previously discussed, Delaware’s early statute did not specify how value was to be determined. The use of the open term “value” surely was intended to include the long-standing “fair market value,” in Delaware as well as elsewhere. In an era before large volumes of trades and a constant flow of material information about companies and large numbers of financial analysts, one can only speculate about what methods appraisers employed. In more primitive times, some courts accepted par value of shares as their value. In Chicago Corp. v. Munds, under such a

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They argue that “the appraisal right helps protect against unfair and inefficient transfers to lower valuing buyers . . . .” See also Audra Boone et al., Merger Negotiations in the shadow of Judicial Appraisal, Indiana Legal Studies Research Paper No. 381 (June 11, 2018), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3039040 and Charles Korso & Minor Myers, Reforming Modern Appraisal Litigation, 41 Del. J. Corp. L. 279, 322 (2016). But see Paul G. Mahoney & Mark Weinstein, The Merger Remedy and Merger Premiums, 1 Am. L. & Econ. Rev. 239, 242 (1999) (reviewing pre-arbitrage evidence and finding no differences because of access to appraisal). But after an efficient search for the highest bidder, where is a higher bidder to be found? Choi and Talley argue that the sale price anticipates judicial treatment of appraisal. Our difficulty here is that the appraisal evidence of expert testimony shows wide, some might say wild, variations, that do not match or predict judicial outcomes. See Appendix A. In effect, this makes appraisal something of a lottery, albeit one with a virtually guaranteed payoff above the risk-free rate. More fundamentally, these authors ignore the limits of the statute.

67 One notable exception is In re Appraisal of SWS Group, Inc., 2017 WL 2334852 (Del. Ch. 2017), aff’d sub nom. Merlin v. Sws Group, 2018 Del. LEXIS 77, where the court found a fair value of $6.38 per share, while the deal price was $6.92. See also ACP Master, Ltd. v. Sprint Corp., 2017 Del. Ch. LEXIS 125, 2017 WL 3105858, where the court found a fair value of $2.13 per share compared to a deal price of $5.00, on the basis of a discounted cash flow analysis.

68 See discussion supra p. 2.

69 Poole v. N. V. Deli Maatschappij, 243 A.2d 67, 70, 72 (Del. 1965).

statute, the appraisers “took evidence upon the earnings of the corporation, its prospects, reproduction value, asset value, market quotations, etc.”

While there was a trading market for the shares, the court noted approvingly that “[t]he appraisers, having made a full examination of the status of the company and its prospects, are in a better position to gauge the fair value of the stock than the outside public.” In 1934, when investors were licking their wounds, at the onset of federal securities regulation and disclosure requirements, there might have been a grain of truth in this, but that day is long past, in the era of efficient capital markets dominated by sophisticated institutional investors and high speed traders that arbitrage away tiny price differences between markets. By the 1950s, this rejection of market prices was accepted doctrine, and valuation somehow morphed from a question of fact for the appraisers to become a question of law for the court to determine—oddly described by today’s Supreme Court as “jurisprudence.”

D. Hedging Bets: Consider “Everything”

What began as a search for the holy grail of “intrinsic value” allowed consideration of virtually anything—sometimes, but not always, including market value. The weighting of these factors when courts exercised their discretion was wildly inconsistent, a problem that continues today, albeit in a somewhat more modern form. The one thing it did not permit was consideration of expected future earnings, on the basis that this was speculative, and not based on existing facts. This approach excludes the evidence most relied upon by investors, who are not buying past earnings, and do not believe that the past always predicts the future. The duPont case was perhaps the most egregious example. A film maker had just discovered new value in its fully amortized film library due to the onset of television’s voracious appetite for new material, including

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71 Chicago Corp. v. Munds, 172 A. 452, 456 (Del. Ch. 1934).
72 Id. at 456.
74 Comment, Valuation of Dissenters’ Stock under Appraisal Statutes, 79 Harv. L. Rev. 1453, 1469 (1966), shows Delaware Block allocations to market value ranging between 25 and 45%, to asset value between 20 and 50%, and earnings value between 25 and 80%. Similar variances appeared in a later study, Note, 30 Okl. L. Rev. 629 (1977).
75 See, e.g., duPont, 312 A.2d at 348–49. For a criticism of the former “Delaware Block” methodology, see David Cohen, Comment: Valuation in the Context of Share Appraisal, 34 Emory L.J. 117 (1985).
full length feature films.\textsuperscript{76} Rather than capitalize expected future earnings, as markets would, and did, the court approved a capitalization based solely on an average of the past years’ earnings, which had grown steadily from $3.32 per share to $8.02 in the previous five years, thus failing to use the trend to make projections of future earnings.\textsuperscript{77} The court declined to include the earnings value of the fully amortized film library in its asset calculation, in effect ignoring the “going concern value.”\textsuperscript{78}

The confusion created by considering “asset value” is perhaps best exemplified by \textit{Poole v. N. V. Deli Maatschappij}, where the Supreme Court admitted that it had perhaps confused the meaning of “asset value” with its own pronouncements, while at the same time denying that they were in error, or unclear.\textsuperscript{79} The court conceded that in valuing stock on a going concern basis, it was not clear whether assets’ value was to be determined on a going concern basis as opposed to fair market value.\textsuperscript{80} In the particular case this was important because the market value of the assets apparently was greater if the company were liquidated and the assets put to an alternative and more valuable use. While the court cited its own cases that assets were to be valued on a going concern basis, and not on a liquidation basis,\textsuperscript{81} it then proceeded to claim (correctly) that “going-concern asset value is comparatively an ethereal concept, and the appraisal thereof is a highly speculative and conjectural process. We are satisfied that \textit{fair market value}, so well formulated in the law of eminent domain, furnishes a more concrete and workable rule for appraisers, lawyers, and judges (emphasis added).”\textsuperscript{82} Then in the next breath the court took back much of what it had just concluded, citing Fletcher:

Net asset value is entitled to weight, but it must be remembered that an appraisal is not a liquidation, and that the stock must be appraised on a going concern basis with

\textsuperscript{76} See \textit{duPont}, 312 A.2d at 347–49.
\textsuperscript{77} \textit{Id.} at 348.
\textsuperscript{78} \textit{Id.} at 351. Following \textit{Poole v. N. V. Deli Maatschappij}, 243 A.2d 67 (Del. 1965), the court held that “any allowance for the earning power of the assets . . . is best left to the court’s consideration of earnings as an independent element of stock value.” But of course, the only consideration was retrospective, where averaging included periods when the film library was not being fully utilized.
\textsuperscript{79} \textit{Poole}, 243 A.2d at 70.
\textsuperscript{80} \textit{Id.}
\textsuperscript{82} \textit{Poole}, 243 A.2d at 72.
the possibility in different cases that the value of the stock may be substantially above or below net asset value or break-up value. The nature of the business, the nature of the assets, their liquidity, and profitable use, are factors bearing upon the weight to be given to net asset value.83

One can only speculate what this wisdom might have meant in *Tri-Continental Corp. v. Battye* if it had been considered carefully. A closed-end investment fund rarely sells at its net asset value, largely because of agency costs, including the brokerage fees of trading and the costs of analysts.84 Liquidation would nearly always produce a higher net asset value. How does one reconcile these values? The cost of voluntary exit for an investor includes search costs for new stocks and the brokerage costs involved in reinvestment and leaves the investor with less diversification unless another fund (with its own agency costs) is chosen. There is a lesson here (ignored by the courts); investors purchase shares in closed-end companies recognizing the agency costs and recognizing that an exit will be at the market value of the fund’s shares, rather than at full liquidation value. Apparently, investors believe this is “fair,” since they were on notice of these facts at the time of purchase and are willing to pay a price for managed diversification.

