Emory Law Journal

Volume 68 | Issue 2

2018

The Flawed Corporate Finance of Dell and DFC Global

Charles Korsmo

Minor Myers

Follow this and additional works at: https://scholarlycommons.law.emory.edu/elj

Recommended Citation

Charles Korsmo & Minor Myers, *The Flawed Corporate Finance of Dell and DFC Global*, 68 Emory L. J. 221 (2018).

Available at: https://scholarlycommons.law.emory.edu/elj/vol68/iss2/1

This Article is brought to you for free and open access by the Journals at Emory Law Scholarly Commons. It has been accepted for inclusion in Emory Law Journal by an authorized editor of Emory Law Scholarly Commons. For more information, please contact law-scholarly-commons@emory.edu.

THE FLAWED CORPORATE FINANCE OF *DELL* AND *DFC GLOBAL*

Charles Korsmo
Minor Myers[*]

ABSTRACT

*In a pair of momentous decisions, the Delaware Supreme Court recently attempted to bring clarity and reason to a corporate law topic of increasing importance: appraisal rights. In both decisions—*Dell *and* DFC Global*—the Court insisted that it did nothing more than apply "established principles of corporate finance." Yet in analyzing the financial ideas and concepts at play, the Court made four critical mistakes. First, the Supreme Court ignored the differences between how public markets price risk and how private parties—particularly financial sponsors—price risk. Second, the Court took the well-supported evidence of information efficiency in securities markets as necessarily implying a high degree of value efficiency. It then compounded this error by attributing this value efficiency not simply to the securities market but also to the deal market. Third, the Court succumbed to a flawed analogy between the fiduciary duty and appraisal contexts, implying that conditions of pricing efficiency are met whenever directors satisfy their minimum fiduciary obligations. Fourth, the Court treated company valuation as a mechanical, arithmetical calculation, downplaying the essential role of human judgment. This Article analyzes these errors and considers some potential implications for the future of appraisal rights in particular and for M&A markets and diversified public stockholders more generally.*

---

[*] Korsmo is Professor of Law at Case Western Reserve University School of Law, and Myers is Professor of Law at Brooklyn Law School. We received helpful feedback from Sean Griffith, J. Travis Laster, Roberta Romano, and participants in workshops at the U.S.C. Gould School of Law, the University of Connecticut School of Law, and Cardozo School of Law. We are the principals of Stermax Partners, which provides compensated advice on stockholder appraisal and manages appraisal-related investments, and we have economic interests in the outcome of appraisal proceedings. We received no compensation for the preparation of this article, and none of the views expressed here were developed directly out of our advisory work, although, of course, general experience serves as helpful background.

INTRODUCTION

Over the past decade, the law of stockholder appraisal rights has become an active and hotly debated topic in corporate law scholarship and practice. The dollar value at stake in appraisal claims has grown dramatically, as has the sophistication of the dissenting stockholders. In many cases, the dissenting stockholders are specialists who acquire positions in the target company after the announcement of the transaction with the intent to demand a judicial appraisal of the company—a practice that has been (inaptly) dubbed "appraisal arbitrage."[1]

In 2017, the Delaware Supreme Court (Supreme Court) issued a pair of important opinions on the stockholder appraisal remedy—its first serious pronouncements since the rise of appraisal arbitrage. These two opinions—*Dell*[2] and *DFC Global*[3]—both involved situations where specialist investors dissented from a public company merger and where the Delaware Court of Chancery (Court of Chancery) determined that the fair value of each company was higher than the merger price negotiated by the target board. Both decisions were reversed by the Supreme Court for failure to justify the decision to depart from the negotiated deal price as the best evidence of fair value.[4]

The Supreme Court clearly intended for these two opinions to stand as testaments to the importance of market pricing in mergers and acquisitions (M&A). The theme of both opinions is that the Court of Chancery should have relied more heavily on the price negotiated by the target company's board of directors.[5] In both cases, reasonable minds may disagree about whether the fair value of each company should have been the deal price or something more like the fair value found initially by the Court of Chancery. But, as detailed below, whatever one's views on the individual case outcomes, the opinions are problematic in their misunderstandings of basic principles of modern finance. Most fundamentally, the Supreme Court embraces a crude notion of market efficiency, which it wields to dismiss any doubts as to the information content of the deal price.

---

1 *See* Charles R. Korsmo & Minor Myers, *Appraisal Arbitrage and the Future of Public Company M&A*, 92 WASH. U. L. REV. 1551, 1574 n.86 (2015) [hereinafter Korsmo & Myers, *Appraisal Arbitrage*] ("In fact, appraisal arbitrage is not true 'arbitrage,' in the sense that it does not involve exploiting a price difference that is eventually expected to disappear. The term 'arbitrage' is used somewhat loosely . . . in order to draw an analogy to merger arbitrage.").

2 Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 5, 16–18 (Del. 2017).

3 DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346, 360–61 (Del. 2017).

4 *Dell*, 177 A.3d at 19; *DFC Glob.*, 172 A.3d at 349.

5 *See infra* Section I.D.2.

The Supreme Court's message to the trial courts is simple: absent a culpable breach of duty, trust the market and have faith in the negotiated price.[6] The court's faith may be not so much in the efficiency of markets as in the perfection of its merger jurisprudence. These opinions leave the impression that a deal process that meets the bare procedural design tests imposed in recent fiduciary duty cases such as *MFW*,[7] *C&J*,[8] and *Corwin*[9]—namely, a deal conditioned on approval by independent directors and a majority of disinterested stockholders—is good enough and will never merit financial recovery for stockholders. Under this view, the statutory appraisal remedy is simply unnecessary as a tool of corporate governance, at least in the public company context. Just as *Corwin* may have driven a nail into the merger class action, *Dell* risks smothering the fledgling utility of the appraisal remedy in its crib.

At root, the court appears convinced that we have reached the end of history on merger process design and that recent fiduciary duty case law has "solved" the problem of agency costs in merger transactions. As a prominent financial columnist for Bloomberg has noted, the Delaware courts have reached "a rather hopeful conclusion: After decades of merger litigation, the merger process has been refined and perfected, and now it can for the most part run on its own."[10] We are less sanguine. When the guardians go to sleep, history has a way of roaring back. Without meaningful protection from the courts, exploitation of minority stockholders will increase, and capital formation will be impaired.[11] Following *Corwin*, appraisal is the last judicial sentry still on watch.[12]

---

[6] At least one Vice Chancellor has interpreted the Supreme Court's message even more strongly, finding that, in the absence of a culpable breach of duty, *Dell* and *DFC Global* compelled him to award the unaffected market price, which was well below the deal price. *See* Verition Partners Master Fund Ltd. v. Aruba Networks, Inc., No. 11448-VCL, 2018 WL 922139, at *24, *30, *34 (Del. Ch. Feb. 15, 2018).

[7] Kahn v. M&F Worldwide Corp., 88 A.3d 635, 638, 644 (Del. 2014) (involving a controlling stockholder squeeze out).

[8] C&J Energy Servs., Inc. v. City of Miami Gen. Emps.' Trust, 107 A.3d 1049, 1052, 1067–68 (Del. 2014) (holding that a single-bidder sales process with the conventional battery of deal protections can satisfy *Revlon*).

[9] Corwin v. KKR Fin. Holdings LLC, 125 A.3d 304, 306, 308–09 (Del. 2015) (involving a third-party transaction).

[10] Matt Levine, Opinion, *Appraisal Arbitrage Is in Trouble*, BLOOMBERG (Feb. 22, 2018, 10:01 AM), https://www.bloomberg.com/view/articles/2018-02-22/appraisal-arbitrage-is-in-trouble.

[11] *See, e.g.*, Guhan Subramanian, *Appraisal After* Dell, *in* THE CORPORATE CONTRACT IN CHANGING TIMES: IS THE LAW KEEPING UP? (Steven Davidoff Solomon & Randall Stuart Thomas eds., forthcoming 2018) (manuscript at 33) ("The 'law and finance' literature demonstrates that protecting minority shareholders improves capital formation. The intuition for this empirical finding is that prospective investors in the *next* dorm room startup will be wary to commit capital if they do not have adequate protections at exit.").

[12] *See id.* ("With the near-death of post-closing fiduciary duty litigation in the post-*Corwin* world, appraisal remains the last check against a deficient and/or conflicted deal process.").

It would be a shame to send this lonely sentry back to its bunk. Whatever one thinks of *Corwin*,[13] the fiduciary duty class action it eviscerated was largely a judicial creation, clearly subject to revision by the judiciary. Moreover, by the time of *Corwin*, a mountain of empirical evidence had accumulated showing that the merger class action was being abused and was not serving any governance function.[14] The appraisal remedy is an altogether different story. Appraisal is a statutory remedy, amended periodically by Delaware's General Assembly.[15] Moreover, the empirical evidence on modern appraisal is positive, finding little evidence of abusive litigation and substantial evidence that it is playing a positive but nascent governance role.[16] The arguments against appraisal have largely been anecdotal or emotional in nature and have thus far been carried forward primarily by law students[17] and prominent deal advisers.[18] Two recently released academic papers mount a defense of the *Dell* and *DFC Global* decisions,[19] though both papers succumb to the very same mistakes that the Supreme Court committed in the cases themselves.[20]

---

[13] One of us argues elsewhere that *Corwin* goes too far in limiting merger class actions, and will have unfortunate governance consequences. *See* Charles R. Korsmo, *Delaware's Retreat from Judicial Scrutiny of Mergers*, 9 U.C. IRVINE L.R. (forthcoming 2019) (manuscript at 55) [hereinafter Korsmo, *Delaware's Retreat*].

[14] *See, e.g.*, Matthew D. Cain & Steven Davidoff Solomon, *A Great Game: The Dynamics of State Competition and Litigation*, 100 IOWA L. REV. 465, 484–85 (2015); Jill E. Fisch et al., *Confronting the Peppercorn Settlement in Merger Litigation: An Empirical Analysis and a Proposal for Reform*, 93 TEX. L. REV. 557, 559–60, 572 (2015). We piled our own stone upon this mountain. *See* Charles R. Korsmo & Minor Myers, *The Structure of Stockholder Litigation: When Do the Merits Matter?*, 75 OHIO ST. L.J. 829, 889 (2014).

[15] Indeed, the Delaware legislature recently convened a blue-ribbon panel of the Council on Corporation Law to consider amendments to the appraisal statute. The panel recommended—and the legislature ultimately adopted—modest reforms, while rejecting any wholesale remaking of the appraisal remedy. *See* H.R. 371, 148th Gen. Assemb., Reg. Sess. (Del. 2016); Charles Korsmo & Minor Myers, *Reforming Modern Appraisal Litigation*, 41 DEL. J. CORP. L. 279, 308–12 (2017).

[16] *See infra* notes 53–82 and accompanying text.

[17] *See, e.g.*, Desiree M. Baca, Note, *Curbing Arbitrage: The Case for Reappraisal of Delaware's Appraisal Rights*, 13 N.Y.U. J.L. & BUS. 425, 427, 460 (2017); Craig Boyd, Comment, *Appraisal Arbitrage: Closing the Floodgates on Hedge Funds and Activist Shareholders*, 65 U. KAN. L. REV. 497, 497 (2016) ("The words that come to mind when attempting to define 'arbitrage' inevitably include terms such as lies, trickery, unfair play, and deception. Intuition calls us to correct the system . . . ."); Stanley Onyeador, Note, *The Chancery Bank of Delaware: Appraisal Arbitrageurs Expose Need to Further Reform Defective Appraisal Statute*, 70 VAND. L. REV. 339, 356, 374 (2017).

[18] *See* Subramanian, *supra* note 11 (manuscript at 5) (cataloguing deal adviser response to the Court of Chancery opinion in *Dell*).

[19] *See* William J. Carney, *The Death of Appraisal Arbitrage: Ending Windfalls for Deal Dissenters*, 43 DEL. J. CORP. L. (forthcoming 2018); Jonathan Macey & Joshua Mitts, *Asking the Right Question: The Statutory Right of Appraisal and Efficient Markets* (Nov. 28, 2018) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3279838.

[20] For example, both papers assume that the market for individual shares is informative of the value of the entire firm. *See* Carney, *supra* note 19 (manuscript at 91) ("[T]he pre-announcement market price should be presumed to be the best evidence of fair value."); Macey & Mitts, supra note 19 (manuscript at 36) ("The share price of the target that is generated by the market, unvarnished by the price effects associated with the deal itself

In this Article, we focus on four errors the Supreme Court committed in applying modern finance theory.[21] First, in considering how risk bears on the pricing of transactions, the court ignored the difference between how diversified investors price risk and how undiversified investors, like private equity investors, price risk.[22] A basic tenet of modern portfolio theory is that, for diversified investors, only market or systematic risks affect asset values, while firm-specific risks are largely irrelevant to pricing. Undiversified investors, on the other hand, must discount for both types of risk. In both opinions, the court devotes pages to the effect of risk on asset prices without recognizing this critical distinction between *types* of risk.[23] This leads to basic errors in how the court analyzed the legal issues before it. Diversified (public) shareholders need only discount for market risk, while concentrated (private) shareholders must discount for both market and firm-specific risk. For DFC Global, in particular, firm-specific risk was especially high,[24] potentially creating a significant gap between the price paid by a private equity buyer and the company's value as a going concern.

The second mistake is to confuse the well-supported evidence of informationally efficient securities markets with crude notions of value efficiency.[25] If the past thirty years of financial economics have taught anything, it is that markets can be extremely efficient at arbitraging away new information without any assurance that prices will be "accurate" in any fundamental way. The court compounds this error by ascribing to the market for entire companies—the deal market—the efficiency of the market for individual shares

are the best indicator of value for the target . . . ."). The gravity of that mistake is explored below in section II.B. Relatedly, both papers also rely on a conception of statutory "fair value" that would strip public stockholders of their interest in the firm as a going concern, a reading neither dictated by the statute nor desirable as a matter of policy. *See* Part III.C.

21 *See generally* Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1 (Del. 2017). Although we seek to cover the Supreme Court's most serious errors, our canvas is not exhaustive. For example, the Supreme Court also misunderstood the basic auction theory concept of the "Winner's Curse," erroneously believing that it would only come into play if an existing bid is already at fair value. *See Dell*, 177 A.3d at 33 ("If a deal price is at a level where the next upward move by a topping bidder has a material risk of being a self-destructive curse, that suggests the price is already at a level that is fair."). In reality, potential bidders proceed by backward induction and, seeing no ultimate path to success, will refrain from bidding at all against an informed party with matching rights, as in *Dell*. *See* Subramanian, *supra* note 11 (manuscript at 18–20) (concluding that the *Dell* Supreme Court's "characterization of the winner's curse is not correct."). For criticisms of the *Dell* court's mischaracterizations of the trial record and unusual application of the abuse of discretion standard, see *id.* (manuscript at 13–26).

22 *See infra* notes 244–92 and accompanying text.

23 *See, e.g.*, *Dell*, 177 A.3d at 28, 30, 32–33, 37–38; DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346, 349–50, 353, 358, 369, 373, 380, 385 (Del. 2017).

24 *DFC Glob.*, 172 A.3d at 353.

25 *See infra* notes 293–351 and accompanying text.

of stock. This is incorrect. The market for corporate control, dealing with a limited universe of buyers for companies that generally lack exact substitutes, is unavoidably less efficient than the market for individual shares.[26] The pricing efficiency of this very different market depends on a variety of factors that the court failed to consider.

The court's third error is to assume that conditions of pricing efficiency were met in the sale of a company whenever the directors satisfied their minimum fiduciary obligations.[27] This assumption has no basis in economics, corporate finance, or auction theory, and no evidence exists in support of it. It also ignores the context in which fiduciary duty liability operates. Corporate fiduciary liability—focused as it is on the personal liability of directors, and properly concerned with the possibility of risk-aversion—is deliberately and appropriately forgiving of director misbehavior. As a result, instances abound where a board might satisfy fiduciary standards but nonetheless fail to conduct a sales process that generates reliable evidence of the company's fair value. As Albert Choi and Eric Talley have recently demonstrated, a sales process that satisfies Delaware's deferential fiduciary duty standards can result in a negotiated price that departs dramatically from the fair value that would emerge from a better-crafted sales process.[28] The court, however, has fallen into the trap of mistaking a process that is not bad enough to justify personal fiduciary liability for a process that is good enough to have confidence in the resulting price.

The fourth major mistake is that the court approached valuation as a mechanical arithmetic exercise, attempting to evade the unavoidable need for human judgment.[29] In *DFC Global* in particular, the Court of Chancery adopted a set of post-trial adjustments to its discounted cash flow (DCF) analysis that, in combination, resulted in a valuation that squared with the available evidence.[30] On appeal, the Supreme Court reversed one aspect of those adjustments, while leaving the others in place.[31] Viewed in isolation, the Supreme Court's analysis of the factor in question was reasonable, with one small problem: it generated an implausible result. In part, this reflects the current Supreme Court's preference for bright-line rules over Delaware's traditional respect for and

[26] *See Dell*, 177 A.3d at 35.