While *Weinberger v. UOP, Inc.*, rejected the rigidity of *Francis I. duPont* and allowed judicial admission of evidence based on modern methods of valuation, it continued the hedging process, thus minimizing the impact of real market values.85 The court stated that all the older

83 Id. (citing 15 FLETCHER CYCLOPEDIA CORPORATIONS (perm. ed.) 305)).
85 Weinberger v. UOP, Inc., 457 A.2d 701 (Del. 1983). Two commentators argue that *Weinberger* was the beginning of the shift to an emphasis on a fair deal price (not just above the pre-bid market), which has spread beyond conflict of interest transactions to all deals. Mahoney & Weinstein, supra note 66, at 240. We are less certain, since the phrase “intrinsic value” appears much earlier. See, e.g., *Chicago Corp. v. Munds*, 20 Del. Ch. 142, 150–51 (1934); Tri-Continental Corp. v. Battye, 74 A.2d 71, 72 (Del 1950); Smith v. Van Gorkom, 488 A.2d 858, 866 (Del. 1985).
elements must also be considered.86 In *Pinson v. Campbell-Taggart, Inc.*, the court approved a weighted value based upon the discounted value of earnings at 75% and book value of assets (an irrelevant historical figure) of 25%.87 This only encouraged the confusion which continues to this day. Cases employing net asset value as one measure persist.88 Older cases employed what appear to be random weightings of asset value, market value, earnings value and in a few cases, dividend value.89 That process persists.90 In *DFC Global*, Vice Chancellor Bouchard gave equal weight to a discounted cash flow value of $13.10, the comparable companies analysis offered by DFC Global’s expert, and the deal price. On appeal Chief Justice Strine stated, “the Court of Chancery must exercise its considerable discretion while also explaining, with reference to the economic facts before it and corporate finance principles, why it is according a certain weight to a certain indicator of value.”91 While emphasizing the importance of judicial discretion in weighing “all relevant factors,” the opinion ignored the crucial importance and overwhelming materiality of the pre-deal stock price, while ironically reciting that “averaging of market prices on the last trading day before the announcement of a merger will reflect the fair market price.”92 This error was repeated in Justice Valihura’s opinion in *Dell*.93 Does this mean that fair market price cannot be fair value?

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86 “By value of the stockholder’s proportionate interest in the corporate enterprise is meant the true or intrinsic value of his stock which has been taken by the merger. In determining what figure represents this true or intrinsic value, the appraiser and the courts must take into consideration all factors and elements which reasonably might enter into the fixing of value. Thus, market value, asset value, dividends, earning prospects, the nature of the enterprise and any other facts which were known or which could be ascertained as of the date of merger and which throw any light on future prospects of the merged corporation are not only pertinent to an inquiry as to the value of the dissenting stockholders’ interest, but must be considered by the agency fixing the value.” 457 A.2d at 713 (quoting *Battye*, 74 A.2d, at 72).


90 In re Appraisal of DFC Global Inc., No. 10107-CB, 2016 WL 3753123 at *14–15 (Del. Ch. July 8, 2016); *Id.* at *2*.

91 Is this asking the trial court to explain the inexplicable? DFC Global Corp., v. Muirfield Value Partners, 172 A.3d 346, 388 (Del. 2017).


93 In re Appraisal of Dell at *48 (“[The statute] vests the Chancellor and Vice Chancellors with significant discretion to consider ‘all relevant factors’ and determine the going concern value of the underlying company.”) citing Golden Telecom, Inc. v. Glob. GT LP
Chief Justice Strine correctly dismissed prima facie reliance on the deal price as the best estimate of value, as having no basis in the statute, “which gives the Court of Chancery in the first instance the discretion to ‘determine the fair value of the shares’ by taking into account all relevant factors.” 94 Here, the Chief Justice confuses relevance and materiality, which has to do with the weight (probative value) to be attached to a particular piece of evidence. In view of the statutory exclusion of Section 262(h), the truly irrelevant and immaterial evidence is the deal price itself. He then went on to note the length and openness of the seller’s search, the lack of conflicts, and said that under these conditions “economic principles suggest that the best evidence of fair value was the deal price.” 95 As the court stated, “the market’s collective judgment of the effect of regulatory risk . . . is more likely to be correct than any individual’s guess. When the collective judgment involved, as it did here, not just the views of company stockholders, but also those of potential buyers of the entire company . . . there is more, not less, reason to give weight to the market’s view of an important factor.” 96 The only problem is that given Section 262(h)’s exclusion, the relevant time for respect of market prices was before the deal was announced or anticipated.

The opinion observes that DFC’s argument on appeal in favor of a judicial presumption in favor of deal value where the price was the product of sufficient market conditions was not presented fairly to the Court of Chancery. The Supreme Court could have relied on this ground to reject the argument on appeal, but instead gratuitously rejected it on other grounds, based largely on precedent, and a judicial clinging to its discretionary powers first generated in the 1930s in Tri-Continental Corp v. Battye. The opinion only questioned the discretion of the particular weighting, not that the Court of Chancery failed to give the deal price sufficient weight or explain why it relied on other factors. There was no mention of exclusion of anticipated or realized effects of the deal on value, thus ignoring Section 262(h)’s exclusionary command. Similarly, in Dell the court did not insist on the deal price or the pre-bid market price as determinative.97

94 DFC Global Corp., 172 A.3d at 349 (citing DEL. CODE ANN. tit. 8, § 262(h)).
95 Id.
96 Id.
97 See Dell, Inc., v. Magnetar Global Event Driven Master Fund Ltd., 177 A.3d 1 (Del. 2017); DFC Global Corp., 172 A.3d at 352.
The *DFC* opinion notes the efficiency of the trading market for DFC’s shares, both in the size of the float and the responsiveness of its stock price to various regulatory initiatives, as did the *Dell* opinion. A stock price chart documented the volatility of price in view of both high leverage and successive regulatory risks. But the Supreme Court’s opinion ignored these facts, and, in discussing the possible unreliability of deal prices, ignored the widely accepted reliability of market prices.98 Most of the Supreme Court opinion was devoted to a detailed analysis of the Court of Chancery’s fair value analysis, and recites at length the positions of the experts, their disagreements, and the trial court’s resolution of these differences. We can only wonder why experts who apply models based on accurate market descriptions can be allowed to apply assumptions the market has apparently rejected, such as the beta, the equity premium, expected earnings growth and others. The *Dell* opinion was more skeptical of expert opinions on value, although it left it to the experts to provide evidence on the size of the deduction for deal synergies.99

### E. Finally Recognizing Market Value

We began writing this article as an unalloyed criticism of the court’s lack of recognition of market value as the best measure of the statutory command to exclude anticipated or realized effects of the merger. Until February of 2018, this was a fair assessment, in our view. But Vice Chancellor Laster’s recent opinion in *Aruba* has required an amendment to our thesis. Whether it will stand up on appeal remains open as we write this, but its logic is so powerful that it would be difficult to reverse it, although it is possible that the Delaware Supreme Court might continue to recite its mantra about the courts’ discretion. As Vice Chancellor Laster wrote, in the context of discussing dissenters’ complaints about whether the negotiators had obtained the highest possible price, or were compromised:

98 “But, not only do we see no license in the statute for creating a presumption that the resulting price in such a situation is the ‘exclusive,’ ‘best,’ or ‘primary’ evidence of fair value, we do not share DFC’s confidence in our ability to craft, on a general basis, the precise pre-conditions that would be necessary to invoke a presumption of that kind.” *DFC Global Corp.*, 172 A.3d at 366.

99 The court noted at petitioners’ expert asserted fair value was more than twice the deal price, *Dell Inc.*, 172 A.3d at *26–27, which the trial court noted lacked credibility on its face. *Id.* at *69–70. At the same time, without reference to pre-bid market values, the trial court was charged with determining the value of synergies. *Id.* at *39.
In a scenario where the underlying market price is reliable, competition and negotiation become secondary. Under these circumstances, an arm’s-length deal at a premium over the market is non-exploitive. By definition, it gives stockholders ‘what would fairly be given to them in an arm’s-length transaction.’

III. HOW MODERN FINANCIAL KNOWLEDGE HAS CHANGED VALUATION

A. Efficient Capital Markets

We now turn to the vast body of knowledge about how financial markets operate and set prices to reflect the current consensus about value. Here we will only summarize much of this knowledge, to set the stage for answering the question of, in terms of Delaware law, what does “fair value” mean?

Theories and evidence about investor choices and behavior center on how participants in capital markets process new information. It would be redundant to repeat all of the evidence in support of what Michael Jensen has called one of the best established propositions in all of the social sciences: the Efficient Capital Markets Hypothesis. Beginning with research that established that stock price movements are unpredictable, researchers were able to infer that stock markets were efficient in a weak form—that nothing in the sequence of past stock prices enabled us to predict future price movements. From that, researchers proceeded to test stronger claims of market efficiency. The semi-strong

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100 Aruba, 2018 WL 922139 at *95–96.
101 The DFC opinion made brief reference to this consensus. DFC Global Corp., at 373 n.144 (“In an efficient market you can trust prices, for they impound all available information about the value of each security.”) (quoting RICHARD A. BREALEY ET. AL., PRINCIPLES OF CORPORATE FINANCE 214 (2008)). However, the Dell court concluded that the market for the stock was semi-strong form efficient. Dell Inc., 172 A.3d at *7.
104 LORIE ET AL., supra note 51, at 70–79.
form asserted that all publicly available information about issuers was
reflected in stock prices, while the strong form asserted that all such
information, public or not, was reflected.\footnote{Id. at 71. We note in passing that the strong form has not been widely accepted, while the semi-strong form has.} The Supreme Court in \textit{DFC Global} noted the widespread acceptance (and evidence in support) of this learning.\footnote{DFC Global Inc., v. Muirfield Value Partners, 172 A.3d 346, 369–70 (Del. 2017); \textit{In re Appraisal of Dell Inc.}, 2016 WL 3186538 at *24 (Del. Ch. May 31, 2016). Vice Chancellor Laster dismissed market prices by quoting then Vice Chancellor Strine to the effect that “even for purposes of determining the value of individual shares, where the stock market is typically thick and liquid, the proponents of the efficient capital markets hypothesis no longer make the strong-form claim that the market price actually determines fundamental value; at most they make the semi-strong claim that market prices reflect all available information and are efficient at incorporating new information.” He ignored the fact that Dell had been widely publicizing its plans and projections, and mentions no inside information concealed from the public.}

Market prices are typically viewed as superior to other valuation techniques because, unlike, e.g., a single person’s discounted cash flow model, the market price should distill the collective judgment and wisdom of the many based on all the publicly available information about a given company and the value of its shares. Indeed, the relationship between market valuation and fundamental valuation has been strong historically. As one textbook puts it, “[i]n an efficient market you can trust prices, for they impound all available information about the value of each security.” More pithily: “For many purposes no formal theory of value is needed. We can take the market’s word for it.” But, a single person’s own estimates of the cash flows are just that, a good faith estimate by a single, reasonably informed person to predict the future [subject to all the perils of bias and inaccurate assumptions shown by competing experts in appraisal cases, as demonstrated in Exhibit A\footnote{\textit{JAMES SUROWIECKI}, \textbf{THE WISDOM OF CROWDS: WHY THE MANY ARE SMARTER THAN THE FEW AND HOW COLLECTIVE WISDOM SHAPES BUSINESS, ECONOMIES, SOCIETIES, AND NATIONS} (Doubleday & Anchor eds., 2004).}]. Thus, a singular discounted cash flow model is often most helpful only when there isn’t an observable market price.\footnote{DFC Global Corp., v. Muirfield Value Partners, 172 A.3d 346, 369–70 (Del. 2017).}
For these reasons, corporate finance theory reflects a belief that if an asset—such as the value of a company as reflected in the trading value of its stock—can be subject to close examination and bidding by many humans with an incentive to estimate its future cash flows value, the resulting collective judgment as to value is likely to be highly informative and that, all estimators having equal access to public information, the likelihood of outguessing the market over time and building a portfolio of stocks beating it is slight.109

B. Exploring the Efficient Capital Market Paradox

Despite the widespread acceptance of stock market efficiency, the Supreme Court remains reluctant to treat this evidence with the respect called for by its power. The DFC opinion gives two reasons: (1) the statute: “We decline to engage in that act of creation, which in our view has no basis in the statutory text, which gives the Court of Chancery in the first instance the discretion to ‘determine the fair value of the shares’ by taking into account ‘all relevant factors’”; and (2) the singular importance of judicial discretion.110 At the same time, the opinion rejects the rules of evidence that require consideration of the materiality of evidence and the weight to be accorded to it as well as its relevance. Later, the opinion attempts to explain why the only material evidence of value is to be discounted: “the definition of fair value used in appraisal cases is a jurisprudential concept that has certain nuances that neither an economist nor market participant would usually consider . . . .”111 One can only wonder why, if no one in the real world considers these immaterial elements of value, the courts feel that they must do so. Moreover, the opinion does not identify these nuances, or the role materiality should play in weighing evidence. No explanation is given why market prices should not be trusted whenever available, nor of what nuances the court refers to. We attempt to explore some possibilities below. Without some specific “nuances,” lawyers and lower court judges are left to speculate. This indeterminacy has been criticized by one of us in other settings.112 It leads to the uncertainty created by courts of equity that have long been criticized

111 Id. at 367.
112 Carney & Shepherd, supra note 3, at 11.
for being as arbitrary as the length of “a Chancellor’s foot.” And so indeed equity appears to be in appraisal cases.

Here we address the lingering suspicions that markets do not always price every stock efficiently, as we noted above in discussing the efficient market paradox. Gilson and Kraakman used the example of issuance of an innovative security, where no one other than the issuer may fully understand its value at the time of issue. One common example is the post-market price reaction to an initial public offering of common stock, where prices typically rise after the IPO, as investor uncertainty is generally assuaged with reactions of more knowledgeable investors and subsequent information.

When an issuer first announces such an innovative security, all traders will be uncertain about its worth. Although the issuer may make good-faith representations about value, most traders will discount these as self-interested puffery. Absent convincing assurances, the initial pricing of the innovative security will be left to the uninformed trading mechanism, which will tend to "undervalue" it relative to the information possessed by the good-faith issuer -- but not, of course, relative to the aggregate forecasts of the uninformed traders. Thus, the security's uninformed equilibrium price will be "biased," and relatively inefficient. Efficiency is possible only if the issuer succeeds in making its representations credible, or if an enterprising trader independently acquires the key facts that establish their accuracy. In the first case, subsequent price equilibration would proceed rapidly through the universally informed or professionally informed trading mechanisms; in the second, it would proceed more slowly through derivatively informed trading.

113 John Selden, TABLE TALK 43 (Pollock ed., 1927) (“Equity is a roguish thing. For Law we have a measure, know what to trust to; Equity is according to the conscience of him that is Chancellor, and as that is larger or narrower, so is Equity. 'T is all one as if they should make the standard for the measure we call a "foot" a Chancellor's foot; what an uncertain measure would this be! One Chancellor has a long foot, another a short foot, a third an indifferent foot. 'T is the same thing in the Chancellor's conscience.'


115 Id.
This market inefficiency can exist in various settings. One is where markets fail to dive deeply into research about a company to predict accurately its future earnings and profits. Warren Buffet is notable because he ignores the short term variance risk measured by beta and used by finance expert witnesses, to focus on longer term prospects, which he calls “focus investing.”116 In another example, one of the authors was a director of a biotechnology company, Pharmasset, Inc., with several complex compounds with the potential to treat (or cure) one or more viral diseases.117 While the company made regular releases of definitive clinical testing information when available, management and the directors generally believed that the company’s stock was undervalued. Many analysts seemed superficial in their work, and when one wrote a report with a detailed analysis of the risks and potential of a lead compound that the CEO said he could have written, the stock moved quickly upward. But complexity and uncertainty continued to dog the stock’s price, until one sophisticated company working in the antiviral area, Gilead Sciences, made a first bid that triggered a diligent search for the best possible price. That price was an 89% premium over the pre-announcement market price, which was based on a relatively recent announcement of the latest clinical test results.118 Upon announcement, the buyer’s stock price fell, upon a consensus that it was paying too much.119 The buyer ultimately priced the FDA approved drug at $1,000 per pill ($84,000 per treatment), over twice the seller’s best estimates of its price ($36,000), which created a stir in Congress and the press.120 At the end, who could say the acquisition price was too low? In hindsight, neither the market nor the seller’s officers or directors fully understood the full commercial potential value of the seller’s compound. Forbes magazine later called Gilead’s purchase of Pharmasset for $11 billion “one of the best pharma acquisitions ever.”121