[27] *See infra* Section II.C.

[28] *See* Albert H. Choi & Eric Talley, *Appraising the "Merger Price" Appraisal Rule*, 35 J.L ECON. & ORG. (forthcoming 2019) (manuscript at 26–27).

[29] *See infra* notes 382–400 and accompanying text.

[30] *See* DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346, 350 (Del. 2017).

[31] *Id.*

reliance on the judgment of its chancellors. In company valuation, however, human common sense is too costly a sacrifice to lay upon the altar of convenience.

These foundational mistakes color all of the legal conclusions that the Supreme Court draws in reliance upon them. Given their full-throated expression by the court, these misunderstandings must be rectified before they do lasting harm to Delaware law, public stockholders, and the competitiveness of U.S capital markets. In recent decisions, the Court of Chancery has labored mightily to preserve its reputation for financial sophistication and good judgment through flexible application of *Dell* and *DFC Global*.[32] But the strictures of the Supreme Court's opinions may not always be easy to avoid. In the *Aruba Networks* appraisal, for example, Vice Chancellor Laster found himself compelled by the "market efficiency" logic of *DFC* and *Dell* to an absurd result: equating "fair value" to the pre-announcement trading price.[33] Further absurdities may follow if the Delaware Supreme Court's errors go uncorrected.

This Article proceeds as follows: Part I examines recent developments in appraisal litigation, including the growing body of empirical research on the topic, and summarizes the *Dell* and *DFC Global* cases. Part II explores each of the four mistakes the Delaware Supreme Court made in its opinions. Part III works through some implications that follow in the wake of these two opinions.

I. THE RISE OF MODERN APPRAISAL

This Part charts developments in appraisal law and practice in recent years. Over the past decade, appraisal activity in Delaware has increased substantially.[34] As the value of claims and the number of filings has grown, so has the sophistication and specialization of those pursuing appraisal.[35] The rise of appraisal has attracted interest from researchers, who have explored the

---

[32] *See* Blueblade Capital Opportunities LLC v. Norcraft Cos., Inc., No. 11184-VCS, 2018 WL 3602940, at *2 (Del. Ch. July 27, 2018) (finding "significant flaws in the process leading to the Merger that undermine the reliability of the Merger Price as an indicator of Norcraft's fair value").

[33] *See* Verition Partners Master Fund Ltd. v. Aruba Networks, Inc., No. 11448-VCL, 2018 WL 922139, at *28, *30, *44–45 (Del. Ch. Feb. 15, 2018). In short, despite an opinion suggesting that the directors did a poor job selling the company and extracting value from the buyer, Vice Chancellor Laster felt constrained by *DFC* and *Dell* to find that the deal price minus synergies represented the best measure of fair value. *Id.* at 44–45. In the absence of any reliable method for estimating the amount of synergies reflected in the deal price, the Vice Chancellor felt further constrained to defer to the pre-announcement trading price as the least arbitrary estimate of Aruba's value as a stand-alone company. *Id.*

[34] *See infra* note 36.

[35] *See infra* note 51.

crucial policy questions of how stockholders have used appraisal and what effect the remedy has on the broader M&A market. Thus far, the empirical work on appraisal has painted a rather promising picture. This empirical support, however, for appraisal has remained largely unacknowledged by the Delaware courts in the face of continued expressions of unease by deal advisers and other practitioners. The Delaware Supreme Court's *Dell* and *DFC Global* opinions suggest that practitioner angst over appraisal has registered far more loudly with the court than scholarly approval.

A. The Growth of Appraisal Activity

As we have shown elsewhere, the use of appraisal rights has flourished in this decade.[36] The causes of that growth remain unclear, as does the question of whether that growth will persist in light of the Delaware jurisprudence discussed below.

The appraisal remedy is nearly as old as the corporate form itself,[37] and it entitles a dissenting stockholder to refuse the merger consideration and instead have a court determine the "fair value" of the dissenter's stock.[38] In Delaware, the remedy is available when a merger requires that public stockholders accept at least some cash in exchange for their cancelled shares.[39] Even in those circumstances, stockholders are not automatically eligible to exercise their appraisal rights. To preserve them, they must not vote in favor of the transaction and must deliver written notice of their intent to the company by a specified time.[40]

---

36 *See, e.g.*, Korsmo & Myers, *Appraisal Arbitrage*, *supra* note 1, at 1569; Charles R. Korsmo & Minor Myers, *Interest in Appraisal*, 42 J. CORP. L. 109, 111 (2016); Korsmo & Myers, *Reforming Modern Appraisal Litigation*, *supra* note 15, at 282, 287, 289.

37 Appraisal rights became widely available in the early twentieth century. *See* MELVIN A. EISENBERG, THE STRUCTURE OF THE CORPORATION: A LEGAL ANALYSIS 75 (1976); *see also* Robert B. Thompson, *Exit, Liquidity, and Majority Rule: Appraisal's Role in Corporate Law*, 84 GEO. L.J. 1, 14–15 (1995); Barry M. Wertheimer, *The Shareholders' Appraisal Remedy and How Courts Determine Fair Value*, 47 DUKE L.J. 613, 618–19 (1998).

38 *See generally* DEL. CODE. ANN. tit. 8, § 262 (2018) (citing most recent electronic version); see also MODEL BUS. CORP. ACT § 13.02 (2016).

39 DEL. CODE ANN. tit. 8 § 262(b) (2018) (citing most recent electronic version).

40 See Ala. By-Products Corp. v. Cede & Co. *ex rel.* Shearson Lehman Bros., Inc., 657 A.2d 254, 260 n.10 (Del. 1995) ("In an appraisal proceeding, however, shareholders enter the appraisal class by complying with the statutory formalities required to perfect their appraisal rights. Thus, shareholders seeking appraisal 'opt in' to a class, invariably before suit is even filed, rather than 'opt out.'").

This unique procedural structure has been the target of reform proposals over the years,[41] but as we noted in earlier work, "the very feature of appraisal action that attracts the most criticism—the unavailability of class treatment—also has the great virtue of largely eliminating the kinds of agency problems that can lead to abusive and wasteful shareholder litigation."[42] With their own interests in mind, stockholders will only seek appraisal where their position is large enough to justify the costs of the proceeding. As a result, the pathologies of class action litigation, where plaintiffs' attorneys control claims and often resolve them in ways that generate no benefits for stockholders,[43] are highly unlikely in appraisal.

Although the remedy was little used for decades,[44] our prior work documents a dramatic increase in appraisal activity that began in 2011.[45] Before that time, only about 5% of public company transactions attracted appraisal petitions, and those stockholders who dissented generally did so as a one-off exercise.[46] Across various measures—claims filed, deals challenged, the dollar value of claims—appraisal activity began to increase after 2011.[47] During 2015, more than $2 billion of stock dissented in Delaware,[48] and in 2016 20% of public company transactions faced an appraisal claim.[49]

The group of dissenting stockholders also grew more specialized and sophisticated. The standing requirements for appraisal have long been unique among corporate claims: stockholders who acquire stock after the announcement of a transaction may still exercise their appraisal rights.[50] This allows investment

---

41 Jesse M. Fried & Mira Ganor, *Agency Costs of Venture Capitalist Control in Startups*, 81 N.Y.U. L. REV. 967, 1004–05 (2006) (noting that "many shareholders find it difficult to meet the complicated procedural requirements and deadlines of the appraisal remedy" and that "[t]he shortcomings of the appraisal remedy are widely known" and that "[c]ommentators have long recognized that appraisal is a remedy that few shareholders will seek under any circumstance"); Bayless Manning, *The Shareholder's Appraisal Remedy: An Essay for Frank Coker*, 72 YALE L.J. 223, 260 (1962) ("The appraisal remedy is of virtually no economic advantage to the usual shareholder except in highly specialized situations.").

42 Korsmo & Myers, *Appraisal Arbitrage*, *supra* note 1, at 1565.

43 Fisch et al., *supra* note 14, at 559.

44 2 PRINCIPLES OF CORPORATE GOVERNANCE: ANALYSIS AND RECOMMENDATIONS 293–94 (AM. LAW INST. 1994) (noting the remedy "is seldom utilized").

45 Korsmo & Myers, *Appraisal Arbitrage*, *supra* note 1, at 1569.

46 *Id.*

47 *Id.* at 1569–72.

48 Charles R. Korsmo & Minor Myers, *Recent Developments in Stockholder Appraisal*, *in* RESEARCH HANDBOOK ON REPRESENTATIVE SHAREHOLDER LITIGATION (Sean Griffith et al. eds., forthcoming 2018) (manuscript at 7).

49 Audra L. Boone et al., *Merger Negotiations in the Shadow of Judicial Appraisal* 14 (Indiana Legal Studies, Working Paper No. 381, 2018).

50 *See* Olivetti Underwood Corp. v. Jacques Coe & Co., 217 A.2d 683, 686–87 (1966). For the financial community's understanding, see Elena Berton, *Hedge Funds Vex a Shire Takeover of Transkaryotic*, WALL

funds to focus specifically on appraisal rights, and in recent years these funds have raised billions of dollars from investors.[51] They have been responsible for most of the value at stake in appraisal during the recent boom of activity.[52]

B. The Empirical Research on Appraisal Rights and M&A

As appraisal activity has increased, so has scholarly interest in the topic.[53] Our papers were the first to document the rise in appraisal activity in the early part of this decade.[54] A succession of papers have since examined two critical research questions involving appraisal: First, in which cases are stockholders invoking their appraisal rights?[55] Second, how, if at all, does the threat of appraisal affect the deal market?[56]

The first question involves whether stockholders are abusing the right to dissent or whether instead they are targeting the "right" transactions—those with markers of opportunistic behavior on the part of management. What kinds of transactions, in other words, attract dissenting stockholders? Does appraisal litigation resemble the classic class action strike suit—a scattershot attack on the M&A market in search of quick settlements and a favorable interest rate on any judgment? Or do stockholders instead focus their attention on deals that merit additional scrutiny?

Thus far, empirical work on appraisal has overwhelmingly pointed to the latter. In our previous work, we consistently found that two factors were

---

STREET J. (Aug. 17, 2005, 12:01 AM), https://www.wsj.com/articles/SB112423543569114987 ("Delaware corporate law allows all shareholders—even those who bought shares just before the vote on a takeover—to seek an independent valuation in court if they reckon the price being offered for their stock is inadequate, even if a majority approve the takeover."). This basic idea has been affirmed by more recent cases. *See In re* Appraisal of Ancestry.com, Inc., No. 8173-VCG, 2015 WL 66825, at *1 (Del. Ch. Jan. 5, 2015) (holding that petitioner who acquired stock after the announcement of the merger was entitled to pursue appraisal); Merion Capital L.P. v. BMC Software, Inc., No. 8900-VCG, 2015 WL 67586, at *6 (Del. Ch. Jan. 5, 2015) (same).

51 *See* Steven Davidoff Solomon, *Delaware Courts Pause on the Deal Price Do-Over*, N.Y. TIMES (Feb. 19, 2015), https://www.nytimes.com/2015/02/20/business/dealbook/delaware-courts-pause-on-the-deal-price-do-over.html.

52 Korsmo & Myers, *Appraisal Arbitrage*, *supra* note 1, at 1572–73.

53 *See, e.g.*, Boone et al., *supra* note 49; Scott Callahan et al., *Appraisal Arbitrage and Shareholder Value*, J.L. FIN. & ACCT. (forthcoming 2018) (manuscript at 2); Choi & Talley, *supra* note 28; Wei Jiang et al., *Appraisal: Shareholder Remedy or Litigation Arbitrage*, 59 J.L. & ECON. 697, 698 (2016); Jonathan Kalodimos & Clark Lundberg, *Shareholder Rights in Mergers and Acquisitions: Are Appraisal Rights Being Abused?*, 22 FIN. RESEARCH LETTERS 53, 53 (2017); Lawrence A. Hamermesh & Michael L. Wachter, *Finding the Right Balance in Appraisal Litigation: Deal Price, Deal Process, and Synergies*, 73 BUS. LAW. 961 (2018).

54 *See* Korsmo & Myers, *Appraisal Arbitrage*, *supra* note 1, at 1553; Korsmo & Myers, *The Structure of Stockholder Litigation: When Do Merits Matter?*, *supra* note 14, at 829.

55 *See supra* note 53.

56 *Id.*

associated with transactions attracting dissenting stockholders: a merger premium that is abnormally low and insider participation in the transaction.[57] Since then, work by Wei Jiang, Tao Li, Danqing Mei, and Randall Thomas has confirmed that same finding.[58] They found that going-private transactions and deals with lower premia both increase the likelihood of appraisal.[59] They interpret their findings as follows: "[P]etitioners seem to target deals with characteristics that are most likely to be tainted by conflicts of interest, such as going-private deals, minority squeeze outs, and short-form M&A with low premiums."[60] They also examined the effect of the statutory interest rate and concluded that the 2016 interest rate reform was "very likely to reduce the incidence of strike suits."[61]

Two other financial economists—Johnathan Kalodimos and Clark Lundberg—examined this same question of which transactions are targeted.[62] Using a matched sample methodology, they confirm the low premium effect: The lower the premium, the greater the chance of appraisal.[63] They do not, however, find an effect associated with insider transactions.[64] They find two other interesting effects. "Busy boards"—where a majority of outside directors have more than three directorships, used in the literature as a proxy for inattention—are more likely to attract dissenting stockholders.[65] And they examine the stock price reactions of acquirers, finding that abnormal positive returns in the window surrounding the deal announcement are higher in transactions targeted for appraisal.[66] Kalodimos and Lundberg interpret this and their other findings as "consistent with petitioned acquisitions occurring at prices below fundamental value and is not consistent with appraisal rights generally functioning as an abusive channel for opportunistic investors."[67]

The second research question involves the effect of appraisal rights on the M&A market more generally. Even if appraisal rights are being used in ways

---

57 Korsmo & Myers, *Appraisal Arbitrage*, *supra* note 1, at 1596; Korsmo & Myers, *Reforming Modern Appraisal Litigation*, *supra* note 15, at 290–91.

58 *See* Jiang et al., *supra* note 53, at 699–700.

59 *Id.* at 718.

60 *Id.* at 727.

61 *Id.*

62 Kalodimos & Lundberg, *supra* note 53, at 54.

63 *Id.* at 54–57.

64 *Id.* at 54.

65 *Id.* at 56.

66 *Id.*

67 *Id.*

tied to underlying merits, it still could be the case that the exercise of these rights has a deleterious impact on the deal market.

In a recent paper, Audra Boone, Brian Broughman, and Antonio Macias examined this question.[68] Their research looked for changes in the deal market in response to events that strengthened or weakened appraisal rights in Delaware.[69] They found that, "Delaware targets receive[d] higher acquisition premiums . . . following events that strengthen[ed] the appraisal remedy . . . ."[70] They found no evidence that bidders lowered their prices in response to the threat of appraisal.[71] They also looked at arbitrage spreads post-announcement. The spread in deals with no appraisal petition was 6%—meaning that target company stock trades, on average, at a 6% discount to the negotiated merger price immediately following the deal's announcement.[72] In deals with dissenting stockholders, however, the spread was statistically indistinguishable from zero.[73] In effect, appraisal specialists bid the trading price up, paying the full merger price. These empirical findings suggest two conclusions. First, the response of acquisition premia indicates that, contrary to the expressed fears of some practitioners, the increasing use of appraisal has not injured minority stockholders by causing acquirers to "hold back" value in anticipation of appraisal. Second, the elimination of the post-announcement spread suggests that appraisal arbitrageurs are providing a direct benefit to stockholders who do not seek appraisal, allowing them to obtain the full merger price immediately.

Perhaps more importantly, the same authors further found that the likelihood of Delaware firms becoming acquisition targets *increases* following events that strengthened appraisal.[74] This suggests that increasing levels of appraisal activity do not deter deal-making. And, crucially, they found that deal planners were more likely to use a formal auction as a market check when appraisal is strengthened.[75] As they conclude: "[O]ur analysis suggests that bidders protect themselves against threat of appraisal, not through contractual terms that would allow the bidder to walk away from the deal . . . but rather by increasing their upfront bid and improving the price-setting process . . . ."[76] In other words, appraisal appears to be having the effect we predicted, giving managers an *ex*

68 Boone et al., *supra* note 49, at 1.
69 *Id.*
70 *Id.* at 3.
71 *Id.*
72 *Id.* at 19.
73 *Id.*
74 *Id.* at 21.
75 *Id.* at 26.
76 *Id.* at 4.

ante incentive to employ a better deal process and obtain a better price. In sum, they conclude that "a strong appraisal regime increases returns to target shareholders."[77]

Another recent paper on this topic, by Scott Callahan, Darius Palia, and Eric Talley, finds that deal premia are higher in appraisal-eligible transactions, even controlling for the tax status of the deal.[78] This result is consistent with the reserve price model that Choi and Talley developed in a separate paper.[79] Callahan, Palia, and Talley also find evidence that 2007 changes to the appraisal regime increased the premia associated with appraisal eligible deals.[80] They note that the Boone, Broughman, and Macias paper—which makes different methodological choices—generates consistent results.[81] In their view, the consistency of the findings strengthens the shared conclusion: "we view the two papers to be highly complementary and ultimately symbiotic robustness checks against one another."[82]

C. *The Continuing Policy Debate*

The empirical findings are consistent with our earlier conjecture that appraisal rights play a salutary but small role in public company M&A.[83] Despite the positive results of empirical investigations of appraisal activity, practitioners—particularly an influential group of New York deal advisers—have continually sounded the alarm bell about appraisal, presenting it as a threat to the deal market and a new front in nuisance litigation.[84]

In 2015, a group of seven law firms that have active M&A practices protested that Delaware, in proposing two prophylactic reforms to the appraisal statute, did not go far enough.[85] The firms wanted reforms that would result in the elimination of appraisal arbitrage.[86] The benefits of their reform agenda would be to "reduce the unseemly claims-buying that is rampant and serves no legitimate equitable or other purpose, but threatens to undermine transactional

---

77 *Id.* at 5.

78 Callahan et al., *supra* note 53 (manuscript at 36).

79 *See* Choi & Talley, *supra* note 28 (manuscript at 3).

80 Callahan et al., *supra* note 53 (manuscript at 28).

81 *Id.* (manuscript at 7).

82 *Id.*

83 *See* Korsmo & Myers, *Reforming Modern Appraisal Litigation*, *supra* note 15, at 282–83.

84 *Id.* at 309.

85 Letter from Cravath, Swaine & Moore et al. to Council of the Corporate Law Section of the Delaware State Bar Association & Lawrence A. Hamermesh, Professor, Widener's Institute of Delaware Corporate Law (Apr. 1, 2015) (on file with authors).

86 *Id.* at 2.

certainty and reduce value to shareholders of Delaware corporations as acquirers, particularly in leveraged transactions, may be forced to factor the enhanced appraisal risk into their calculations."[87] The bar committee responsible for proposing amendments to Delaware's corporate statute considered the firms' proposal but declined to endorse it.[88]

Criticism from deal advisers continued. A memorandum from Wachtell, Lipton, Rosen & Katz, for example, suggested that with appraisal "there is a substantial risk that public stockholders lose out—whether by losing a value maximizing deal altogether or through value leakage to appraisal arbitrageurs."[89] Practitioners complained about appraisal decisions from the Court of Chancery, suggesting that the possibility of appraisal liability was "terrifying."[90] In 2017, the U.S. Chamber of Commerce knocked Delaware out of its customary position in first place on its ranking of state liability systems,[91] and some observers suggested that the fall "reflect[ed] Delaware actions in some well-known appraisal cases."[92]

D. DFC Global*,* Dell*, and Other Developments*

Thanks to the influx of appraisal cases, the Delaware courts have had the opportunity to confront new issues—and to revisit old ones. *Dell* and *DFC Global* constitute the Delaware Supreme Court's first extended treatment of the modern practice of appraisal.[93]

---

87 *Id.* at 3.

88 *See* 2015 Explanatory Memorandum Prepared by the Council of the Corporation Law Section of the Delaware State Bar Association (unpublished memorandum) (on file with authors).

89 Martin Lipton & Theodore N. Mirvis, *Delaware Court of Chancery Appraises Fully-Shopped Company at Nearly 30% Over Merger Price*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (June 3, 2016), https://corpgov.law.harvard.edu/2016/06/03/delaware-court-of-chancery-appraises-fully-shopped-company-at-nearly-30-over-merger-price/. For another Wachtell memo that offers a tendentious view of appraisal, see Theodore N. Mirvis, *Delaware Appraisal at a Crossroads?*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (June 20, 2017), https://corpgov.law.harvard.edu/2017/06/20/delaware-appraisal-at-a-crossroads/.

90 Chelsea Naso, *4 Takeaways from the 2017 Tulane Corporate Law Institute*, LAW360 (Apr. 3, 2017, 8:52 PM) (quoting Blackstone chief legal officer who described the Dell ruling as "terrifying"), https://www.law360.com/articles/908947.

91 *See* U.S. CHAMBER INST. FOR LEGAL REFORM, 2017 LAWSUIT CLIMATE SURVEY: RANKING THE STATES (2017), http://www.instituteforlegalreform.com/uploads/pdfs/Harris-2017-Executive-Summary-FINAL.pdf; Ning Chiu, *Delaware's Loss of Top Spot for Lawsuit Climate*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Oct. 2, 2017), https://corpgov.law.harvard.edu/2017/10/02/delawares-loss-of-top-spot-for-lawsuit-climate/.

92 Chiu, *supra* note 91.

93 Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1 (Del. 2017); DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346 (Del. 2017).

1. *The Delaware Court of Chancery*

Well before the rise of appraisal arbitrage, the Court of Chancery considered whether and when the negotiated merger price should stand as the statutory fair value in an appraisal proceeding. In 2004, then-Vice Chancellor Strine held that a negotiated price reflected the fair value of a company when the merger "resulted from a competitive and fair auction, which followed a more-than-adequate sales process and involved the broad dissemination of confidential information to a large number of prospective buyers."[94]

In a string of opinions beginning in 2013, the Court of Chancery found that the fair value of a public company was equal to the price negotiated by the board.[95] The decisions that attracted the most attention, however, were two—involving DFC Global and Dell—where the Court of Chancery found that the fair value was higher than the transaction price.[96] While each opinion dealt with a variety of issues, the fundamental question on appeal in each case was how much weight, if any, to afford the negotiated transaction price.[97]

a. Dell

The transaction at issue in the *Dell* case was a 2013 management buyout, where Michael Dell, the founder and CEO, teamed up with the private equity firm Silver Lake Partners to acquire the company for $13.75 per share.[98] At trial, the company argued that the transaction price was the best evidence of Dell's fair value.[99] The Court of Chancery, however, concluded that the deal price "is certainly a relevant factor, but it is not the best evidence of the Company's fair value."[100] Instead, the court relied on a DCF analysis, finding that the fair value of Dell was $17.62 per share.[101]

---

94 Union Ill. 1995 Inv. Ltd. P'ship v. Union Fin. Grp., Ltd., 847 A.2d 340, 358 (Del. Ch. 2004).

95 *See, e.g.*, *In re* Appraisal of PetSmart, Inc., No. 10782-VCS, 2017 WL 2303599, at *2 (Del. Ch. May 26, 2017); Merion Capital L.P. v. Lender Processing Servs., Inc., No. 9320-VCL, 2016 WL 7324170, at *1, *11 (Del. Ch. Dec. 16, 2016); Merion Capital L.P. v. BMC Software, Inc., No. 8900-VCG, 2015 WL 616477, at *1 (Del. Ch. Oct. 21, 2015); Merlin Partners L.P. v. AutoInfo, Inc., No. 8509-VCN, 2015 WL 2069417, at *14 (Del. Ch. Apr. 30, 2015); *In re* Appraisal of Ancestry.com, Inc., No. 8173-VCG, 2015 WL 399726, at *16–17 (Del. Ch. Jan. 30, 2015); Huff Fund Inv. P'ship v. CKx, Inc., No. 6844-VCG, 2013 WL 5878807, at *1 (Del. Ch. Nov. 1, 2013).

96 *DFC Glob.*, 172 A.3d at 349; *In re* Appraisal of Dell Inc., No. 9322-VCL, 2016 WL 3186538, at *36 (Del. Ch. May 31, 2016).

97 *Dell*, 177 A.3d at 5; *DFC Glob.*, 172 A.3d at 378.

98 *In re Appraisal of Dell Inc.*, 2016 WL 3186538, at *18, *20.

99 *Id.* at *22.

100 *Id.*

101 *Id.* at *1.

The court analyzed the informational content of the transaction price by evaluating the quality of the forces that produced it.[102] It separated the inquiry into two parts by time, first examining the market dynamics in the period before Dell signed the merger agreement, and then those in the post-signing phase.[103]

During the pre-signing phase, several factors led the court to question the reliability of the sales process.[104] First, the court noted that the management group faced no meaningful competitive pressure during its negotiations.[105] This was a serious limitation on the sales process.[106] The special committee and its financial advisers approached no strategic buyers during the pre-signing phase, not even the obvious targets.[107] Indeed, the financial adviser, Evercore, received a contingency payment *only* if it secured a deal during the post-signing phase, and Evercore naturally discouraged the committee from contacting a wider universe of buyers until then.[108] Instead, during the pre-signing phase the company dealt only with two financial sponsors, who both relied on the same valuation approach.[109]

Second, the court observed that the company's stock price was not a useful reservation price in negotiations. This was so because of what the court described as an "anti-bubble" in Dell's public stock price, drawing on behavioral economics.[110] Stock analysts had no confidence in the future of the company, which kept the price down, and this affected the negotiations by anchoring perceptions of the company's value.[111]

The third weakness identified by the court in the pre-signing phase focused on the identity of the handful of potential bidders the special committee contacted: financial sponsors, or private equity firms. Private equity firms invest

[102] *Id.* at *25.

[103] *Id.* at *36–38.

[104] *Id.* at *29.

[105] *Id.* at *36 (noting that there was a lack of pre-signing competition for the management buyout group).

[106] *Id.* at *37 ("Without a meaningful source of competition, the Committee lacked the most powerful tool that a seller can use to extract a portion of the bidder's anticipated surplus.").

[107] *See id.* ("HP was the obvious choice, and Evercore would later estimate that a deal between the Company and HP could generate between $3 and 4 billion in annual cost savings.").

[108] *See id.* at *11 ("The Committee discussed recent news leaks about Mr. Dell's exploration of an MBO. In response to the leaks, Blackstone Management Partners LLC had reached out to Evercore about engaging with the Company. Evercore advised the Committee to wait for the go-shop before engaging Blackstone or soliciting additional bids. The petitioners observe correctly that Evercore would earn a contingency fee only from offers produced during the go-shop period, so it had an incentive to prefer that any additional bidder emerge during that phase.").

[109] *Id.* at *30–31.

[110] *See id.* at *36.

[111] *See id.*

on behalf of their limited partners and must earn a gross profit that is sufficiently high to pay themselves and deliver their limited partners a market-clearing return.[112] They also rely heavily on debt in acquiring companies, and so debt market conditions can affect their bids.[113] A private equity firm's bid is driven, in other words, by a valuation model that includes a gross profit that likely exceeds a public company's cost of capital by a substantial margin. In *Dell*, the special committee itself appeared to have employed this valuation model in its negotiations.[114] For these reasons, the court concluded that the dynamic in the pre-signing phase was not sufficient to demonstrate that the negotiated price was equal to the fair value of the company.[115]

The competitive dynamics in the post-signing phase, likewise, were not sufficient to prove that the deal price reflected the fair value of the company.[116] The merger agreement included a conventional "go-shop" provision and a termination fee that was reduced during the go-shop period.[117] During that go-shop period, two higher bids emerged, both from financial sponsors, and in response to one of them, the management group increased its price by 2%.[118] The obvious question—which the court confronted—was: If the company was worth more than the management group's bid, why would some bidder not have bested it again during the go-shop period? As a threshold matter, the Delaware Court of Chancery concluded that the possibility for a competing bid to emerge during the go-shop period was enough to rule out a large a gap between the negotiated price and fair value.[119] But Vice Chancellor Laster avoided the fallacy that the mere absence of a topping bid demonstrates the adequacy of the negotiated price.[120]

---

112 *See id.* at *29.

113 *See id.* ("What the sponsor is willing to pay diverges from fair 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.").

114 *See id.* at *31 ("[T]he Committee negotiated without determining the value of its best alternative to a negotiated acquisition.").

115 *Id.* at *37.

116 *Id.* at *38.

117 *Id.* at *12.

118 *Id.* at *37.

119 *Id.* at *44 ("The market data is sufficient to exclude the possibility, advocated by the petitioners' expert, that the Merger undervalued the Company by $23 billion. Had a value disparity of that magnitude existed, then HP or another technology firm would have emerged to acquire the Company on the cheap.").

120 *See infra* note 252.

The go-shop suffered from a number of infirmities.[121] For one thing, the court noted that the Dell transaction was twenty-five times larger than any other deal that had ever been topped post-signing. The court suggested that "the magnitude of the task" of participating in the go-shop—in particular, the need to perform due diligence on such a large and complex target in an abbreviated time frame—may have had "a chilling effect on other parties," particularly in the context of a management buyout, where the insiders would naturally have an informational advantage.[122]

Additionally, private equity firms are notoriously uncompetitive with each another. As the deal market commentator Andrew Ross Sorkin observed, any bidder who sought to compete with the management team's offer would "appear to have made a hostile bid."[123] And for private equity firms, as Sorkin emphasized, that simply is not done: "Private equity firms have spent the last 25 years avoiding anything that could make them perceived as hostile because they typically want management teams to want to do business with them."[124] The court noted that leading private equity firms—including the one that teamed up with the CEO and the supposed competing bidders—agreed to pay a combined $325 million to settle allegations that they conspired to avoid competing with one another in an effort to keep deal prices low.[125]

The relationship between Michael Dell and Dell Inc. figured prominently in the court's analysis. Given that he was a net buyer of shares in the transaction, any higher bid would cost him substantial money out of pocket, increasing the chances it would be regarded as hostile.[126] For the same reason, Michael Dell "would have a financial incentive to push the deal price down rather than up."[127] His unique relationship with the company and knowledge of its business also

---

[121] *In re Appraisal of Dell Inc.*, 2016 WL 3186538, at *44 ("What the market data does not exclude is an underpricing of a smaller magnitude, given that all of the participants constructed their bids based on a leveraged financing model and were limited by its constraints."); *see id.* at *39 (noting the court's reliance here on unrebutted expert testimony from the petitioner's expert on deal process; the respondent did not put forward an expert on the topic).

[122] *Id.* at *42.

[123] Andrew Ross Sorkin, *A $25 Million Question Over a Bid for Dell*, N.Y. TIMES (Apr. 1, 2013, 9:26 PM), https://dealbook.nytimes.com/2013/04/01/a-25-million-charade-over-a-bid-for-dell/.

[124] *Id.*

[125] William Alden, *K.K.R., Blackstone and TPG Private Equity Firms Agree to Settle Lawsuit on Collusion*, N.Y. TIMES (Aug. 7, 2014, 9:18 AM) https://dealbook.nytimes.com/2014/08/07/k-k-r-agrees-to-settle-lawsuit-on-private-equity-collusion/.

[126] *See* Subramanian, *supra* note 11 (manuscript at 22).

[127] *Id.*

complicated the competitive landscape.[128] While the special committee attempted to make him available to alternative bidders, the informational asymmetry between Mr. Dell's group and any competing bidder, especially a financial bidder, was a "powerful disincentive . . . to get involved."[129] Likewise, the relationship between Mr. Dell and the company's customers may have been an important asset to the company, which other bidders could not replicate, inhibiting the post-signing process.[130] The court concluded that "in light of the nature of the competition that took place during the go-shop phase, the 2% bump was not sufficient to prove that the Final Merger Consideration was the best evidence of fair value."[131]

As an alternative to the transaction price, the court engaged in a DCF analysis that generated a value of $17.62 per share.[132] It noted that this result comported with the testimony and evidence at trial.[133] The court observed that private equity buyers—the only type of buyer that the committee approached—could not have paid such a price "because of their IRR [(internal rate of return)] requirements and the Company's inability to support the necessary levels of leverage."[134] Why did a strategic bidder not pay such a price, if the company was worth that? The court noted that, "[g]iven the massive integration risk inherent in such a deal, it is not entirely surprising that HP did not engage and that no one else came forward."[135] In other words, even though no single bidder was actually in a position to pay that much, the court was comfortable that the DCF value was realistic as a measure of Dell's stand-alone value as a going concern.[136]

In settling on a final valuation, the court decided to give no weight to the negotiated price. The sales process had "functioned imperfectly as a price discovery tool, both during the pre-signing and post-signing phases,"[137] and the

---

128 *In re Appraisal of Dell Inc.*, 2016 WL 3186538, at *42 ("As the Company's founder and longtime CEO, Mr. Dell knew more about the Company than anyone else. Before any bidder would become involved, they had to have a strategy for dealing with Mr. Dell's superior knowledge.").

129 *Id.* at *43; *see also* Subramanian, *supra* note 11 (manuscript at 18) (noting that the evidence suggested "that HP did not perceive a pathway to success in a bidding contest against Michael Dell, in which it would have 45 days and Michael Dell would have had decades.").

130 *In re Appraisal of Dell Inc.*, 2016 WL 3186538, at *44 ("Mr. Dell's unique value and his affiliation with the Buyout Group were negative factors that inhibited the effectiveness of the go-shop process.").

131 *Id.* at *39.

132 *Id.* at *51.