119 Id.; “Grading Pharma in 2013”, FORBES, December 31, 2013. Pharmasset’s experienced legal adviser assured the board that the company would be sued, given the uncertainty of the application of Delaware law to such transactions, and two spurious suits claiming Revlon violations followed.
Who could have known this purchase was a bargain? Only those with perfect foresight, which did not include one of these authors, experienced pharmaceutical officers and directors, and experienced financial advisors. How could a court know this?\textsuperscript{122}

A modest regard for criticisms of market efficiency compels us to suggest that the pre-announcement market price should be presumed to be the best evidence of fair value, with a heavy burden on those who would challenge it—not met in \textit{DFC Global} or \textit{Dell}. As Fischel has stated, “market prices are superior to other methods of valuation when market prices are available . . . .”\textsuperscript{123}

\textbf{IV. \hspace{1em} THE COURTS’ REACTIONS—TOO LITTLE AND TOO FAR}

We have noted that the Supreme Court’s \textit{DFC Global} and \textit{Dell} decisions have edged toward acceptance of deal values as the primary, if not exclusive, means of measuring corporate value, while still retaining judicial discretion to move away from these valuations under undefined circumstances, thus preserving the unpredictable use of “jurisprudence” under conditions of uncertainty. We argue below that well-defined market prices—not deal prices—are the only material evidence; everything else, however otherwise relevant, becomes immaterial speculation divorced from the reality of markets.

We have described the outlines of modern scientific evidence about the accuracy of markets in pricing securities. Summarized, we can say that a large number of analysts continually review new information about companies, seeking a profitable (if momentary) trading advantage for sophisticated institutional investors and traders, and that as a result, all stocks are fairly priced with respect to each other considering expected risk and returns. This effect is magnified by high-speed trading, which taps into small differences in quoted prices, thus closing many of these gaps. Thus, if one exits one stock, other stocks are readily available with similar, if not identical, risk-return profiles, at minuscule transaction costs. We can now state with confidence that in efficient capital markets, an exiting shareholder who receives the pre-announcement market price, or

\textsuperscript{122} Vice Chancellor Laster captured this problem in Dell in describing directors’ search duties in sales: “In this formulation, the key verb is ‘sought.’ Time-bound mortals cannot foresee the future.” \textit{In re Appraisal of Dell Inc.}, 2016 WL 3186538 at *79 (Del. Ch. May 31, 2016).  
more, for her shares has received fair value in compliance with the statute. Judicial confusion over the years in distinguishing “fair market value” from “fair value” should be set aside as a misleading side road. In short, a heavy burden of proof should face any litigant claiming that an abstract valuation model is a better measure of firm value than its market price. As one student author stated: “Maybe Publius Was Right.”

There are some dissenters from this view. Lawrence Hamermesh and Michael Wachter argue that in a going private merger, if the controller wants to minimize the price paid to the minority, the controller may depress the market price through wrongdoing, such as deliberate poor management. There may be cases where a controller has not shared a potential business opportunity with the corporation that the controller intends to hold until after a cashout merger, in which a challenge to the fairness of the pre-bid market price would be appropriate, under the Weinberger “entire fairness” doctrine. In Aruba, petitioners challenged the validity of the market price because management deferred announcing improved results until the end of the quarter when it included the announcement of the merger agreement in its filing, thus blurring the separate effects of the earnings and the merger. But the court rejected any inference of manipulation because shareholders had all the information in making their decision.

Burton Malkiel, the distinguished financial economist, has addressed the issue of investor myopia and potential mispricing of securities relied upon in DFC and Dell by the Court of Chancery and rejected by the Supreme Court:

These attacks on the efficient market theory are far from convincing. Some of the market patterns discovered may
have rational causes; others may be spurious. But none of them are dependable in all time periods. And there is no evidence that rational investors can exploit any of the alleged mispricing in securities markets to earn above-average returns. * * * In summary, I remain skeptical that markets are systematically irrational, and that knowledge of such irrationalities can lead to profitable trading strategies. Indeed, the more potentially profitable a trading strategy is, the less likely it is to survive.128

The appropriate response to corporate wrongdoing is through a derivative action, not attempting to reconstruct what a company might have been worth under honest management—a form of the Nirvana fallacy. Valuation in an appraisal proceeding could conceivably include the value of a derivative action to the company. Once a merger is consummated, former shareholders lack standing to bring derivative actions, but at least one court has held that the value of the derivative claim may be included in an appraisal valuation.129 If one buys stock in a badly managed company, the price the buyer pays is a discount from what it would be with better or more honest controllers. In short, buying in at a bargain price and selling out at a bargain price seems fair to the investor. And there is evidence that controllers often obtain control to reduce agency costs where managers have broad discretion.130

A. Deal Prices Typically Exceed Previous Market Values and Thus are Barred by Section 262(h)

The idea that combinations of businesses produce gains from trade is hardly a new one. Nor is the idea that these gains arise from synergies of various kinds. Because the law has long treated appraisal as allowing an exit for an investor not willing to enter the newly created combination, it was logical to limit the investor’s compensation to what his shares were worth without considering the merger’s financial benefits or detriments. Section 262(h) recognizes this, as most statutes do, in commanding the court to determine the fair value of the dissenter’s shares, “exclusive of any element of value arising from the accomplishment or expectation of

the merger or consolidation . . .” 131 Henry Manne’s seminal paper, *Mergers and the Market for Corporate Control*, recognized that companies are valued as going concerns with their current management, and if that management was weak, and could be replaced by a stronger management team, that change of control would generate greater profits and add value to the firm. 132 But the possibility of greater profit from future changes is not part of “value” that can be included in appraised value, according to the statute.

Replacing poor management is not the only source of value in mergers and acquisitions. Consolidations often reduce costs in industries with excess capacity. 133 Technological change can make scale economies more important and efficient for larger companies. Economies of scope in marketing often provide suppliers with better leverage to obtain improved shelf space. 134 Creating a dominant producer also enhances market power to set prices. Less frequently, tax benefits may play a role in an acquisition. One of the most notable cases involving a tax-motivated transaction was *Smith v. Van Gorkom*. 135 Trans Union held large tax loss carry-forwards that it could not expect to utilize in the foreseeable future, but would be attractive to a tax-paying entity. 136 A variety of target characteristics can create value for bidders, such as economies of scale or latent debt capacity, which upon acquisition would result in a net increase in value for the business combination. 137 Financial deals that take a company private can also benefit from reducing the regulatory costs of being a publicly traded company. These costs can be significant even for large corporations. 138

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Holding a security for a long time may be evidence that the holder is satisfied with the security’s performance and its role in the investor’s portfolio, and does not see a more attractive substitute (though underperformance may well simply be reflected in the current price). One could characterize the security’s price as “fair,” although this word is rarely employed. This accounts for part of the popularity of index funds, with their low cost buy and hold strategies, in today’s market. To persuade an investor to relinquish a holding requires the offer of a more attractive alternative. In stock markets, that alternative is typically a price at a premium over today’s market price.