133 *Id.*

134 *Id.*

135 *Id.*

136 *Id.*

137 *Id.*

court found it impossible to determine the extent of the mispricing.[138] Instead, the court relied exclusively on the DCF methodology.[139]

b. DFC Global

DFC Global was a payday lender that had been acquired by a private equity fund called Lone Star in 2014.[140] As in *Dell*, the negotiated merger price and what weight to afford it figured prominently in the Court of Chancery's decision.[141] The court observed that relying on the deal price as a source of fair value made sense "only when the market conditions leading to the transaction [were] conducive to achieving a fair price."[142] As a payday lender, DFC Global was facing the threat of heavy regulation at the time of the merger. This regulatory uncertainty undermined the court's confidence in both the transaction price and the company's financial projections—critical inputs for valuing the business in a DCF analysis.[143] As a result, the court decided to blend the merger price together with valuations derived from other methodologies.[144] The resulting value of $10.21 per share was a premium of about 7.5% over the deal price.[145]

At the time of the acquisition, the company faced a risk that regulators in its two major geographic markets, the United States and the United Kingdom, might impose new regulatory mandates and prohibitions.[146] The effect of increasing regulations on the company's business, however, was uncertain.[147] New regulations might have diminished the profitability of its business.[148] Conversely, they might have improved the company's position, if less

138 *Id.* ("Because it is impossible to quantify the exact degree of the sale process mispricing, this decision does not give weight to the Final Merger Consideration.").

139 *Id.*

140 *In re* Appraisal of DFC Glob. Corp., No. 10107-CB, 2016 WL 3753123, at *1 (Del. Ch. July 8, 2016), *rev'd sub nom.* DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346 (Del. 2017).

141 *Id.* at *20–21.

142 *Id.* at *1.

143 *Id.* at *2, *21–22.

144 *Id.* at *1.

145 *See id.*

146 *Id.* at *2.

147 *See id.* ("One of the key risks DFC faced was the potential for changes to those regulations that could increase the cost of doing business or otherwise limit the company's opportunities.").

148 *See id.* at *21 ("[A]t the time of its sale, DFC was navigating turbulent regulatory waters that imposed considerable uncertainty on the company's future profitability, and even its viability. Some of its competitors faced similar challenges. The potential outcome could have been dire, leaving DFC unable to operate its fundamental businesses, or could have been very positive, leaving DFC's competitors crippled and allowing DFC to gain market dominance.").

established firms had trouble bearing the regulatory costs.[149] The magnitude of the risk left the court skeptical of each valuation methodology it considered: a DCF analysis, a comparable companies analysis, and the transaction price.[150]

The court observed that conditions were generally right to look to the deal price. The merger was struck with a third-party at arm's length; the sales process, though fitful, lasted two years; and the financial adviser to DFC Global contacted both strategic buyers and private equity buyers.[151] For these reasons, the court concluded that there was "a reasonable level of confidence that the deal price [could] fairly be used as one measure of DFC's value."[152]

The court, however, declined to give exclusive weight to the negotiated price.[153] It offered two reasons for its skepticism, both of which echoed some of the *Dell* court's misgivings. First, Chancellor Bouchard pointed out that the transaction occurred at a moment when the company's performance "appeared to be in a trough, with future performance depending on the outcome of regulatory decision-making that was largely out of the company's control."[154] The implication was that the transaction had been opportunistically timed to take advantage of the regulatory uncertainty.

Second, Chancellor Bouchard noted the buyer's "status as a financial sponsor [that] focused its attention on achieving a certain [IRR] and on reaching a deal within its financing constraints, rather than on DFC's fair value."[155] The buyer here reduced its offer when its available financing options changed,[156] indicating that the transaction price was driven at least partly by the borrowing capacity of the buyer rather than the fair value of the target company.

The court equivocated about the thoroughness of the sales process.[157] On the one hand, it observed that the buyer secured a critical period of negotiating exclusivity and also pressured the company into the deal with an exploding offer.[158] On the other hand, the court drew "confidence in the robustness of the market for DFC" from the extended sales process, the public announcement of

149 *Supra* note 148.
150 *See In re Appraisal of DFC Glob. Corp.*, 2016 WL 3753123, at *21–23.
151 *Id.* at *21.
152 *Id.*
153 *Id.* at *22.
154 *Id.*
155 *Id.*
156 *Id.*
157 *See id.* at *21–23.
158 *See id.* at *23.

the transaction, and a termination fee that "was reasonable and bifurcated to allow for a reduced fee in the event of a superior proposal."[159]

In considering what weight to afford three sources of information on the value of DFC Global—the deal price, a DCF analysis, and a comparable companies analysis—the court lamented that "all three metrics suffer from various limitations" but ultimately concluded that each offered some "insight into DFC's value."[160] Moreover, the Chancellor noted that "all three of them [fell] within a reasonable range."[161] As a result, he weighted the three approaches equally and arrived at a valuation of $10.21.[162]

2. *The Delaware Supreme Court*

The two decisions in the Court of Chancery attracted significant media attention, especially *Dell*.[163] Some commentators struggled to understand how stockholders could have been underpaid if no one had done anything "wrong."[164] In his column, Andrew Ross Sorkin observed that "[t]he decision [was] sending shudders all over Wall Street and the boardrooms of corporate America, because the court, in effect, overruled 'the market.'"[165] Practitioners likewise saw darkness on the horizon, suggesting that "the implications of the [*Dell*] decision, if not narrowed or reversed on appeal, are potentially far reaching."[166] The dean of the M&A bar, Martin Lipton, wrote that private equity firms will face "routine appraisal exposure in Delaware, no matter how robust the auction, and therefore seek out alternative transaction structures to cap and price their risk (or exit the market entirely)."[167] Delaware, the whispers went, had let something get out of

---

159 *Id.*

160 *Id.*

161 *Id.*

162 *Id.*

163 *E.g.*, Michael J. de la Merced, *Dell Buyout Deal Shortchanged Shareholders, Court Rules*, N.Y. TIMES (May 31, 2016), https://www.nytimes.com/2016/06/01/business/dealbook/dell-buyout-deal-shortchanged-shareholders-court-rules.html.

164 Roger Parloff, *How Michael Dell Shortchanged Shareholders While Doing Nothing Wrong*, FORTUNE (June 2, 2016) http://fortune.com/2016/06/02/michael-dell-shortchanged-shareholders; *see* Andrew Ross Sorkin, *Who Decides 'Fair Value?' In Dell's Case, a Judge*, N.Y. TIMES (June 6, 2016), https://www.nytimes.com/2016/06/07/ ("What's so peculiar about the [*Dell*] decision is that the judge found no chicanery and still didn't think the price was fair . . . ."); *see also* Subramanian, *supra* note 11 (manuscript at 5) (noting that "[b]rouhaha ensued," and providing examples).

165 Sorkin, *supra* note 164.

166 SULLIVAN & CROMWELL LLP, IN RE: APPRAISAL OF DELL INC. 1 (2016).

167 Sorkin, *supra* note 164; *M&A Governance 2017*, WHO'S WHO LEGAL (May 2017), http://whoswholegal.com/news/analysis/article/33784/Gabriel-R-Bustamante-Brambila-Vera-Asociados-The-Latest-Legal-News-Research-Legal-Profiles-Whos-Who-Legal/; David Lat, *The Marty Lipton Fan Blog*, ABOVE L. (Sept. 27, 2007, 12:30 PM), https://abovethelaw.com/2007/09/the-marty-lipton-fan-blog/.

hand, something that could only be fixed on appeal.[168] Although the *Dell* opinion was issued earlier in the Court of Chancery, it was the *DFC Global* case that arrived first at the Delaware Supreme Court.[169] The Supreme Court issued its opinion in *DFC Global* in August 2017, reversing the judgment below, and fulfilling Lipton's hopes.[170] Four months later it did the same thing in *Dell*.[171]

a. DFC Global

In the Delaware Supreme Court, DFC Global argued that the court should establish a presumption that trial courts should defer to the negotiated transaction price in an "arm's-length, conflict-free transaction."[172] This argument prompted two competing amicus briefs from academics.[173] The first came from seven corporate law professors, including William Carney, a distinguished retired Emory professor who has written extensively on appraisal rights.[174] That brief supported the company's position, encouraging the court to defer presumptively to the transaction price where it arises from "an arm's-length auction process."[175] A competing brief argued against such a presumption. The signatories to this brief included not only corporate law professors but also financial economists and experts in auction design, including the 2007 Nobel Prize winner Eric Maskin.[176] These amici argued that any categorical rule would be "a trifecta of bad law, bad economics, and bad policy."[177] A presumption would be inconsistent with the statutory command to

---

168 *See* SULLIVAN & CROMWELL LLP, *supra* note 166; Sorkin, *supra* note 164 ("The decision is sending shudders all over Wall Street and the boardrooms of corporate America, because the court, in effect, overruled 'the market.'").

169 Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1 (Del. 2017); DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346 (Del. 2017); *In re* Appraisal of DFC Glob. Corp., No. 10107-CB, 2016 WL 3753123, at *1 (Del. Ch. July 8, 2016); *In re* Appraisal of Dell Inc., No. 9322-VCL, 2016 WL 3186538, at *1 (Del. Ch. May 31, 2016).

170 *DFC Glob.*, 172 A.3d at 351.

171 *Dell*, 177 A.3d at 1, 6.

172 *See* Appellant's Opening Brief at 1, DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346 (Del. 2017) (No. 518, 2016).

173 Brief of Law and Corporate Finance Professors as *Amici Curiae* in Support of Reversal, DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346 (Del. 2017) (No. 518, 2016); Brief of Law, Economics and Corporate Finance Professors as *Amici Curiae* in Support of Petitioners-Appellees and Affirmance, DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346 (Del. 2017) (No. 518, 2016).

174 Brief of Law and Corporate Finance Professors as *Amici Curiae* in Support of Reversal at Exhibit 1, DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346 (Del. 2017) (No. 518, 2016).

175 *Id.* at 1.

176 Brief of Law, Economics and Corporate Finance Professors as *Amici Curiae* in Support of Petitioners-Appellees and Affirmance at Exhibit 1, DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346 (Del. 2017) (No. 518, 2016).

177 *Id.* at 2.

"take into account all relevant factors" in determining fair value, and it would also ignore the obvious possibility that "a facially disinterested process can still render a price falling short of fair value."[178] Additionally, the brief marshaled auction theory to argue that "the credible threat of [an] appraisal" award that is untethered to the merger price would improve the M&A market.[179]

The doctrinal trouble for the company's argument on appeal was that the Supreme Court had already addressed precisely this issue in *Golden Telecom*, its then-most recent statement on appraisal.[180] There, the court rejected any idea of a presumption[181] emphasizing that the statute called on the Court of Chancery to complete an "independent evaluation of the 'fair value'" of the company, in which it must consider "all relevant factors."[182] The statute requires that the court, and not the parties, determine the value of the company, and this is so "even in the face of a pristine, unchallenged transactional process."[183]

The Supreme Court stuck by *Golden Telecom*, at least de jure, declining to adopt any presumption in favor of the transaction price.[184] But the Supreme Court nevertheless strongly indicated that the Court of Chancery should treat the transaction price as the best evidence of the company's value.[185] At the beginning of its opinion, the Supreme Court emphasized that the Court of Chancery made the following findings of fact:

> i) the transaction resulted from a robust market search that lasted approximately two years in which financial and strategic buyers had an open opportunity to buy without inhibition of deal protections; ii) the company was purchased by a third party in an arm's length sale; and iii) there was no hint of self-interest that compromised the market check.[186]

While disclaiming any presumption, the Supreme Court indicated as follows:

> [U]nder the conditions found by the Court of Chancery, economic principles suggest that the best evidence of fair value was the deal price, as it resulted from an open process, informed by robust public information, and easy access to deeper, non-public

178 *Id.*
179 *See id.* at 11, 13.
180 *See* Golden Telecom, Inc. v. Glob. GT L.P., 11 A.3d 214, 218 (Del. 2010).
181 *Id.*
182 *Id.* at 217–18.
183 *Id.* at 218.
184 *DFC Glob.*, 172 A.3d at 348–49.
185 *Id.* at 366.
186 *Id.* at 349.

> information, in which many parties with an incentive to make a profit had a chance to bid.[187]

Throughout the opinion, the Supreme Court repeatedly emphasized the primacy of the transaction price.[188] The opinion's focus on the deal price was so emphatic that seasoned observers described it as tantamount to "a bright-line rule requiring deference to the deal price."[189]

In the same vein, the Supreme Court also put forth a novel conception of the purpose of appraisal, one that dramatically reformulated the historic fair value inquiry. The traditional formulation 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."[190] In its place, the *DFC Global* court suggested that "the purpose of an appraisal is . . . to make sure that [target 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."[191] As discussed below, this formulation ignores the alternative of the target remaining independent. But lurking in this formulation is perhaps something even beyond a presumption: an equivalency. If the fair value standard is "fair compensation," and "fair compensation" means whatever a stockholder would get in an arm's-length transaction, then the consideration in an arm's-length transaction is, necessarily, fair value.

While the Supreme Court disclaimed any presumptive deference to the deal price, it nonetheless reversed the trial court's valuation.[192] The Supreme Court concluded on its own reading of the facts that, even in the absence of a presumption, the negotiated price was the best indication of the fair value of the company, despite the trial court's misgivings about the deal process.[193]

---

[187] *Id.* at 349, 366 ("[W]e have little quibble with the economic argument that the price of a merger that results from a robust market check, against the back drop of a rich information base and a welcoming environment for potential buyers, is probative of the company's fair value."); *see id.* at 366 ("[O]ur refusal to craft a statutory presumption in favor of the deal price when certain conditions pertain does not in any way signal our ignorance to the economic reality that the sale value resulting from a robust market check will often be the most reliable evidence of fair value, and that second-guessing the value arrived upon by the collective views of many sophisticated parties with a real stake in the matter is hazardous.").

[188] *See, e.g.*, *id.* at 370.

[189] T. Brad Davey, *DFC Global: A Few Observations from Delaware*, *in* 2017 YEAR IN REVIEW: THE STATE OF APPRAISAL IN THE DELAWARE COURTS 8 (Potter Anderson & Corroon LLP ed., 2017).

[190] Tri-Cont'l Corp. v. Battye, 74 A.2d 71, 72 (Del. 1950); *see, e.g.*, Cede & Co. v. Technicolor, Inc., 684 A.2d 289, 298 (Del. 1996); Cavalier Oil Corp. v. Harnett, 564 A.2d 1137, 1144 (Del. 1989) (citation omitted).

[191] *DFC Glob.*, 172 A.3d at 371.

[192] *Id.* at 351.

[193] *Id.* at 370–71.

In reversing the trial court's valuation, the Supreme Court rejected both of the reasons that the trial court had relied upon when giving the merger price only a one-third weight.[194] The first was the Court of Chancery's suggestion that the company's stock price was in a "trough" at the time of the transaction.[195] The Supreme Court noted that price movements in the target company stock were the result of changes in the regulatory environment, and that environment was not a "trough" but was simply a harsh reality from which the company could not escape.[196] To the Supreme Court, the same regulatory uncertainty necessarily also affected the bidders' valuation and thus, for the court, was not a reason to doubt the transactional pricing.[197]

The second reason the Court of Chancery offered for its skepticism of the deal price was that the buyer, as a private equity fund, was focused only on achieving certain internal rates of return and staying within leverage limitations, not on the company's fair value.[198] The Supreme Court rejected what it called a "private equity carve out."[199] The buyer's status as a private equity sponsor—in the business of hitting internal return targets for its limited partners that necessitate paying low prices up front—was not relevant.[200] Instead, the touchstone was whether the price resulted from "a competitive process,"[201] and the Supreme Court laid special emphasis on the trial court's finding that there had been no conflicts of interest in the transaction.[202] The idea that a private equity buyer necessarily pays a price below fair value, the Supreme Court said, is not "grounded in economic literature or this record."[203] Whatever flaws there might have been in the sales process, they were insufficient, in the eyes of the Supreme Court, to call the deal price into question.[204]

The Supreme Court offered a number of reasons for rejecting the idea of a bright-line presumption in favor of the deal price.[205] The court echoed the

---

194 *Id.* at 372, 388.

195 *Id.* at 372.

196 *Id.* at 372, 381.

197 *Id.* at 375.

198 *In re* Appraisal of DFC Glob. Corp., No. 10107-CB, 2016 WL 3753123, at *22 (Del. Ch. July 8, 2016).

199 *DFC Glob.*, 172 A.3d at 350.

200 *Id.* ("[T]he fact that a financial buyer may demand a certain rate of return on its investment in exchange for undertaking the risk of an acquisition does not mean that the price it is willing to pay is not a meaningful indication of fair value.").

201 *Id.*

202 *Id.* at 373.

203 *Id.* at 350.

204 *Id.* at 376 ("[T]he record does not include the sorts of flaws in the sale process that could lead one to reasonably suspect that the ultimate price paid by Lone Star was not reflective of DFC's fair value.").

205 *Id.* at 363.