There is much evidence to support the assertion that selling shareholders receive substantial premiums in acquisitions. 139 “It is well accepted that creating value gains (synergy) or incremental cash flows from mergers has been the dominating explanation provided to the shareholders of moving parties.”140 One author calculated the premium paid based on the market value of the target two months prior to the announcement date minus one.141 Premiums averaged 19% in the 1960s, 35% in the 1970s, and 30% from 1980 to 1985.142 A study covering mergers from 1999 to 2002 showed average premiums of 36% in cash mergers and 30% in stock for stock mergers.143 A study of deals from 2000 to 2008 shows average premiums for strategic bidders of 16.7%, and 11.7% for financial bidders.144 Returns to shareholders of bidders appear much smaller, and in some cases are negative.145 Gains to bidder shareholders appear to be smaller because of bidder competition for a target.146 While there are some observers who attribute lower gains for

140 Ahmad Ismail, Does Management’s Forecast of Merger Synergies Explain the Premium Paid, the Method of Payment, and Merger Motives?, 40 FINANCIAL MGT. 879 (Winter 2011).
141 Id. at 884.
142 Jarrell, et al., supra note 143, at 51.
143 Hamermesh, supra note 143, at 913 (Appendix A) (2003).
145 Jarrell et al, supra note 143, at 53 (Table 1); Ralph A. Walkling and Robert O. Edmister, Determinants of Tender Offer Premiums, FINANCIAL ANALYSTS J., 31-32 (Jan.–Feb. 1985).
146 Id.
bidder shareholders (and sometimes losses) to agency costs—that poor managers overspend in acquisitions—there is evidence to the contrary.\textsuperscript{147} One paper is more sympathetic, suggesting that with imperfect knowledge of the future, many bidders may err in estimating future synergies and cost reductions. Thus, the winner of an auction may, by making the most optimistic estimate, suffer from the “winner’s curse.”\textsuperscript{148} A recent study, using call option prices to measure gains in takeovers finds roughly equal sharing between target and acquiring company shareholders.\textsuperscript{149} Ismail uses different methodology, comparing actual accounting results over time with estimated synergies, and finds lower returns to buyers.\textsuperscript{150} He finds that buyers underpaid for predicted synergies in about one-third of cases and overpaid in the other two-thirds.\textsuperscript{151} That, of course, does not change the measure of gains from the transaction to target shareholders. However, these studies are viewed, there are clear gains for target shareholders, solely attributable to the acquisition.

\section*{B. Control Premiums Only Exist at the Time of a Sale and are not Part of the “Intrinsic Value” of a Firm}

Some have argued that control premiums exist in every company, and that takeover bidders merely exploit this invisible asset in acquisitions, at the expense of small shareholders.\textsuperscript{152} The literature persuasively shows that control premia do not exist without news of buyer interest.\textsuperscript{153} It shows,

\begin{itemize}
\item \textsuperscript{148} Varaiya & Ferris, supra note 151, at 65.
\item \textsuperscript{149} Kathryn Barraclough, David T. Robinson, Tom Smith, & Robert E. Whaley, \textit{Using Option Prices to Infer Overpayments and Synergies in M&A Transactions}, 26, No. 3 REV. OF \textit{FINANCIAL STUDIES} 695, 719 (2013).
\item \textsuperscript{150} Ismail, \textit{ supra} note 144, at 905.
\item \textsuperscript{151} \textit{Id.} at 889 (Table III).
\item \textsuperscript{152} For a refutation of this position, see Carney and Heimendinger, \textit{ supra} note 1, at 879–80.
\item \textsuperscript{153} \textit{Id.} at *29; Lawrence A. Hamermesh & Michael L. Wachter, \textit{The Short and Puzzling Life of the ‘Implicit Minority Discount’ in Delaware Appraisal Law}, 156 U. PA. L. REV. 1 (2007).[hereinafter Hamermesh & Wachter, Minority Discount] (taking a slightly different approach, observing that control can carry a premium, but that it does not belong to the firm). By negative implication, there is no minority discount that needs to be added in valuation of the firm. They add one more benefit of control: the right to squeeze out the minority shareholders. \textit{Id.} at 53.
\end{itemize}
in the case of financially motivated transactions involving “going private,” that these premiums “are due to the blocking power typically accorded minority stockholders in going private transactions.”\footnote{Jensen & Ruback, supra note 143, at 45.} This is not to say that a controlling shareholder can never receive benefits that are not shared with minority shareholders, but rather that such benefits do not necessarily involve agency costs, wealth transfers through self-dealing, or other forms of wrongdoing. Instead, they may involve divergent preferences about firm policies, such as timing and amount of firm distributions and investments, riskiness of new projects, and riskiness of firm capital structure, each with potential differential benefits for each group.\footnote{William J. Carney, The Theory of the Firm: Investor Coordination Costs, Control Premiums and Capital Structure, 65 WASH. UNIV. L. Q. 1 (1987). Here we disagree with John C. Coates, “Fair Value” As An Avoidable Rule of Corporate Law: Minority Discounts in Conflict Transactions, 147 U. Pa. L. Rev. 1251, 1280 (1999). Coates assigns control premiums to three basic categories: (1) synergy value – the value derived from a particular combination of economic assets; (2) expropriation value – the value from being able to use control unfairly to usurp value rightly belonging to the minority (which we believe is trivial if not nonexistent in virtually all public companies); and (3) pure control value – the residual value attaching to the authority to control corporate policy on an ethical and fiduciarily-compliant basis. Coates argues that all control premiums “should be analyzed initially as reflecting each of these types of value.” Id. at 1274–77. No suggestion is given about how to unpack these three elements of a premium.} We argue that no control premium exists absent an acquisition. If a control block is transferred from one shareholder to another, any premium paid clearly belongs to the seller, absent any wrongdoing that harms the entity.\footnote{See, e.g., Abraham v. Emerson Radio Corp., 901 A.2d 751, 762 (Del. Ch. 2006).}

The fact that Gorbenko and Malenko’s study showed lower gains from financial acquisitions is not dispositive on the issue of control premiums.\footnote{Gorbenko & Malenko, supra note 148, at 2541–42.} There is an abundant literature documenting the gains from financial deals. To have premiums, there must necessarily be gains from trade. Obviously, financial transactions do not involve synergies involving reduced transaction costs between suppliers and customers, nor gains from greater market dominance and pricing power, nor gains from economies of scope or scale. Typically, in financial transactions there is no replacement of one management team with a superior one, at least at the onset.\footnote{We are unaware of studies that separate management treatment in financial transactions as opposed to strategic deals. Most of the studies were done in the early stages of hostile takeovers, with fewer done in the current era of negotiated transactions. One study found that approximately 52% of all top managers will no longer be employed by a target three years after a successful takeover. Perham, Surge in Executive Job Contracts, 32 DUN'S BUS. MONTH 86 (1981). In another study, Gregg Jarrell, in The Wealth Effects of Litigation by Targets: Do
leverage, greater management equity investments, the deductibility of interest payments, use of underutilized tax benefits (Trans Union), reduction of regulatory (securities compliance) costs, and more direct owner supervision of management, all of which can reduce agency costs and increase returns to equity.\footnote{159} Michael Jensen has described financial acquisitions as creating a new form of ownership:

organizations that are corporate in form but have no public shareholders and are not listed or traded on organized exchanges. . . . Their primary owners are not individuals nor passively managed institutions but large actively managed private equity institutions and entrepreneurs that designate agents to manage and monitor on their behalf and bind those agents with large equity interests and contracts governing the use and distribution of cash.\footnote{160}

Delaware’s treatment of the exclusion of effects of the merger announcement has not been consistent. The Court of Chancery has correctly stated that "[i]n an arm’s-length, synergistic transaction, the deal price generally will exceed fair value because target fiduciaries bargain for

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Interests Diverge in a Merge?, 28 J. LAW & ECON. 151, 172 (1985), found 50% attrition rates in one-half of the firms that successfully defeated bids. This figure, Jarrell believes, is well above the normal turnover rate of 25%, suggesting that bids are traumatic events for managers regardless of their success. See also Turnover at the Top. BUS. WEEK, Dec. 19, 1983, at 104; Coff, Merger Mania Adds to Executive Woes, N. Y. TIMES (Oct. 17, 1982), https://www.nytimes.com/1982/10/17/jobs/merger-mania-adds-to-executive-woes.html.

Charles Knoeber, Golden Parachutes, Shark Repellents, and Hostile Tender Offers, 76 AM. ECON. REV. 155 (1986). Knoeber characterized target managers as accepting deferred compensation in many instances, which shareholders can opportunistically capture by accepting a tender offer for control. See also Lambert & Larker, Golden Parachutes, Executive Decision-Making and Shareholder Wealth, 7 J. ACCTG. & ECON. 179 (1985). Displacement after a change of control appears to be one of the major risks facing managers. A BUSINESS WEEK survey of 1300 terminated managers was reported to have shown that nearly one-third were terminated after a change of control. Walkling & Long, Strategic Issues in Cash Tender Offers: Predicting Bid Premiums, Probability of Success, and Target Management’s response, 4, No. 2 MIDLAND CORP. FIN. J. 57, 64, n.10 (1986).

\footnote{159} Harry DeAngelo, Linda DeAngelo & Edward M. Rice, Going Private: Minority Freezeouts and Stockholder Wealth, 27 J. L. & ECON. 367, 370–74 (1984); Jensen & Ruback, supra note 144, at 23–24 (describing financial motivations); Matthew D. Cain & Steven M. Davidoff, Form Over Substance? The Value of Corporate Process and Management Buy-Outs, 36 DEL. J. CORP. L. 849, 865–69 (2011) (noting the benefits of MBOs and citing studies)


\footnote{160} Michael C. Jensen, Eclipse of the Public Corporation, HARV. BUS. REV. 61 (1989).
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a premium that includes . . . a share of the anticipated synergies.”

Indeed, “the ability of target fiduciaries to obtain a premium to market implies that they successfully extracted a portion of the value that the acquirer planned to create and that the merger consideration therefore exceeds the fair value of the standalone entity as a going concern.” In many cases the Delaware courts never discuss pre-deal announcement market prices at all, virtually precluding exclusion of “any element of value arising from the accomplishment or expectation of the merger or consolidation.” This is so even though the Delaware Supreme Court has recently noted that removal of the Delaware Block Method “does not mean that the pre-transaction trading price of a public company’s shares is not relevant to its fair value in appraisal,” while not mentioning that specific value in the case at hand. As Fischel has observed, why should a minority shareholder expect to receive more in a merger than he or she could obtain by selling in an efficient market?

C. Backing Out of Control Premiums and Synergies to Obtain Firm Values Involves Guesswork and Speculation

The Delaware courts have rarely taken the exclusion of control premiums seriously. In Kleinwort Benson v. Silgan Corp., Chancellor Chandler correctly declined to apply a control premium “because it reflects value arising from the accomplishment or expectation of the merger.” As he later explained, the court “will not specifically consider . . . control premiums paid in merger transactions because those reflect expected future profits after the merger (i.e., synergy values).” In another case while the Court of Chancery conceded that “there remains some uncertainty about the actual amount of impermissible post-merger [synergies] reflected in [data on] control premiums”, it applied a 30% control premium to eliminate an erroneously presumed minority

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161 Olson v. EV3, Inc., No.5583-VCL 2011 Del. Ch. LEXIS 342011); see also Dell, 177 A.3d at 76–77.
164 DFC Global, 172 A.3d at 373.
167 ONTI, Inc. v. Integra Bank, 751 A.2d 904, 913 (Del. Ch. 1999).
discount. The court should have recognized that any premium paid is based on an expectation of benefits to the buyer from the transaction. In a financially motivated “going private” transaction, the court found no control premium, and that the only deal synergies were tax savings and cost savings from going private, and accepted the deal price as the best evidence of fair value (including whatever synergies from tax and agency cost savings, and regulatory savings might have existed because of the deal).

The Delaware courts have long mistakenly concluded that where a dominant shareholder exists, publicly traded shares must necessarily trade at a discount. More recently, in Dell, the Court of Chancery erroneously rejected market values as infected with investor myopia and an anchoring bias, ignoring the dominance of sophisticated financial institutions and analysts in today’s markets. On appeal this was reversed for an absence of supporting evidence in an efficient market. Given current judicial assumptions that control premiums are inherent in all companies, with or without a dominant stockholder, the courts are faced with the impossible task of separating included control premiums from excluded synergy values in appraising value. One is tempted to ask, “will the Delaware courts ever trust markets as investors do?”

The Court of Chancery has recognized the synergies included in any deal premium. In Longpath Capital LLC v. Ramtron Int’l Corp. the Court of Chancery attributed half of the deal premium to a “control premium” (a discredited concept, as we discussed above) and the other half to deal synergies. The court accepted the methodology of the respondent’s expert, who attempted to determine the value of deal synergies by examining premiums paid in strategic deals versus those

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170 See, e.g., Cavalier Oil Corp. v. Harnett, 564 A.2d 1137 (Del. 1989); Rapid-American Corp. v. Harris, 603 A.2d 796 (Del. 1992).
171 Dell, 177 A.3d , at *102.
172 Kenneth R. Ahern, Bargaining Power and Industry Dependence in Mergers, 103 J. FIN. ECONS. 530, 547 (2012) (showing that targets capture on average "modestly more" of the merger gains than buyers); Lawrence A. Hamermesh & Michael L. Wachter, The Short and Puzzling Life of the ‘Implicit Minority Discount’ in Delaware Appraisal Law, 156 U. PA. L. REV. 1, 29 (2007) (“In an arm’s-length transaction, an acquirer will pay a premium to [the equity value] in purchasing the firm.”).
(smaller) premiums paid in financial deals. The percentage difference, he concluded, represented the synergies in strategic deals, with the balance of synergy gains retained by the buyer. This may be a reasonable measure of synergies, but Section 262(h) does not address synergies alone, but “any element of value arising from the accomplishment or expectation of the merger.” The Longpath court relied on a study by Gregg Jarrell, a frequent witness in appraisal cases, that purported to find a “control premium” by comparing deal premiums in acquisitions by strategic buyers with acquisitions by financial buyers.\(^{174}\) This only demonstrates that synergistic gains from trade vary across types of transactions, and assuredly between transactions of the same type. More importantly, averages conceal wide variances in outcomes in individual cases.

Perhaps the most egregious example of ignoring the exclusion rule is *Merion Capital L.P. v. Lender Processing Servs.*, where Vice Chancellor Laster recited much credible evidence about the size of the synergies included in the deal price (about 20%) by the petitioner, only to ultimately ignore this evidence, employing the deal price ($37.14), on the basis that the company’s expert provided no opinion on this and the company was late making this argument.\(^{175}\) The court observed that evidence in the record indicated that the merger consideration “included a portion of the value that Fidelity and THL expected to generate from synergies.”\(^{176}\) It further noted that petitioner modeled $100 million in synergies, or $7.50 per share.\(^{177}\) While relying on partisan experts, the court ignored the more impartial evidence of pre-announcement value from independent analysts, who had a median price target of $25.00 with a high price target of $31.00.\(^{178}\) At the same time it cited another opinion that “the price actually derived from the sale of a company as a whole . . . may be considered as long as synergies are excluded.”\(^{179}\) The court also ignored Vice Chancellor Glascock’s statement in *In re Appraisal of Ancestry.com, Inc.*, that the unique construction of Section 262 places burdens on both parties, thus leaving judges on their own in determining

\(^{174}\) *Id.* at *79–82, *85.


\(^{176}\) *Id.* at *32.

\(^{177}\) *Id.* at *34.

\(^{178}\) *Id.* at *17.

fair value. The irony of that statement is that it was made in the face of reliable market prices determined by expert traders and analysts with far more expertise than a law-trained judge, and their own or clients’ money at stake.

In re Appraisal of SWS Group, Inc. is a rare case where synergies in the form of scale economies to achieve cost savings were discussed extensively. The respondent’s expert specifically excluded them in his calculation of fair value, resulting in a valuation well below the deal price.

The most recent ironic example is found in the Supreme Court’s DFC Global opinion, where Chief Justice Strine conceded the accuracy and rationality of the pre-announcement market price, but apparently not its materiality, stating that because the shares at issue “were widely traded on a public market based upon a rich information base, the ‘fair value of the stockholder’s shares of stock held by minority stockholders like the petitioners, would, to an economist, likely be best reflected by the prices at which their shares were trading as of the merger.”