Golden Telecom anxiety that any presumption would run afoul of the statute.[206] It also acknowledged the difficulty in crafting a general test that would capture the "precise pre-conditions" for invoking such a presumption.[207] And the court observed that a presumption was unnecessary because of the "proven record of our Court of Chancery in exercising its discretion to give the deal price predominant, and indeed exclusive weight, when it determines, based on the precise facts before it that led to the transaction, that the deal price is the most reliable evidence of fair value."[208] Nevertheless, the Supreme Court remanded the case with very clear instructions to the Court of Chancery that the fair value should be equal to the deal price in the case before it.[209]

The outcome in the *DFC Global* appeal was hardly a surprise,[210] but commentators took the reversal as a strong endorsement of the idea that the transaction price should be the best evidence of a company's fair value when the deal is struck at arm's length and the sales process is "robust."[211] The opinion may also have reflected a desire to relieve private equity funds of litigation risk.[212]

b. Dell

Only a few months later, the Supreme Court issued its opinion in *Dell*, reversing the Court of Chancery's opinion and again strongly suggesting that the

---

206 *Id.* at 364; *see also* Golden Telecom, Inc. v. Glob. GT L.P., 11 A.3d 214, 218 (Del. 2010).

207 *DFC Glob.*, 172 A.3d at 366.

208 *Id.*

209 *Id.* at 351 ("[T]he Chancellor should reassess the weight he chooses to afford various factors potentially relevant to fair value, and he may conclude that his findings regarding the competitive process leading to the transaction, when considered in light of other relevant factors, such as the views of the debt markets regarding the company's expected performance and the failure of the company to meet its revised projections, suggest that the deal price was the most reliable indication of fair value.").

210 *See* Subramanian, *supra* note 11 (manuscript at 5) (noting that the reversal "was generally unsurprising in corporate law circles").

211 *E.g.*, ROPES & GRAY, DELAWARE SUPREME COURT PROVIDES GUIDANCE ON FACTORS TO CONSIDER IN APPRAISAL VALUATION PROCEDURE IN CONTEXT OF DFC GLOBAL APPRAISAL ACTION 2 (2017) ("[I]ts reversal of the Court of Chancery's appraisal decision reaffirms the Delaware courts' general view that the transaction price resulting from a robust, conflict-free, and arm's-length sales process will often be the most reliable evidence of fair value of a company's shares."); SULLIVAN & CROMWELL LLP, DELAWARE SUPREME COURT REVERSES DFC GLOBAL APPRAISAL DECISION 4 (2017) (the decision "reiterates the preeminence of the merger consideration as an indicator of fair value"); *see also* Subramanian, *supra* note 11 (manuscript at 12) ("Commentators called [*DFC*] a 'presumption in everything but name,' and I agree with that assessment.").

212 Tom Hals, *Delaware Court Reverses Closely Watched DFC Global Appraisal Ruling*, REUTERS (Aug. 1, 2017, 1:36 PM) https://www.reuters.com/article/us-dfc-global-lone-star-ruling/delaware-court-reverses-closely-watched-dfc-global-appraisal-ruling-idUSKBN1AH4Y1 ("Wall Street dealmakers have warned that Bouchard's view made it difficult for private equity buyers to protect their deals from appraisal-seeking hedge funds.").

most appropriate measure of a company's fair value was the transaction price. At bottom, the aspects of the sales process that troubled the Court of Chancery simply did not worry the Supreme Court. The Supreme Court observed that, by giving the deal price no weight in its fair value calculation, the Court of Chancery ran afoul of "relevant, accepted financial principles."[213] Indeed, in the view of the Supreme Court, the trial court had made a set of minimum factual findings sufficient to conclude that the "the deal price deserved heavy, if not dispositive, weight."[214] The trial court had made extensive factual findings, cited to scholarly literature, and relied on an unrebutted deal process expert witness who critiqued the sale process.[215] In light of these features, the reversal in *Dell* came as more of a surprise than it had for *DFC Global*.[216]

The Supreme Court concluded that the Court of Chancery had identified three bases for assigning no weight to the deal price, and it rejected all three as flawed.[217] First, the Supreme Court dismissed the trial court's concern that deal negotiations were anchored downward by the company's depressed stock price.[218] This argument, the Supreme Court said, "ignored the efficient market hypothesis long endorsed by this Court."[219] Embracing none of the behavioral insights of the trial court's opinion, the Supreme Court found that the market in Dell's stock was not myopic so much as it was unconvinced that the company had a bright future.[220]

Second, as in *DFC Global*, the Supreme Court rejected the idea that a buyer's status as a private equity firm had any bearing on whether the transaction price was evidence of fair value.[221] Any buyer, the Supreme Court observed, would expect to hit an IRR with its investment, just like private equity buyers, so the fact that private equity bidders had a higher cost of capital should not

213 Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 5 (Del. 2017).

214 *Id.* at 23.

215 *Id.* at 5–6, 15–18.

216 *See* Subramanian, *supra* note 11 (manuscript at 5–6, 6 n.2) (noting that the reversal "surprised (and even shocked) some practitioners and commentators" and that an anonymous poll of what he calls a "Respondent-friendly" crowd at a conference held at Kirkland & Ellis in May 2017 had found a strong majority agreeing that *Dell* should be affirmed, and predicting that it in fact would be affirmed).

217 *Dell*, 177 A.3d at 23–24 (The Court of Chancery's three points were "untenable in view of the Court of Chancery's own findings of fact as considered in light of established principles of corporate finance.").

218 *Id.* at 27.

219 *Id.* at 24.

220 *Id.* at 26 ("There is also no evidence in the record that investors were 'myopic' or short-sighted. Rather, the record shows analysts understood Dell's long-term plans. But they just weren't buying Mr. Dell's story . . . .").

221 *Id.* at 28 ("[W]e see 'no rational connection' between a buyer's status as a financial sponsor and the question of whether the deal price is a fair price.").

matter.[222] The sales process, not the identity of the bidders, determines the reliability of the sales price.[223]

The third factor that undermined the Court of Chancery's confidence in the deal price was the lack of competitive pressure put on the management group's bid.[224] The Supreme Court was more comfortable with the level of competition.[225] The members of the special committee were independent, experienced, and empowered to say no.[226] The financial advisers to the special committee did their best to generate bidders.[227] The Supreme Court chalked up any lack of competition to doubts about the company's future.[228] Indeed, the Supreme Court assumed that leaks about the transaction alone generated sufficient market pressure.[229] In this sense, the Supreme Court seemed to suggest that in such a context the actual process followed by the target board is almost irrelevant, as any interested bidders will appear by their own initiative.[230] Including additional bidders in the process up front, on this reasoning, would have changed nothing.[231]

In analyzing the post-signing developments, the Court of Chancery focused on the complexity of the transaction for any potential bidder and on the complicated relationship between Michael Dell, his buyout group, and the company's future.[232] The Supreme Court viewed the informational asymmetry

---

[222] *Id.* ("[A]ll disciplined buyers, both strategic and financial, have internal rates of return that they expect in exchange for taking on the large risk of a merger, or for that matter, any sizeable investment of capital.") (quoting DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346, 375 (Del. 2017)).

[223] *See id.* at 34 ("Competition limited to private equity bidders does not foreclose the sale price reflecting fair value, especially where the special committee instituted and oversaw a robust post-signing go-shop process.").

[224] *Id.* at 16.

[225] *Id.* at 29.

[226] *Id.* at 28.

[227] *Id.* at 28–29. In this Article, we focus on the Delaware Supreme Court's errors of finance, but others have argued that the Court's fact-finding, particularly on this point, relies on mischaracterizations of the trial record. *See* Subramanian, *supra* note 11 (manuscript at 14–18).

[228] *Dell*, 177 A.3d at 28 (noting that the special committee's financial advisers "choreographed the sale process to involve competition with Silver Lake at every stage, both pre-signing and during the go-shop. When KKR walked, TPG, another major-league PE buyer, was introduced. And both KKR and TPG demurred for many of the objective reasons that the stock market—and, later, Blackstone—doubted Dell's ability to transform itself and become more profitable.").

[229] *Id.* ("[G]iven leaks that Dell was exploring strategic alternatives, record testimony suggests that Evercore presumed that any interested parties would have approached the Company before the go-shop if serious about pursuing a deal.").

[230] *Id.* at 29 (The trial court's "assessment that more bidders—both strategic and financial—should have been involved assumes there was some party interested in proceeding.").

[231] *Id.* at 28 ("Nothing in the record suggests that increased competition would have produced a better result.").

[232] *Id.* at 32.

problem as one that was only “theoretical,” as no one could point to a bidder who declined to participate.[233] Michael Dell, moreover, was not a conventional controlling stockholder. He was CEO, to be sure, but he had pledged to vote his stock proportionally with other stockholders in the event of a higher bid.[234] Any risks associated with a management buyout, in the Supreme Court’s view, were also “theoretical,” and none undermined the deal price as a marker of fair value.[235]

At the end of the day, the Supreme Court simply saw nothing wrong with the sales process. A set of basic attributes of the transaction—”evidence of market efficiency, fair play, low barriers to entry, outreach to all logical buyers, and the chance for any topping bidder to have the support of Mr. Dell’s own votes”—left the Court of Chancery with only one possible conclusion: that the deal price should receive “heavy weight” in determining the fair value of the company.[236]

In some ways, the Supreme Court opinion recapitulated many of the same themes that arose during proceedings four years earlier, when class action plaintiffs challenging the Dell transaction sought to expedite proceedings. Then-Chancellor Strine issued a ruling from the bench denying the motion and expressing puzzlement at the allegations of wrongdoing in the deal.[237] He emphasized precisely the same issues that appeared in the Supreme Court opinion: the pre-signing competition among private equity buyers, the modest deal protections, and the post-signing go-shop activity.[238] As a result, he

---

[233] *Id.* (“[A]side from the theoretical, the Court of Chancery did not point to any bidder who actually shied away from exploring an acquisition out of fear of the winner’s curse phenomenon.”). Subramanian characterizes this as “a remarkable test” that would be virtually impossible to meet. *See* Subramanian, *supra* note 11 (manuscript at 19) (“In ten years of studying go-shops and twenty years of studying deal jumping situations, I have never seen this kind of evidence. But it defies common sense and well-accepted economic theory to claim that the absence of such evidence means that a winner’s curse concern does not exist.”).

[234] *Dell*, 177 A.3d at 30.

[235] *Id.* at 31 (“[N]one of these theoretical characteristics detracts from the reliability of the deal price on the facts presented here.”); *id.* at 34 (“[T]he [trial] court did not identify any possible bidders that were actually deterred because of Mr. Dell’s status.”). As with their holding on information asymmetries, Subramanian notes that this “sets an evidentiary bar that would be virtually impossible to meet.” Subramanian, *supra* note 11 (manuscript at 23).

[236] *Dell*, 177 A.3d at 35 (“[F]ailure to give the resulting price heavy weight because the trial judge believes there was mispricing missed by all the Dell stockholders, analysts, and potential buyers abuses even the wide discretion afforded the Court of Chancery in these difficult cases.”).

[237] Transcript of Motion for Expedited Hearings at 34–35, *In re* Appraisal of Dell, Inc., No. 9322-VCL, 2016 WL 3186538 (Del. May 31, 2016) (No. 8329-CS).

[238] *Id.* at 13 (“There was not only presigning competition among private equity sponsors, there was an active postsigning go-shop with insubstantial deal protections.”).

concluded that there was no "conceivable basis" on which the board might have fallen short of its *Revlon* obligations.[239]

II. CORPORATE FINANCE IN *DFC GLOBAL* AND *DELL*

In the abstract, the outcomes of *Dell* and *DFC Global*—deference to the deal price in both cases—are not particularly alarming. Had the trial courts reached the same conclusions, many would not have batted an eyelash. The fact that the Supreme Court overruled the considered opinions of the Court of Chancery in the manner it did, however, is troubling. The Supreme Court repeatedly found that the trial courts had abused their discretion, sometimes on the ground that their holdings found no support in the record, but primarily on the ground that the Court of Chancery's conclusions violated basic precepts of financial economics.[240] Indeed, throughout both the *Dell* and *DFC Global* opinions, the Supreme Court professed to be guided by principles of financial economics. They emphasized their fidelity to "relevant, accepted financial principles"[241] and "established principles of corporate finance"[242] and "reliable principles of corporate finance and economics."[243] But on closer examination, it is the Supreme Court's opinions, not those of the Court of Chancery, that misapply and misunderstand basic financial economics. This Part explores the financial concepts at play in the two opinions.

A. Firm-Specific Risks and the LBO Pricing Model

Looming over both cases was the role of the private equity or leveraged buyout (LBO) valuation models.[244] Both opinions in the Court of Chancery relied in part on fact that the buyers were private equity firms in declining to

239 *Id.* at 42 ("I do not see any plausible, conceivable basis in which to conclude that it is a colorable possibility that you could deem the choices made by this board to be unreasonable with all the different safeguards."). *See generally* Revlon, Inc. v. MacAndrews & Forbes Holdings, Inc. 506 A.2d 173 (Del. 1986) (setting forth a target board's obligations in the context of the sale of the company).

240 *See, e.g.*, *Dell*, 177 A.3d at 5.

241 *Id.* at 44.

242 *Id.* at 24.

243 DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346, 372 (Del. 2017).

244 In its purest form, an LBO valuation seeks to determine how much money could be borrowed and used to buy a company while still having the debt serviced by the cash flows of the target. More generally, an LBO valuation seeks to determine how much an acquirer could pay for a company while still achieving a target return. *See* JOSHUA ROSENBAUM & JOSHUA PEARL, INVESTMENT BANKING: VALUATION, LEVERAGED BUYOUTS, AND MERGERS & ACQUISITIONS 195–96 (2009) ("[An LBO model] is used . . . to determine an implied valuation range for a given target in a potential LBO sale based on achieving acceptable returns.").

give deference to the merger price.[245] Some market participants felt as though the opinions had placed a target on the backs of private equity firms,[246] and the issue figured prominently in the appeals.[247] The *Dell* trial court decision examined this issue in far greater depth, but it was the first of the Supreme Court's two opinions, *DFC Global*, that devoted the most attention to the issue and made the foundational analytical errors.[248]

The Court of Chancery in *Dell* noted that private equity firms generally rely on similar methods to price their deals and also have comparatively high costs of capital.[249] As a consequence, their models will generate valuations lower than what a DCF analysis would generate for a firm owned by diversified public investors.[250] If a target corporation limits the pool of bidders to private equity firms, the process will naturally generate bids constrained by their shared IRR targets.[251] Vice Chancellor Laster pointed out that the special committee's financial advisers highlighted these very dynamics and expressed concern that a sale process limited to financial sponsors would not achieve fair value.[252]

Relatedly, in explaining his misgivings about the sales process in *DFC Global*, Chancellor Bouchard articulated a worry that the board agreed to sell the company while in "turbulent regulatory waters that imposed considerable uncertainty on the company's future profitability, and even its viability."[253] He noted that this regulatory uncertainty impacted both the valuation that the market placed on the common stock of DFC Global and also the value that a private equity buyer, seeking to meet a high IRR, would place on the company.[254] The Chancellor was right to acknowledge the substantial regulatory risk facing the company and to appreciate the financial implications of it for a deal with a private equity buyer.

---

[245] *In re* Appraisal of DFC Glob. Corp., No. 10107-CB, 2016 WL 3753123, at *22–23 (Del. Ch. July 8, 2016); *In re* Appraisal of Dell Inc., No. 9322-VCL, 2016 WL 3186538, at *36–37 (Del. Ch. May 31, 2016).

[246] Hals, *supra* note 212 ("Wall Street dealmakers have warned that Bouchard's view made it difficult for private equity buyers to protect their deals from appraisal-seeking hedge funds.").

[247] *Dell*, 177 A.3d at 1; *DFC Glob.*, 172 A.3d at 346.

[248] *Dell*, 177 A.3d at 1; *DFC Glob.*, 172 A.3d at 346.

[249] *In re Appraisal of Dell Inc.*, 2016 WL 3186538, at *30.

[250] *In re Appraisal of DFC Glob. Corp.*, 2016 WL 3753123, at *30–32.

[251] *In re Appraisal of Dell, Inc.*, 2016 WL 3186538, at *30 (noting that "the outcome of competition between financial sponsors primarily depends on their relative willingness to sacrifice potential IRR. It does not lead to intrinsic value").

[252] *Id.* ("JPMorgan told the Committee in December 2012 that 'given comparable LP make-up and return hurdles,' it was 'unlikely to see any material difference' between Silver Lake's offer and what other financial sponsors would pay.").

[253] *In re Appraisal of DFC Glob. Corp.*, 2016 WL 3753123, at *21.

[254] *Id.* at *22–23.

A bedrock feature of modern portfolio theory is the distinction between firm-specific risk and systematic or market risk.[255] Firm-specific risk is "risk that potentially can be eliminated by diversification," while market risk is "risk that you can't avoid, regardless of how much you diversify."[256] A central tenet of modern portfolio theory is that the expected return, and therefore the price, of the publicly traded securities of a firm depends not on the total risk facing a firm but instead on only its systematic risk—the firm's exposure to the risk of the market as a whole.[257] Firm-specific or unsystematic risk of the sort facing particular firms can be cheaply and easily diversified away by public investors. They demand no compensation (in the form of a higher return) for bearing firm-specific risk,[258] and thus firm-specific risk is not relevant to the price of a publicly traded stock.[259]

The only type of risk that affects stock prices is market risk, typically represented by the stock's "beta," a measure of the stock's sensitivity to movements in the market as a whole.[260] As one widely used textbook summarizes the point, "[n]o matter how much total risk an asset has, only the systematic portion is relevant in determining the expected return (and the risk premium) on that asset."[261] As a result, the equity of firms with a significant degree of firm-specific risk is often more valuable when held primarily by diversified public investors than when held by a small number of concentrated, undiversified owners. In this context, the Supreme Court's new formulation of statutory "fair value" as whatever stockholders would receive in a fair deal may diverge dramatically from the traditional concept of awarding dissenters the value of what has been taken from them.

---

255 *See, e.g.*, Harry Markowitz, *Portfolio Selection*, 7 J. FIN. 77, 77 (1952).

256 *See* RICHARD A. BREALEY ET AL., PRINCIPLES OF CORPORATE FINANCE 170 (10th ed. 2011).

257 *Id.* at 170 ("For a reasonably well-diversified portfolio, only market risk matters."); STEPHEN A. ROSS ET AL., FUNDAMENTALS OF CORPORATE FINANCE 418 (8th ed. 2008) ("The expected return on an asset depends only on that asset's systematic risk.").

258 *See* BREALEY ET AL., *supra* note 256.

259 ROSS ET AL., *supra* note 257, at 418 ("The systematic risk principle states that the reward for bearing risk depends only on the systematic risk of an investment. The underlying rationale for this principle is straightforward: Because unsystematic risk can be eliminated at virtually no cost (by diversifying), there is no reward for bearing it. Put another way, the market does not reward risks that are borne unnecessarily.").

260 *See, e.g.*, BREALEY ET AL., *supra* note 256, at 175 ("The beta of an individual security measures its sensitivity to market movements . . . . In a portfolio context, a security's risk is measured by beta.").

261 ROSS ET AL., *supra* note 257, at 418; *see* Korsmo, *Delaware's Retreat*, *supra* note 13 (manuscript at 44) (discussing stockholders' ability to reduce the risk of business decisions through a diversified portfolio).

The considerable regulatory uncertainty faced by DFC Global was largely a species of firm-specific risk.[262] As a public company, however, that risk would be of little consequence to public stockholders.[263] Post-merger, however, the equity of DFC Global was held as a concentrated position by a single financial sponsor.[264] A merger transaction with a private equity buyer meant the abandonment of a capital structure perfectly suited to bearing that firm-specific risk—public holdings by diversified investors—in favor of ownership by a financial sponsor that could not fully diversify away the firm-specific risk and would necessarily have to discount for it. The risk, in other words, would not matter to public investors but mattered dramatically to private buyers.

This difference in the treatment of firm-specific risk can drive a wedge between price paid by a private equity buyer and the value as a going concern. This may be so even in a competitive process, if that competition is limited to private equity buyers. Incidentally, this insight provides an answer to the puzzlement some commentators expressed after *Dell*: how can the fair value of a company be more than any bidder is willing to pay?[265] The possibility this "puzzle" ignores is that the company is worth more if it is not bought by anybody and instead remains public, held by diversified investors. Given the Delaware courts' task of valuing the company "as a going concern," this is a strange possibility to overlook.[266]

Significantly, a private equity buyer is not the only relevant actor who must discount for firm-specific risk. The directors and officers of DFC Global themselves held large, undiversified investments in the company, both in financial capital and in human capital.[267] As a result, the managers bore substantial firm-specific risk. They thus had a powerful incentive to offload the firm's regulatory risk through a sale of the company, even at a discount to its value to diversified stockholders as a going concern. Notably, the chairman and CEO was approaching retirement age and owned nearly 3.4% of the company

---

[262] *See In re* Appraisal of DFC Glob. Corp., No. 10107-CB, 2016 WL 3753123, at *18 (Del. Ch. July 8, 2016).

[263] DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346, 348 (Del. 2017).

[264] *Id.* at 348.

[265] *See, e.g.*, Sorkin, *supra* note 164.

[266] If, of course, as is usually the case, the pre-announcement market price is less than the negotiated merger price, the apparent mystery returns. As is discussed more in the next section, however, the mystery again dissipates if one acknowledges that (1) prices of individual shares traded on public markets do not reflect the value of control—the so-called "control premium"—which dissenters are entitled to share; (2) prices of individual stocks can depart substantially from fundamental value; and/or (3) fair value of the target firm may change between when the merger is announced and when it is completed, at which time fair value is determined. *See infra* Section II.B.

[267] DFC Glob. Corp., Proxy Statement (Schedule 14A) 82 (Oct. 7, 2013).

in stock and options.[268] Had the company failed, the result would have been a calamity for the CEO—but not for diversified public stockholders.

The court's skepticism of the transaction may well have been prompted by this conflict of interest between management and outside stockholders. Indeed, though Chancellor Bouchard did not write in terms of firm-specific and market risk, he appeared to recognize the issue, repeatedly pointing to DFC Global's unusual degree of regulatory risk as a reason to doubt the meaningfulness of the merger price.[269]

Delaware case law has in the past recognized the problems arising from precisely this sort of conflict. Then-Vice Chancellor Strine, for example, observed in *In re Lear* that an executive's exposure to non-diversifiable risk could generate a conflict.[270] The retirement-age executive's concentrated equity position in a risky firm could "create incentives that actually give managers reasons to pursue ends not shared by the corporation's public stockholders."[271] The court noted that the CEO "had powerful interests to agree to a price and terms suboptimal for public investors" because doing so would allow the CEO to cash out his equity stake.[272] The role of this conflict in the transaction received no attention in the *DFC Global* appeal or in the Delaware Supreme Court's decision in the case.[273]

Shortly before the Supreme Court's *DFC Global* opinion, Vice Chancellor Slights tried to grapple in a different way with this private equity issue in the PetSmart appraisal.[274] The court there was unpersuaded by the argument that a private equity buyer's higher target rate of return would lead to a deal price below fair value.[275] The court emphasized that the high return targets of financial

---

268 *Id.* at 7, 14.

269 *See, e.g.*, *In re* Appraisal of DFC Glob. Corp., No. 10107-CB, 2016 WL 3753123, at *4 (Del. Ch. July 8, 2016) ("Part of Lone Star's interest in the transaction related to the regulatory uncertainty. Lone Star sought to take advantage of this uncertainty by buying DFC at this time, when its performance was weak and outlook unclear."); *id.* at *18.

270 *See In re* Lear Corp. S'holder Litig., 926 A.2d 94, 117 (Del. Ch. 2007) (discussing CEO's non-diversifiable risk and its effect on the merger selling point).

271 *See id.* at 116.

272 *Id.* at 117.

273 DFC Glob. Corp. v. Muirfield Value Partners, L.P.,172 A.3d 346 (Del. 2017).

274 *See In re* Appraisal of PetSmart, Inc., No. 10782-VCS, 2017 WL 2303599, at *29 (Del. Ch., May 26, 2017).

275 *Id.* ("And while it is true that private equity firms construct their bids with desired returns in mind, it does not follow that a private equity firm's final offer at the end of a robust and competitive auction cannot ultimately be the *best* indicator of fair value for the company.").

sponsors would be offset by greater risks post-transaction arising from the use of leverage.[276]

This is partly true, but beside the point. A private equity sponsor will insist on a higher IRR than diversified public investors, precisely to offset its exposure to leverage and firm-specific risk.[277] The question that matters is not whether the financial sponsor is getting a free lunch. Instead, the question is whether the deal price reflects the value of the target firm as a going concern. Firms will frequently have a lower cost of capital—and, as a consequence, a higher value—when they have an equity base of diversified public stockholders, rather than a single owner who may be undiversified and highly leveraged.

While the Court of Chancery in *PetSmart* failed to appreciate the significance of the LBO model argument, the Supreme Court, in both *DFC Global* and *Dell*, appeared to misunderstand it completely.[278] Instead of contending with it in any meaningful way, the court instead grappled with a series of weak arguments that nobody before it was making. At one point, the court seemed determined to refute the argument that having a target rate of return is nefarious—a suggestion no one had made.[279] The court hammers away for dozens of pages at a strawman: that buyers could not value risks.[280] In *DFC Global*, the Supreme Court emphasized that "[t]he buyers who were part of the sales process—and who ultimately decided not to pursue a transaction with DFC—considered regulatory risk."[281] Elsewhere, the court emphasized the fact that it was natural for potential buyers to worry about regulatory risk.[282] The Supreme Court faulted the Court of Chancery in *DFC Global* for citing "no

276 *See id.* at *29 n.352 ("The LBO model, however, is risk adjusted to account for post-transaction leverage. It follows, then, that the higher rate of return sought by bidders employing an LBO model will be offset by the fact that most of the purchase price is financed with debt . . . .").

277 *See supra* notes 249–52.

278 At one point in its *DFC Global* opinion, the court admits that, "[t]o be candid, we do not understand the logic of [the] finding" that a deal price built around a private buyer's IRR and financing constraints is not strong evidence of value as a going concern; the ensuing analysis bears out this admission. *DFC Glob.*, 172 A.3d at 349. In *Dell*, the court reiterated that there is "'no rational connection' between a buyer's status as a financial sponsor and the question of whether the deal price is a fair price." Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 28 (Del. 2017) (citing *DFC Glob.*, 172 A.3d at 349–50).

279 *DFC Glob.*, 172 A.3d at 375 ("[A]ll disciplined buyers, both strategic and financial, have internal rates of return that they expect in exchange for taking the large risk of a merger, or for that matter, any sizeable investment of its capital.").

280 *See id.* at 346.

281 *Id.* at 373 ("[T]he record reveals that equity analysts, equity buyers, debt analysts, debt providers and others were in fact attuned to the regulatory risks facing DFC.").

282 *Id.* at 349 ("The Court of Chancery did not cite, and we are unaware of, any academic or empirical basis to conclude that market players like the many who were focused on this company's value would not have examined the potential for regulatory action and factored it into their assessments of the company's value.").

economic literature to suggest that markets themselves cannot price this sort of regulatory risk."[283]

All of this is orthogonal to the point. Of course private buyers would pay attention to firm-specific risk, and of course they might be expert at incorporating that risk into their valuation models.[284] The critical point is that private equity buyers *had* to discount the company's future value for this risk, when diversified public shareholders *did not*.[285]

The Supreme Court's failure to confront the distinction between firm-specific and market risk—and its implications for valuation—is evident elsewhere in *DFC Global*. The court at one point, for example, asserts that "[e]quity betas increase with the risk of the business."[286] In fact, equity betas increase with the *market* risk of the business, and have nothing to do with the overall risk of the business.[287]

This mistake in analyzing the relevant financial principles drives a deeper legal misunderstanding of "fair value." In the two Supreme Court opinions, confusion reigns over the statutory conception of "fair value." The *Dell* opinion oddly suggests the objective of the remedy is "fair treatment of the minority,"[288] and in another place suggests the touchstone is whether dissenters "got fair value and were not exploited" in receiving the deal price, a rather circular definition that appears to overlap with fiduciary duty concerns.[289] In *DFC Global*, the Supreme Court more concretely gestures towards "fair value" equivalent to what it would be in a fiduciary duty case—willing buyer, willing seller, etc.: "what they deserve to receive based on what would fairly be given to them in an arm's-length transaction."[290] In articulating this novel understanding of appraisal—which as noted above would create an equivalence between the deal price in an arm's-length transaction and fair value—the *DFC Global* opinion quoted and drew support from language in *Cinerama, Inc. v. Technicolor, Inc.*, where

---

283 *Id.* at 372.

284 *Id.* at 373 (noting that "DFC's regulatory risk was being watched by . . . potential buyers in the sale," a group "who had money at stake").

285 The Supreme Court's repeated references to DFC's inability to refinance its debt suffers from a similar problem, in that it never considers the possibility of offering a higher interest rate, and never mentions the potentially higher interest rates confronting the buyer. *Id.* at 374.

286 *Id.* at 385 (citing SHANNON P. PRATT & ROGER J. GRABOWSKI, COST OF CAPITAL 203 (5th ed. 2014)).

287 Indeed, it is possible for a firm to have extremely high levels of risk and still have a low beta, if that risk is primarily firm-specific—that is, not closely correlated to overall market movements. *See* BREALEY ET AL., *supra* note 256, at 185–203.

288 *See* Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 35 (Del. 2017).

289 *Id.* at 33.

290 *See DFC Glob.*, 172 A.3d at 370–71.

Chancellor Allen considered the fair price prong of the entire fairness analysis.[291] While this standard makes sense in the context of a fiduciary duty action, where the issue is the personal liability of directors for their actions in negotiating a deal, it is out of place in appraisal. The reason this is wrong in appraisal—and the reason that "value as a going concern" is right—is that this standard ignores the obvious possibility that the company might be more valuable when held by public, diversified shareholders.[292]

B. Abuse of the Efficient Capital Market Hypothesis

Perhaps the most remarked-upon aspect of the *Dell* and *DFC Global* opinions is their enthusiastic embrace of the Efficient Capital Market Hypothesis (ECMH). If this embrace is not merely situational, it could portend a tectonic shift in Delaware jurisprudence well beyond the appraisal context.[293] The *DFC Global* opinion, in particular, includes a paean to the magic of market pricing that would make Hayek blush, emphasizing that "the market price should distill the collective judgment of the many . . . ."[294] Both opinions claim that the stock for each company traded in an efficient market,[295] and in *Dell*, the Supreme Court chided the trial court for "ignor[ing] the efficient market hypothesis long endorsed by this Court"[296] and for doubting the reliability of a "price produced by an efficient market."[297]

As a matter of doctrine, the notion that the Delaware courts have "long endorsed" the ECMH strains credibility.[298] More importantly, the Delaware

---

[291] Cinerama, Inc. v. Technicolor, Inc., 663 A.2d 1134, 1143 (Del. Ch. 1994), *aff'd*, 663 A.2d 1156 (Del. 1995).

[292] As noted above, *supra* note 266, this can be true even where the deal price is higher than the pre-announcement market price.

[293] *See infra* Section III.B.

[294] *DFC Glob.*, 172 A.3d at 369.

[295] *Id.* at 373 ("[T]he company had . . . a deep base of public shareholders, and highly active trading, the 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."); Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 6 (Del. 2017) ("[T]he evidence suggests that the market for Dell's shares was actually efficient and, therefore, likely a possible proxy for fair value."). These factual findings, of course, were not supported by the kinds of expert testimony as to market efficiency that are de rigeur in securities fraud class actions. Verition Partners Master Fund Ltd. v. Aruba Networks, Inc., No. 11448-VCL, 2018 WL 922139, at *24 n.257 (Del. Ch. Feb. 15, 2018) (noting the possibility that "future appraisal litigants will retain experts on market efficiency, as is common in federal securities actions . . . .").

[296] *Dell*, 177 A.3d at 24.

[297] *Id.* at 24, 25 n.113 (citing *DFC Glob.*, 172 A.3d at 373).

[298] Even restricting oneself to seminal casebook cases, one finds example after example of Delaware courts rejecting market prices as definitive, even for large companies with highly liquid trading markets. *See, e.g.*, Unitrin, Inc. v. Am. Gen. Corp., 651 A.2d 1361, 1384 (Del. 1995) (allowing directors to take defensive measures due to "the risk that shareholders will mistakenly accept an underpriced offer because they disbelieve

Supreme Court paints a misleading picture of the modern understanding of the ECMH, deploying it for purposes to which it is not suited. In particular, the court repeatedly relies on the ECMH in its effort to wave away all evidence that a stock price does not reflect fair value.[299] To be sure, the court frequently softens the claim that market prices are the best evidence of fair value through modifiers like "likely" and "generally."[300] In every concrete circumstance, however, the Supreme Court held that the trial court judges had abused their discretion by crediting evidence that the market price was incorrect—evidence like the repeated and detailed arguments by Michael Dell that the market was

---

management's representations of intrinsic value"); *id.* at 1385 (finding it reasonable to fear that "Unitrin's shareholders might accept American General's inadequate Offer because of 'ignorance or mistaken belief' regarding the Board's assessment of the long-term value of Unitrin's stock."); Air Prods. & Chems., Inc. v. Airgas, Inc., 16 A.3d 48, 108–13 (Del. Ch. 2011) (same); Rapid-Am. Corp. v. Harris, 603 A.2d 796, 806 (Del. 1992) (noting that "*Munds'* succinct evaluation of the market has lost none of its lustre"); *In re* Time, Inc. S'holder Litig., 571 A.2d 1140, 1150 n.12 (Del. 1990) (finding that "it is not a breach of faith for directors to determine that the present stock market price of shares is not representative of true value"); Cede & Co. v. Technicolor, Inc., 542 A.2d 1182, 1187 n.8 (Del. 1988) (noting that "[i]nformation and insight not communicated to the market may not be reflected in stock prices" and recognizing that insiders "may have insight into their company's future based primarily on bits and pieces of *nonmaterial* information that have value as a totality"); Smith v. Van Gorkom, 488 A.2d 858, 875–76 (Del. 1985) ("Using market price as a basis for concluding that the [merger price] adequately reflected the true value of the Company was a clearly faulty, indeed fallacious, premise, as the defendants' own evidence demonstrates."); Paramount Commc'ns Inc. v. Time Inc., Nos. 10866, 10670, 10935, 1989 WL 79880 (Del. Ch. 1989), at *19 ("[J]ust as the Constitution does not enshrine Mr. Herbert Spencer's social statics, neither does the common law of directors' duties elevate the theory of a single, efficient capital market to the dignity of a sacred text."); Chi. Corp. v. Munds, 172 A. 452, 455 (Del. Ch. 1934) ("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."). Perhaps the reason the Delaware Supreme Court's claim to have "long endorsed" the ECMH has attracted so much attention is that it rings false to anyone familiar with Delaware case law.