Rather than

In re Appraisal of Ancestry.com, Inc., No. 8173-VCG, 2015 Del. Ch. LEXIS 21: “It is worth noting, however, that this task is made particularly difficult for the bench judge, not simply because his training may not provide a background well-suited to the process, but also because of the way the statute is constructed. A judge in Chancery is the finder of fact, and is frequently charged to make difficult factual determinations that may be outside his area of expertise. The saving judicial crutch in such situations is the burden of proof. The party with the burden must explain why its version of the facts is the more plausible in a way comprehensible and convincing to the trier of fact; if not, it has failed to carry its burden, and the judge's duty is accordingly clear. A judge in a bench trial relies, therefore, on the burden of proof; he holds on to it like a shipwreck victim grasps a floating deck-chair or an ex-smoker hoards his last piece of nicotine gum. Section 262 is unusual in that it purports explicitly to allocate the burden of proof to the petitioner and the respondent, an allocation not meaningful in light of the fact that no default exists if the burden is not met; in reality, the ‘burden’ falls on the judge to determine fair value, using ‘all relevant factors.’ Here, therefore, I must independently review those factors to determine ‘fair value,’ the price per share to which the Petitioners are entitled.” See also In re Appraisal of SWS Group, Inc., 2017 WL 2334852 (Del. Ch. 2017), aff’d sub nom. Merlin v. Sws Group, 2018 Del. LEXIS 77.

Vice Chancellor Laster reviewed the difficulties the Court of Chancery has faced in this area in his Aruba opinion, No. 11448–VCL, 2018 WL 922139, at *44–45. See also In re Appraisal of Ancestry.com, Inc., No. 8173-VCG, 2015 Del. Ch. LEXIS 21 at *2, where Vice Chancellor Glascock noted “I have commented elsewhere on the difficulties, if not outright incongruities, of a law-trained judge determining fair value of a company in light of an auction sale, aided by experts offering wildly different opinions on value.” Later he referred to the difficulties of employing a DCF analysis with a mind “softened as it has been by a liberal arts education.” Id. at *59.


concede that valuation is a question determined by markets, he rejected
that, arguing that the court had earlier “adopted a definition of fair value
that is a jurisprudential, rather than purely economic, construct.” Here the
court cites a minority discount case for the assertion that “going concern”
value includes the pro rata value of the entire enterprise. There is no
mention of the exclusion of the anticipated or realized effects of the
merger.

Following Chief Justice Strine’s lead, Justice Valihura’s Dell
opinion preserves the notion that Delaware law makes valuation a
jurisprudential concept and omits any discussion of market value or the
limitations of Section 262(h).

Vice Chancellor Laster’s opinion in Aruba reflects unusual
candor by the parties and their experts: “The parties agree that it is not possible to
determine with precision what portion of the final deal price reflects
synergy value. The respondent’s expert conceded that “[t]he percentage
of synergies actually paid by HP to Aruba cannot be accurately measured.”

Vice Chancellor Laster’s response to concerns about value boil
down to whether the investors were given at least as much as or more than
the market price determined in an efficient market without manipulation:

Perhaps different negotiators could have extracted a
greater share of the synergies from HP in the form of a
higher deal price. * * * An outcome along these lines
would have resulted in HP sharing a greater portion of the
anticipated synergies with Aruba’s stockholders. It would
not have changed Aruba’s standalone value. Hence, it
would not have affected Aruba’s fair value for purposes
of an appraisal.

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184 Id. (citing Cavalier Oil, 564 A.2d , at 1144–45. As we have pointed out, the notion
of a “control premium” employed in Cavalier Oil, is a discredited one. And yet it persists here
in an amorphous fashion.

185 There is a rote recital of the statutory limit on value without any discussion of its
application in the case at hand. See Dell, 177 A.3d, at *38.

186 Aruba, No. 11448–VCL, 2018 WL 922139, at *44.

187 Id.
V. EXPLORING SOLUTIONS

The uncertainty created by the proliferation of appraisal litigation, driven by appraisal arbitrageurs that take little risk at the present, creates real costs for deals, and ultimately for the economy. Buyers are increasingly insisting on “outs” from deals, thus limiting the advantages made available in acquisitions.\(^{188}\) The more competitive the market for the target, the greater its bargaining power, and the higher the acquisition price will rise, leaving fewer benefits from the bargain for the buyer, and the more buyers will insist on outs if holders of many shares seek appraisal. Other buyers may back out of deals if they can’t obtain such an out, and those costs will remain invisible.

There are two goals in reform. First, in the interest of economic efficiency, where a selling process is a model of thoroughness and independence, why should a court ever second-guess the deal price as the ceiling on fair value? Why should we expect non-expert judges, potentially influenced by polarized and biased experts, to know more about the value of a stock than the company’s own directors and shareholders, all of whom have skin in the game, in terms of stock and stock options? Second, why should a privileged few (large) shareholders receive more compensation than the majority of informed disinterested shareholders who approved the transaction?

With this in mind, we offer the following consequences from simply following the statute, respecting market valuations rather than those of biased experts, and excluding prices influenced by expectations or realizations of the effects of a merger.\(^ {189} \)

\(^{188}\) *Appraisal Risk in Private Equity Transactions*, PRIV. EQUITY DIG. (Paul, Weiss, Rifkind, Wharton & Garrison LLP), May 2017, at 4, https://www.paulweiss.com/media/3977122/may-2017-pe-digest-r15.pdf. (showing an increase in the percentage of agreements with appraisal outs in public deals from 4.1% in 2014 to 18.1% in the first two months of 2017); Audra Boone et al., *Merger Negotiations in the shadow of Judicial Appraisal*, Indiana Legal Studies Research Paper No. 381 (June 11, 2018), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3039040, (arguing that there is no evidence that appraisal risks lower bidders’ offers to compensate for the risk). In part that may be true because appraisal outs remove that risk for bidders, but raise the risk of failure for targets.

\(^{189}\) Ironically, we quote Justice Walsh’s opinion in Barkan v. Amsted Industries, Inc., 567 A.2d 1279, 1287 (Del. 1989) (quoting the Chancellor) (“A decent respect for reality forces one to admit that . . . advice [of an investment banker] is frequently a pale substitute for the dependable information that a canvas of the relevant market can provide.”).
For public companies, there are four categories:

1. Cash mergers where there is no controlling shareholder.
2. Cash mergers involving a controlling shareholder.
3. Stock mergers where there is no controlling shareholder.
4. Stock mergers where there is a controlling shareholder.

Here are the issues in each category:

1. **Cash mergers where there is no controlling shareholder.**

   Here we have simple disinterested majority approval by both shareholders and directors, assuming a proper search and full disclosure. Most of the recent appraisal cases fit this description. If the goal of appraisal is exit from an unwanted merger, a cash deal satisfies that need. If the goal of appraisal is fair value, any deal price at or above the pre-announcement price more than satisfies that need.

2. **Cash mergers involving a controlling shareholder.**

   As in #1, exit is satisfied here. If the goal of appraisal is fair value, any price above the pre-announcement price more than satisfies that need, because shareholders bought into a company with a controlling shareholder, and thus accepted the possibility of a cash-out.

3. **Stock mergers where there is no controlling shareholder.**

   Here, if there is a board search that satisfies business judgment rule standards, and approval by a majority of fully independent shareholders, a decent respect for board and shareholder collective judgment requires deferral to that price, and employment of the pre-announcement value of the stock as fair value. In this case, as in the final one, some attention might be paid to the statute, where Section 144 provides a safe harbor from challenges to director actions.

4. **Stock mergers with a controlling shareholder.**

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190 We include stock mergers for purposes of a complete model, recognizing that there are exceptions from the appraisal right in stock mergers where shareholder are to receive shares in a publicly traded corporation, under Del. Code Ann. tit. 8, § 262(b)(2) b.


192 Corwin v. KKR Fin. Holdings LLC, 125 A.3d 304 (Del. 2015).
Where a merger with a controlling shareholder is approved by an independent board or committee with full power to consider alternatives and to recommend them, and the transaction is conditioned on approval by fully informed independent shareholders, there is no reason for a court to be concerned about the fairness of the price, beyond the conceit that judges know best. 193

For all these categories, courts could implement the reforms we suggest under existing statutory law. That said, legislative codification of this approach is certainly welcome, because codification would make it more difficult for courts to resist this approach and substitute their own discretionary valuations for the pre-deal market prices.

Our discussion until now has concerned publicly traded firms, for which using the pre-deal market price to calculate the appraisal remedy appropriately satisfies the requirement of Section 262(h) to exclude the value of deal synergies. But this approach is not available for transactions involving closely held target firms, because for them there is no pre-deal market price. This does not mean, however, that value in such cases must necessarily be established via judicial discretion. Discretionary valuation is also problematic for closely held firms, and alternatives to judicial discretion are available for them too.