299 *See, e.g.*, *Dell*, 177 A.3d at 6 ("[T]he evidence suggests that the market for Dell's shares was actually efficient and, therefore, likely a possible proxy for fair value."); *id.* at 24 (holding that the Court of Chancery's finding of a "valuation gap . . . ignored the efficient market hypothesis long endorsed by this court."); *id.* ("[T]he price produced by an efficient market is generally a more reliable assessment of fair value than the view of a single analyst . . . ."); *id.* at 34 ("The apparent efficiency of Dell's pre-signing stock market and the long-term approach of its analysts undermine concerns of a 'valuation gap.'"); *id.* at 35 ("[T]he market-based indicators of value—both Dell's stock price and deal price—have substantial probative value."); *DFC Glob.*, 172 A.3d at 370 ("[I]n an efficient market you can trust prices, for they impound all available information about the value of each security."); *id.* at 368–69 ("In economics, the value of something is what it will fetch in the market. That is true of corporations, just as it is true of gold."); *id.* at 370 ("[C]orporate 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 information, the likelihood of outguessing the market over time and building a portfolio of stocks beating it is slight."); *id.* at 373 ("[T]he price at which its shares trade is informative of fair value . . . .").

300 *See, e.g.*, *supra* note 295.

undervaluing Dell stock.[301] So insistent was the Supreme Court on this point that Vice Chancellor Laster—who was overruled in the *Dell* case—felt compelled in a subsequent case to defer to the pre-announcement trading price, despite his concerns about a defective deal process.[302]

In doing so, the Supreme Court has boldly gone where few economists have gone in thirty-five years—conflating well-supported notions of semi-strong market efficiency, often known as informational efficiency, with an unfounded and widely discredited notion of value efficiency.[303] Informational efficiency simply implies that "available information" will—through the actions of market participants—quickly become impounded in market prices, such that it is no longer possible to make a profit by knowing the information.[304] The evidence is overwhelming that, at least for many types of information, modern stock markets are usually highly informationally efficient.[305] The notion of informational efficiency is to be distinguished, however, from the notion of fundamental value efficiency—the idea that the market price is, in some sense, "right."[306] Fundamental value efficiency remains unproven and, at root, likely unprovable, in that any test of whether the market is "right" as to a company's fundamental value would have to presume some other way of measuring the company's fundamental value in the first place—a difficulty known in the finance literature as the "joint hypothesis problem."[307]

---

301 *See, e.g.*, *Dell*, 177 A.3d at 27 ("In short, the record does not adequately support the Court of Chancery's conclusion that the market for Dell's stock was inefficient and that a valuation gap in the Company's market trading price existed . . . ."); *id.* at 25 ("The record before us provides no rational, factual basis for such a 'valuation gap.'"); Verition Partners Master Fund Ltd. v. Aruba Networks Inc., No. 11448-VCL, 2018 WL 922139, at *1, *30 (Del. Ch. 2018) ("On appeal, the Delaware Supreme Court held that, in light of the attributes of the market for Dell's shares and the implications of the [ECMH], my reliance on the views of these knowledgeable insiders constituted an abuse of discretion."); *id.* at *31 (summarizing the evidence on a valuation gap and concluding that "the Delaware Supreme Court regarded it as the equivalent of no evidence at all.").

302 *See Verition Partners*, 2018 WL 922139, at *4, *39–41 ("Fortunately for a trial judge, once Delaware law has embraced a traditional formulation of the efficient capital markets hypothesis, the unaffected market price provides a direct route to the same endpoint, at least for a company that is widely traded and lacks a controlling stockholder.").

303 *See, e.g.*, Lynn A. Stout, *Are Stock Markets Costly Casinos? Disagreement, Market Failure, and Securities Regulation*, 81 VA. L. REV. 611, 646–47 (1995) [hereinafter Stout, *Are Stock Markets Costly Casinos?*] (distinguishing informational from fundamental value efficiency); Lynn A. Stout, *The Mechanisms of Market Inefficiency: An Introduction to the New Finance*, 28 J. CORP. L. 635, 639–41 (2003) [hereinafter Stout, *The Mechanisms of Market Inefficiency*] (same).

304 *See, e.g.*, Sanford J. Grossman & Joseph E. Stiglitz, *On the Impossibility of Informationally Efficient Markets*, 70 AM. ECON. REV. 393, 393–95 (1980) (defining a market as "informationally efficient" when "prices are such that all arbitrage profits are eliminated").

305 Stout, *Are Stock Markets Costly Casinos?*, *supra* note 303, at 646.

306 Stout, *The Mechanisms of Market Inefficiency*, *supra* note 303, at 639–41.

307 *See* Eugene F. Fama, Professor, Booth Sch., Univ. of Chi., Prize Lecture: Two Pillars of Asset Pricing (Dec. 8, 2013), *in* THE NOBEL PRIZE, https://www.nobelprize.org/prizes/economic-sciences/2013/fama/lecture/

While it is sometimes naively assumed that informational efficiency implies valuation efficiency, in fact this is only true when informational efficiency is combined with the consciously unrealistic assumptions underlying the Capital Asset Pricing Model (CAPM).[308] In particular, the traditional version of CAPM expressly employs the simplifying assumption that all investors have the exact same expectations as to future risks and returns.[309] In a world where all investors share a single opinion, the notion that market values will represent the "best" estimate is simply a tautology.[310] In reality, of course, investors have heterogeneous expectations for the future. Even the godfather of the traditional ECMH himself, Eugene Fama, has written that when the assumption of investor homogeneity is relaxed "distortions of expected returns can be large" and that "[o]ffsetting actions by informed investors [will] not typically suffice to cause the price effects of erroneous beliefs to disappear with the passage of time."[311] As a result of this and other considerations, many leading economists have quite modest expectations for value efficiency. For example, Fischer Black defined "an efficient market as one in which price is within a factor of 2 of value, i.e., the price is more than half of value and less than twice value."[312]

(last visited Nov. 12, 2018) ("Tests of [value] efficiency basically test whether the properties of expected returns implied by the assumed model of market equilibrium are observed in actual returns. If the tests reject, we don't know whether the problem is an inefficient market or a bad model of market equilibrium."); *see also* Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383, 384, 413–14 (1970); Eugene F. Fama, *Efficient Capital Markets*, *in* FOUNDATIONS OF FINANCE: PORTFOLIO DECISIONS AND SECURITIES PRICES 137 (1976).

308 *See* Stout, *The Mechanisms of Market Inefficiency*, *supra* note 303, at 641 ("When the CAPM is combined with the ECMH, the two theories produce a joint prediction that, in an informationally efficient market, prices will also be fundamental value efficient.").

309 *See* John Lintner, *The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets*, 47 REV. ECON. & STAT. 13, 14 (1965); William F. Sharpe, *Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk*, 19 J. FIN. 425, 427 (1964); *see also* Stout, *The Mechanisms of Market Inefficiency*, *supra* note 303, at 641–42 ("One of the most remarkable (yet remarkably unremarked-upon) characteristics of the classic CAPM is that the pioneering theorists who developed it began by expressly assuming that all investors share homogenous expectations regarding the likely future returns and risks associated with particular securities. In other words, they assumed that all investors agree.").

310 *See* Stout, *The Mechanisms of Market Inefficiency*, *supra* note 303, at 641–42 ("Combining the ECMH with the CAPM produces a prediction of fundamental value efficiency through a difference and more troubling analytical path—by tautology. . . . If investors make identical estimates of securities' future risks and returns, it is inevitable that the market should mirror this 'best' estimate, because there is only *one* estimate—the estimate of the homogenous investor.").

311 Eugene F. Fama & Kenneth R. French, *Disagreement, Tastes, and Asset Prices*, 83 J. FIN. ECON. 667, 683 (2007). The creators of the first CAPM models have published similar conclusions. *See* WILLIAM F. SHARPE, *Disagreement*, *in* PORTFOLIO THEORY AND CAPITAL MARKETS 104, 104–13 (1970); John Lintner, *The Aggregation of Investor's Diverse Judgments and Preferences in Purely Competitive Security Markets*, 4 J. FIN. & QUANTITATIVE ANALYSIS 347, 347 (1969); Jack Treynor, *Bulls, Bears, and Market Bubbles*, 54 FIN. ANALYSTS J. 69, 74 (1998).

312 Fischer Black, *Noise*, 41 J. FIN. 529, 533 (1986).

While the joint hypothesis problem renders rigorous conclusions elusive, examples of apparent violations of value efficiency—and even informational efficiency—have multiplied over the decades.[313] These examples range from market-wide bubbles, to slow market reactions to difficult-to-understand information,[314] to apparently irrational reactions to content-free events, such as companies having their stock prices jump after adding ".com" to their names in the late 1990s, without any change to the underlying business.[315] Personally, the authors have two favorite recent examples. In December of 2017, Long Island Iced Tea Corp.—a maker of, naturally, iced tea—announced that it was changing its name to "Long Blockchain Corp." and exploring opportunities related to Bitcoin.[316] Despite the implausibility of an iced tea company having any competitive advantage in cryptocurrencies, the company's stock price as much as tripled overnight, before eventually falling back.[317]

Our other favorite example is one given in an interview by 2017 Nobel Prize winning economist Richard Thaler.[318] The Herzfeld Caribbean Basin Fund is a closed-end mutual fund whose assets are entirely made up of other publicly traded securities.[319] An investor could therefore replicate the assets of the fund by simply buying the underlying securities directly. As Thaler tells it, "[f]or many years, [the fund] traded at a discount of about 10–15 percent of net asset value, meaning that you could buy $100 worth of its assets for $85-90."[320] By itself, this so-called "closed-end mutual fund" discount is something of a

[313] The trial court in *Dell* provided a useful canvass of the literature on market anomalies and behavioral economics. *See In re* Appraisal of Dell Inc., No. 9322-VCL, 2016 WL 3186538, at *24 n.16 (Del. Ch. May 31, 2016); *see also* Verition Partners Master Fund Ltd. v. Aruba Networks, Inc., No. 11448-VCL, 2018 WL 922139, at *24 n.257 (Del. Ch. Feb. 15, 2018).

[314] *See* Stout, *The Mechanisms of Market Inefficiency*, *supra* note 303, at 639–41.

[315] Joe Pinsker, *The Once-Upon-a-Time Magic of Adding '.com' to a Company's Name*, ATLANTIC (Aug. 6, 2014), https://www.theatlantic.com/business/archive/2014/08/the-once-upon-a-time-magic-of-adding-com-to-a-companys-name/375658/.

[316] *See* Olga Kharif, *Long Blockchain May Have Misled Investors, Nasdaq Says in Letter*, BLOOMBERG (Feb. 21, 2018, 6:34 PM), https://www.bloomberg.com/news/articles/2018-02-21/long-blockchain-may-have-misled-investors-nasdaq-says-in-letter.

[317] *Id.*; Paul R. La Monica, *Iced Tea Company Kills Plans to Buy Bitcoin Mining Rigs*, CNN MONEY (Feb. 2, 2018, 11:22 AM), https://money.cnn.com/2018/02/02/investing/long-blockchain-long-island-iced-tea-bitcoin/index.html; Arie Shapira & Kailey Leinz, *Long Island Iced Tea Soars After Changing Its Name to Long Blockchain*, BLOOMBERG (Dec. 21, 2017, 5:17 PM), https://www.bloomberg.com/news/articles/2017-12-21/crypto-craze-sees-long-island-iced-tea-rename-as-long-blockchain.

[318] Binyamin Appelbaum, *Nobel in Economics is Awarded to Richard Thaler*, N.Y. TIMES (Oct. 9, 2017), https://www.nytimes.com/2017/10/09/business/nobel-economics-richard-thaler.html.

[319] *Company Overview of the Herzfeld Caribbean Basin Fund Inc.*, BLOOMBERG, https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=6184169 (last visited Nov. 12, 2018).

[320] *Are Markets Efficient?*, CHI. BOOTH REV. (June 30, 2016), http://review.chicagobooth.edu/economics/2016/video/are-markets-efficient (interview with Eugene Fama and Richard Thaler).

puzzle.[321] This fund, however, traded under the ticker symbol "CUBA."[322] On the day President Obama announced a thawing of relations with Cuba, the country, the value of CUBA, the stock, skyrocketed even as the value of the underlying securities held by CUBA remained flat.[323] The same assets that the market "valued" at $90 on one day cost $170 the following day.[324]

In the same interview, Eugene Fama dismisses such examples as "anecdotes."[325] But he does not dismiss the CUBA example because he believes that the fundamental value of CUBA, the company, actually skyrocketed when President Obama relaxed tensions with Cuba, the country.[326] He dismisses it as an "anecdote" in the context of arguing that these examples do not furnish generalizable predictions that would form the basis a new asset pricing model as an alternative to CAPM and its progeny.[327] As Fama himself notes, "[t]he point is not that markets are efficient. They're not. It's just a model."[328]

An appraisal action, however, is itself an anecdote. The task for a court in considering the market price is not to forge a new general model of asset pricing, but rather to evaluate how well the traditional model functions in the case—the anecdote—before it.

In theory, the Delaware Supreme Court purports to recognize the limitations on the value efficiency of markets, modestly noting only that it is "likely" or "generally" the case that market prices will be a good proxy for fundamental value.[329] But the court then goes on to erect a virtually insurmountable evidentiary burden for any trial court that would take these equivocations seriously. The Supreme Court did not merely disagree with the Vice Chancellor

---

321 *Id.*

322 *Id.*

323 *Id.* ("Thaler: . . . Then, all of a sudden, one day it sells for a 70 percent premium. That was the day President Obama announced his intention to relax relations with Cuba.").

324 *Id.* ("Thaler: . . . So securities you could buy for $90 on one day cost you $170 the next day."). Note that this jump is not related to a jump in the value of the actual underlying assets, but in both cases are scaled to that underlying value. That is, the day before President Obama's announcement, you could buy $100 worth of underlying securities by buying $90 worth of CUBA. The next day, it would cost you $170 to buy $100 worth of underlying securities—securities, remember, that you could instead buy directly for $100. *Id.*

325 *Id.*

326 *Id.*

327 *Id.*

328 *Id.*

329 *See, e.g.*, Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 6 (Del. 2017) ("[T]he evidence suggests that the market for Dell's shares was . . . *likely* a possible proxy for fair value." (emphasis added)); *id.* at 24 ("[T]he price produced by an efficient market is *generally* a more reliable assessment of fair value than the view of a single analyst . . . ." (emphasis added)); *id.* at 35 ("[T]he market-based indicators of value—both Dell's stock price and deal price—have *substantial* probative value." (emphasis added)).

in *Dell* about the possibility of a valuation gap; it concluded that he abused his discretion in crediting the possibility.[330]

The distinction between information efficiency and value efficiency has played an important role in Delaware law outside of the appraisal context.[331] As a Vice Chancellor, for example, Chief Justice Strine chided plaintiffs for asking him to follow "blindly some crude rendition of the semi-strong form of the efficient capital markets hypothesis, one in which any board should treat the current market price as a reliable guidepost to decisionmaking. My understanding of ECMH is that it makes much less drastic claims."[332] In *Dell*, the Delaware Supreme Court found that the trial court abused its discretion by not treating Dell's market price as a reliable guidepost, despite overwhelming evidence that Dell's management did not regard it as a reliable guidepost, either.[333] The *Dell* decision thus signals either a deep shift in Delaware's law or a willingness to rely on the ECMH only in the context of appraisal proceedings.

Whatever its motivation, the Delaware Supreme Court's conflation of informational efficiency and value efficiency is unfortunate, but perhaps understandable. Despite the foregoing discussion, there is indeed good reason to believe that modern securities markets are generally efficient, and that the judgment of the market is generally better than that of individual market participants. Both opinions, however, then push beyond this uncontroversial proposition, misusing it in two ways.

First, the Delaware Supreme Court implicitly assumes that the fundamental value determined by the market can be treated as the equivalent of the jurisprudential concept of fair value in an appraisal proceeding. The court properly acknowledges that "fair value" under the appraisal statute is a "jurisprudential, rather than purely economic, construct."[334] This is only natural, of course, as the appraisal remedy involves a share of stock (a jurisprudential

---

330 *Id.* at 24.

331 *Infra* note 332 and accompanying text.