One way that closely held transacting parties may protect themselves from discretionary judicial valuation is by including a discretion limiting, algorithmic valuation clause in their charters, bylaws, joint venture agreements, or buyout provisions. 195 With such a

194 See e.g., Del. Open MRI Radiology Assocs., P.A. v. Kessler, 898 A.2d 290 (Del. Ch. 2006) (Strine, V.C.) (exercising judicial discretion to asymmetrically split the difference between the party experts to value a medical practice entity at a figure maintained by neither of the parties to the appraisal litigation). For other examples of unpredictable judicial difference splitting in Delaware appraisal cases involving both public and private firms, see Keith Sharfman, Contractual Valuation Mechanisms and Corporate Law, 2 VA. L. & BUS. REV. 53, 61 n. 32–33 (2007) (collecting cases). These unpredictable, divergent results cause appraisal litigants to invest excessively in their evidentiary presentations and raise the cost of settlement. Id. at 59; see also Keith Sharfman, Valuation Averaging: A New Procedure for Resolving Valuation Disputes, 88 MINN. L. REV. 357, 360, 377 (2003).
195 Litigation management bylaws have in recent years become quite common for Delaware firms, especially now that the Delaware courts enforce them (see In re Revlon, Inc. Shareholders Litigation, 990 A.2d 940, 960 (Del. Ch., 2010)) and the Delaware legislature in 2015 specifically authorized them in Section 115, at least as to so-called “intra-corporate disputes,” which appraisal actions surely are. But we must note that at least as to forum selection
"contractual valuation mechanism" in place, value is calculated algorithmically on the basis of a pre-specified formula involving party-supplied and/or neutral expert appraisals, effectively eliminating judicial discretion to find value in some other way.\textsuperscript{196} A typical contractual valuation structure is for the parties to offer competing appraisals with the average of them becoming the conclusive value if it is no more than 10% higher than the lower of the two appraisals. Otherwise, a third appraiser is chosen by a pre-specified neutral party (such as the target firm’s external auditor), and the resulting neutral figure (or an average of that figure with one or both or the party appraisals, if they are close enough—say, within 30%—to the neutral figure) becomes the conclusive value.\textsuperscript{197} This structure provides predictable outcomes and gives valuation disputants the incentive to offer conciliatory figures, thereby reducing the cost of litigation and increasing the chance of settlement. And most importantly, to protect the parties from discretionary valuation by the trier of fact.

There are many examples of firms using such clauses in intra-corporate agreements.\textsuperscript{198} And the Court of Chancery has accepted such pre-specified formulas and enforced them in appraisal litigation.\textsuperscript{199} If the Supreme Court were to follow suit, closely held transacting parties would likely welcome the development.

Algorithmic valuation also holds promise as an alternative to discretionary judicial valuation (for appraisal cases, as well as for valuation disputes in other legal contexts) even when the litigants have not specified such a valuation mechanism in advance of any dispute. As one

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\textsuperscript{196} See Keith Sharfman, Contractual Valuation Mechanisms and Corporate Law, 2 VA. L. & BUS. REV. 53 (2007) (introducing the concept of contractual valuations mechanisms, documenting their frequent use by both public and private firms and their successful enforcement in Delaware, and proposing that they be used in conjunction with choice of law and forum selection clauses in corporate charters as a way for transacting parties to insulate themselves from discretionary judicial valuation).

\textsuperscript{197} Id. at 66.

\textsuperscript{198} See Id. at 66–69, 78–88 (discussing and tabulating multiple examples).

of us has argued elsewhere, algorithmic valuation may be legislatively imposed, making available to valuation litigants the valuation mechanisms that sophisticated transacting parties who anticipate valuation disputes agree to use in lieu of open-ended discretionary valuation by the trier of fact. Such market mimicking legislation is especially needed for corporate appraisal of closely held firms for which there is not a pre-deal market price on which the trier of fact may rely.

A final issue to consider concerning algorithmic valuation is the case of multiple parties. Suppose, for instance, that there are multiple shareholders of a closely held firm dissenting from a transaction and seeking a judicial appraisal of their shares as a remedy. And suppose further that these dissenting shareholders divide into two or more groups, contending for two or more proposed valuations. Is there an algorithmic mechanism for resolving the dispute in such a circumstance?

The answer to that question is "yes." All that need be done in such a case is to calculate an appropriately weighted average proposed valuation for the dissenting shareholders. For instance, if 60% of the dissenters contend that the appraisal value of their shares is $X and 40% of the dissenters maintain that the appraisal value is $Y, the weighted average of the dissenting shareholders’ position would be \[ \frac{(0.6)(X) + (0.4)(Y)}{2} \]. It would then be a simple matter to apply the mandated two-party algorithm to the resulting weighted average and the opposing side’s competing figure. In this way, a weighted averaging of multiple valuations on the same side could itself become part of the valuation algorithm and thereby obviate the need for (or justification of) discretionary judicial valuation in appraisal cases that continues to persist in Delaware.


201 Keith Sharfman, *Contractual Valuation Mechanisms and Corporate Law*, 2 VA. L. & BUS. REV. at 59 (explaining that “the legal valuation problem is perhaps most acute in the corporate appraisal context, where the stakes are often high and the problem frequently recurs”).

CONCLUSION

Each block of Marble, Michelangelo believed (or purported to believe) contained a sculpture; the sculptor’s job was merely to pitch the overburden to reveal the beauty within. Early jurists believed (or purported to believe) something similar about common law; that it existed in perfect form, awaiting “finding” by the judge. By contrast, even Blackstone would expect that statutory law would be an explicit, if blunt, tool of justice; manufactured, rather than revealed. Our appraisal statute, Section 262 of the DGCL, is an exception. Broth of many cooks and opaque of intent, it provides every opportunity for judicial sculpting.203

Returning to some deference for statutory guidance would eliminate much uncertainty and decrease legal costs. This statute is clear enough, and principles of finance and materiality are equally so.

We have mainly argued here for reliance on the pre-deal market price for share valuation in appraisal litigation involving public companies. To achieve this result, the courts would simply need to give actual respect to market prices rather than merely pay them lip service as the Supreme Court has consistently done, most recently in Dell and DFC. And abandoning the so-called "jurisprudence" of discretionary valuation would have the added virtue of obeying and giving effect to the statutory command in Section 262(h) to exclude the value of synergies from the appraisal calculus.

For appraisal of shares in closely held firms, we have suggested that parties protect themselves transactionally from discretionary valuation with contractual valuation mechanisms in their charters, bylaws, joint venture agreements, and other buyout provisions. We have also suggested that legislation imposing an algorithmic valuation process for appraisal cases involving closely held firms that is akin to what sophisticated firms often themselves agree to is possible to do and would be a salutary reform that would substantially improve upon the regime of discretionary valuation that now prevails in appraisal cases.

## Appendix A

<table>
<thead>
<tr>
<th>Case Name</th>
<th>Deal Price Per Share</th>
<th>Appraised at</th>
<th>S/h Expert</th>
<th>Co. Expert</th>
<th>Pre-Deal Market Price</th>
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<td>Ng v. Heng Sang Realty Corp., 2004 Del. Ch. LEXIS 69</td>
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<td>Highfields Capital, Ltd. v. AXA Fin., Inc., 939 A.2d 34, 42 (Del. Ch. 2007)</td>
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<td>$28.00</td>
<td>$51.00, then $73.29 on remand</td>
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<td>Olson v. EY3, Inc., 2011 Del. Ch. LEXIS 34, 2011 WL 704409</td>
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<td>Fee award case - not appraisal</td>
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<td>Dunmire v. Farmers &amp; Merchs. Bancorp of W. Pa., 2016 Del. Ch. LEXIS 167</td>
<td>Stock for stock (hard to value) $83.50</td>
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<td>LongPath Capital, LLC v. Ramtron Int'l Corp., 2015 Del. Ch. LEXIS 177</td>
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<td>In re ISN Software Corp. Appraisal Litig., 2016 Del. Ch. LEXIS 125, aff'd 2017 Del. Ch. LEXIS 451</td>
<td>$25,000</td>
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