332 *In re* Dollar Thrifty S'holder Litig., 14 A.3d 573, 611 (Del. Ch. 2010) (Strine, V.C.); *see also* Leo E. Strine, Jr., *Who Bleeds When the Wolves Bite?: A Flesh-and-Blood Perspective on Hedge Fund Activism and Our Strange Corporate Governance System*, 126 YALE L.J. 1870, 1930 (2017) ("[T]he claim of the efficient market hypothesis is not that a corporation's stock price at any time is a reliable estimate of fundamental value, but rather that it is not possible to design a trading strategy that will outguess the guesses of the market as a whole.").

333 *Dell*, 177 A.3d at 27.

334 DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346, 367 (Del. 2017) ("[T]he 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 when either valuing a minority block of shares or a public company as a whole.").

concept) in a corporation (another jurisprudential concept). And the transaction triggering the appraisal remedy is a not actually a sale but instead that great grandee of jurisprudential concepts, a statutory merger, which cancels stock by operation of law. These jurisprudential concepts have been developed over the centuries to aid in the efficient aggregation and deployment of capital, and they come with various features and rights designed to further those ends. One essential element in the concept of fair value in appraisal is the idea that the valuation ignores the fractionalized equity interest in the company and awards stockholders their proportional share of the company's value as a going concern.[335] Doing so allows all stockholders to share in the gains from the sale of control. This element assists in the aggregation and deployment of capital by minimizing the discount capital-seeking entrepreneurs would otherwise have to offer minority stockholders.[336] When the Delaware Supreme Court analogizes determining the value of a company in appraisal to determining the value of a gold nugget—as it did in *DFC Global*—it makes a category error.[337]

The Supreme Court repeatedly imagined how "an economist" would view matters at bar in *DFC Global*,[338] but this recurring dramatic role only emphasizes the court's misunderstandings of how stock market efficiency bears on the question in appraisal. The court at one point says:

> Precisely because DFC's shares were widely traded on a public market based on 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.[339]

This is wrong. The assets being valued are not alike: stock market values do not reflect the value of corporate control. Moreover, the trading price of the shares "as of the merger" will almost always be the deal price, not because of any economic fact about the value of the company but only because, by operation of law, the shares are about to be cancelled and cashed out for that price. That is

---

335 *See, e.g.*, Cavalier Oil Corp. v. Harnett, 564 A.2d 1137, 1144 (Del. 1989) ("[T]he objective of a section 262 appraisal is 'to value the *corporation* itself, as distinguished from a specific fraction of its *shares* as they may exist in the hands of a particular shareholder.'").

336 *See id.* at 1145 ("More important, to fail to accord a minority shareholder the full proportionate value of [the petitioner's] shares imposes a penalty for lack of control, and unfairly enriches the majority shareholders who may reap a windfall from the appraisal process by cashing out a dissenting shareholder, a clearly undesirable result.").

337 *DFC Glob.*, 172 A.3d at 368–69 ("In economics, the value of something is what it will fetch in the market. That is true of corporations, just as it is true of gold.").

338 *Id.* at 367, 369.

339 *Id.* at 367 (citation omitted).

not economics. It tells us nothing about whether the price at which the shares will be cashed out represents the fair value. Even absent an impending merger, the trading price of shares will reflect, in part, the value of the judicial protections offered to minority stockholders, rendering it impossible to identify what the firm is "worth" independent of the value of those minority protections.

In defense of its holding that the trial court abused its discretion, the Delaware Supreme Court in *Dell* resorts to the non sequitur that the fair value selected by the Court of Chancery "did not reflect a value deemed attractive to the buyers of Dell's 1,765,369,276 publicly traded shares."[340] Even if the market for individual shares were value efficient, however, the prevailing price would be for minority positions. Under Delaware law, the remedy affords the dissenter the "proportionate interest in [the] going concern"—a pro rata share of the whole.[341] That is the key distinction between valuing the entire company as a going concern and merely valuing a share of stock—that is, the price at which a willing buyer and willing seller will exchange a minority position in the company. A market price, even if it is value efficient, can only ever set a floor for the fair value of the entire company.

The second way the Delaware Supreme Court compounds its errors is via the suggestion that the efficiency of trading in the market for individual shares necessarily implies something entirely distinct: that the *transaction price* constitutes fair value.[342] In so doing, the Supreme Court effectively reads the "Capital" out of the Efficient Capital Markets Hypothesis, ascribing to the deal market characteristics of efficiency that have not been definitively demonstrated even for deep capital markets.

It should perhaps go without saying, but the market for individual shares of a company is not the same thing as the market for the whole company. The efficiency of the trading in the market for a company's stock does not imply anything about the sales process or the efficiency of the deal market. Among the necessary conditions for market efficiency are liquidity and fungibility.[343] Securities market prices tend to be at least informationally efficient because they

---

[340] Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 37 (Del. 2017).

[341] Cavalier Oil Corp. v. Harnett, 564 A.2d 1137, 1144 (Del. 1989) (quoting Tri-Cont'l Corp. v. Battye, 74 A.2d 71, 72 (Del. 1950)). The court's job is "to value the *corporation* itself, as distinguished from a specific fraction of its *shares* as they may exist in the hands of a particular shareholder." *Id.*

[342] *Dell*, 177 A.3d at 6 ("[T]he evidence suggests that the market for Dell's shares was actually efficient and, therefore, likely a possible proxy for fair value."); *id.* at 35 ("[T]he market based indicators of value—both Dell's stock price and deal price—have substantial probative value."); *DFC Glob.*, 172 A.3d at 373 ("[T]he price at which its shares trade is informative of fair value . . . .").

[343] Korsmo & Myers, *Reforming Modern Appraisal Litigation*, *supra* note 15, at 323.

consist of large numbers of identical securities trading on a deep market with thousands or millions of participants.[344] By contrast, the deal market consists of the rather inconvenient unit of trade: entire companies.[345] No two are exactly alike, so the market is chunky rather than liquid, and the number of potential buyers is exponentially smaller.[346] As a result, few, if any, insights of the ECMH offer any meaningful application to the deal market.[347] The Supreme Court made the self-evident mistake of treating the efficiency of the stock market as bearing on the efficiency of the deal market. The efficiency of the stock market simply has nothing to say about whether the deal process generated a price that functions as a reliable proxy for fair value.

Breezy analogies between a corporation and a product or commodity are just as unhelpful as analogies between a corporation and a share of stock trading on a securities market. The Supreme Court in *DFC Global* claims that "an economist would find that the fair market value of a company is what it would sell for when there is a willing buyer and willing seller without any compulsion to buy."[348] This might be true if the company were sold by a single owner into a thick market of potential buyers. But any analogy between a merger and a transaction between "a willing buyer and a willing seller" is virtually useless. In a public company merger, the firm will be sold by a board of directors with varying incentives, advised and assisted by inside managers and outside professionals with still different incentives, and then put to a stockholder plebiscite on a take-it-or-leave-it basis. Undoubtedly under certain conditions—conditions that, the authors stress, will likely be met in most arm's-length deals—the outcome of that process will be a price that serves as an adequate proxy for what the willing seller and buyer might have reached. But the reliability of that price depends on the process that gave rise to it.

The Supreme Court's opinion in *DFC Global* presents a truism about pricing:

> [I]n any assessment of the economic value of something—be it a company, a product, or a service—economics teaches that the most reliable evidence of value is that produced by a competitive market, so

---

344 *Id.*

345 *Id.*

346 *Id.*

347 *See generally In re* Appraisal of Dell Inc., No. 9322-VCL, 2016 WL 3186538, at *24 (Del. Ch. May 31, 2016) ("It is perhaps more erroneous to claim that the thinner M&A market generates a price consistent with fundamental efficiency, when the same claim is no longer made for the thicker markets in individual shares."); Korsmo & Myers, *Reforming Modern Appraisal Litigation*, *supra* note 15, at 323–24; Guhan Subramanian, *The Drivers of Market Efficiency in* Revlon *Transactions*, 28 J. CORP. L. 691, 695 (2003).

348 DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346, 369 (Del. 2017).

> long as interested buyers are given a fair opportunity to price and bid on something in question.[349]

For the appraisal inquiry, the relevant question is a threshold one: whether that competitive market existed in the context of the deal market. Did the market for a particular company operate in a way that generated complete information about the value of the company? The market for the *stock* can supply no answer. Further, as explained below, the efficiency of the deal market cannot be assumed merely because directors complied with their fiduciary duties.[350]

In *Dell*, the Supreme Court makes the claim that failing to credit the deal price in favor of a DCF analysis "was the antithesis of any economist's definition of fair market value."[351] But there are alternative ways of synthesizing a price where a true market does not exist—corporate finance textbooks (written by "economists") overflow with them. DCF valuation is perhaps the most prominent. The Delaware Supreme Court never fully engages with the question of whether the conditions for the sale are adequate to generate a price that conveys a reliable proxy for the value of the company. That is the market efficiency question that matters in appraisal and, as explained further in the next section, the Delaware Supreme Court does not offer a convincing answer to this question.

C. Conflating the Fiduciary Duty and Appraisal Contexts

One of the most striking aspects of both opinions is that they casually conflate questions of fiduciary liability with the valuation questions central to appraisal disputes.

The fiduciary inquiry asks whether the board has met its obligations to a degree sufficient to avoid personal liability, while the appraisal inquiry seeks to determine the fair value of the company. One way of resolving the appraisal inquiry is to determine whether the deal price contains sufficient information about the company's value. It is an obvious proposition—and one that should not be controversial—that a board could fully meet its fiduciary duties while at the same time running a sales process that results in a price that does not adequately reflect the fair value of a company. As a result, there must necessarily be an independent legal inquiry to determine whether the merger price conveys

---

349 *Id.* at 367. "This argument is sensible and in accordance with the economic literature." *Id.*

350 *See infra* Section II.C.

351 Dell Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 37 (Del. 2017).

that sort of information. Vice Chancellor Laster's opinion in *Lender Processing*[352] was an intelligent step in that direction.

The fiduciary inquiry lines up poorly with the appraisal inquiry because fiduciary standards are especially forgiving of director shortcomings for two important reasons. First, directors—the defendants in fiduciary claims—face the prospect of personal liability. If directors are too worried about their personal liability, they may be too risk-averse in making decisions while on the board. They would inevitably begin making decisions designed to minimize the risk of personal liability, rather than maximize stockholder wealth.[353] This would diminish the expected returns of diversified public stockholders, a socially undesirable outcome. Avoiding that result is one good reason—perhaps the best one—that the fiduciary standards afford directors such wide latitude.[354] Second, fiduciary suits as a practical matter are controlled by attorneys, not stockholders. There are substantial reasons to worry that class action attorneys are no more faithful agents to stockholders than the allegedly disloyal directors on the other end of the lawsuit.[355] These are sensible reasons that fiduciary duty standards have been especially forgiving of minor conflicts of interest and garden-variety negligence in the boardroom.

In the Court of Chancery, these inquiries were kept intellectually distinct. In *Dell*, for example, Vice Chancellor Laster considered the applicable fiduciary duty standards and observed that "the Company's process easily would sail through if reviewed under enhanced scrutiny."[356] The court correctly noted that the standards for the inquiries, although they both involve mergers, are analytically distinct.[357] Directors could satisfy their fiduciary duties in a transaction where the sales process was nevertheless inadequate to demonstrate fair value.[358] As the Court of Chancery recognized, the only thing that matters

---

352 *See* Merion Capital L.P. v. Lender Processing Servs., Inc., No. CV 9320-VCL, 2016 WL 7324170, at *14–15 (Del. Ch. Dec. 16, 2016).

353 *See generally* Stephen M. Bainbridge, *The Business Judgment Rule as Abstention Doctrine*, 57 VAND. L. REV. 83 (2004) (arguing that the business judgment rule is premised on maximizing shareholder wealth).

354 *See, e.g.*, Joy v. North, 692 F.2d 880, 886 (2d Cir. 1982) ("[B]ecause potential profit often corresponds to the potential risk, it is very much in the interest of shareholders that the law not create incentives for overly cautious corporate decisions. . . . A rule which penalizes the choice of seemingly riskier alternatives thus may not be in the interest of shareholders generally."); *see also* Korsmo, *Delaware's Retreat*, *supra* note 13 (manuscript at 43–45).

355 *See, e.g.*, Korsmo & Myers, *Reforming Modern Appraisal Litigation*, *supra* note 15, at 300–02.

356 *In re* Appraisal of Dell Inc., No. 9322-VCL, 2016 WL 3186538, at *29 (Del. Ch. May 31, 2016).

357 *Id.* at *26–27.

358 *Id.* at *27 ("Because the standards differ, it is entirely possible that the decisions made during a sale process could fall within *Revlon's* range of reasonableness, and yet the process still could generate a price that was not persuasive evidence of fair value in an appraisal.").

about the sales process is whether it provides adequate information about the value of the company.[359]

The two Supreme Court opinions let these distinct legal inquiries mingle until it is impossible to say which is which. In *Dell*, the Supreme Court seemed to join the inquiries as one:

> [T]he Court of Chancery's own summary remarks suggest the deal price deserves weight as the court characterized the sales process as one that 'easily would sail through if reviewed under enhanced scrutiny' and observed that '[t]he Committee and its advisors did many praiseworthy things,' too numerous to catalog in its opinion, as the trial court noted.[360]

This elision of the difference between the two standards is unlikely to be accidental. For example, during his tenure on the Court of Chancery, Chief Justice Strine was quite attentive to the difference between appraisal proceedings and fiduciary duty claims.[361] In *Toys "R" Us*, he denied a request to enjoin the transaction on fiduciary grounds but emphasized that nevertheless any "loss of dollar value" for stockholders "can be rectified adequately in a later appraisal proceeding."[362] In *Orchard Enterprises*, he noted the unique rules that prevailed in "an appraisal action, not a fiduciary duty case," and he did not hesitate to arrive at a going concern value that "no buyer was willing to pay."[363]

In *Dell* and *DFC Global*, the Supreme Court seems to have simply assumed that any transaction in which target directors met their fiduciary standards *must* result in a merger price that is a reliable proxy for the company's fair value. More broadly, the court's analysis evinces a faith that its own fiduciary duty jurisprudence, as developed over the past four decades, has rendered mergers a "solved problem," and that nothing can be gained by intervention via appraisal. Any such faith is unfounded. In reality, meeting the (generally appropriate) low bar of minimum fiduciary standards[364] offers little assurance that the resulting deal price is informative as to fair value. As Eric Talley and Stephen Choi have recently demonstrated, a sales process that easily satisfies Delaware's

---

[359] *Id.* at *26 ("The sales process is useful to the extent—and only to the extent—that it provides evidence of the company's value on the date the merger closed.").

[360] Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 30–31 (Del. 2017).

[361] *See, e.g.*, *In re* Toys "R" Us, Inc. S'holder Litig., 877 A.2d 975, 979, 1023 (Del. Ch. 2005).

[362] *Id.* at 1023.

[363] *In re* Appraisal of the Orchard Enters., Inc., No. 5713-CS, 2012 WL 2923305, at *1, *5 (Del. Ch. July 28, 2012).

[364] *See supra* notes 353–54 and accompanying text.

deferential fiduciary duty standards can result in a negotiated price that departs dramatically from the fair value that would emerge from an ideal auction.[365]

The Delaware Supreme Court's faith in the optimality of the existing set of fiduciary expectations—about defensive behavior, deal protection devices, and manager conflicts—in fact seems to animate and underlie its opinions about the efficiency of the deal market.[366] The winner's curse was a purely hypothetical problem because no identifiable suitors declined to bid.[367] The fair value award was too high in *Dell* because no party had offered to pay that much.[368] Because no party offered to pay more than the transaction price, that must be the fair value.[369] The absence of bidders tells you only that no one was interested.[370]

Under this credulous view of the merger market, there can be no mispricing so long as the board has not committed a culpable breach of duty. The body of law that governs what defensive measures a company can deploy and what deal protection devices can be incorporated into a merger agreement has been optimized. The absence of a topping bid demonstrates the adequacy of the merger price. Controlling stockholder transactions have been cured by the healing hands of *MFW*,[371] and board disloyalty—both subtle and overt—could not have been a meaningful problem if stockholders approved the deal.[372] The only credible evidence that something is wrong would be a thwarted bidder

365 *See* Choi & Talley, *supra* note 28 (manuscript at 3).

366 *See supra* Section I.D.2.

367 Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 32 (Del. 2017) ("[A]side from the theoretical, the Court of Chancery did not point to any bidder who actually shied away from exploring an acquisition out of fear of the winner's curse phenomenon.").

368 *See id.* at 37 ("[The fair value determination] did not reflect the value that private equity buyers (including the biggest players such as KKR, TPG, and Blackstone) put on it, as it was too high for any of them to pay. The trial court also picked a price higher than any strategic [buyer] would pay because, in economic terms, no strategic [buyer] believed it could exploit a purported $6.8 billion value gap because the risks and costs of acquiring Dell and integrating it into its company dwarfed any potential for profit and synergy gains if Dell were purchased at the Court of Chancery's determination of fair value.").

369 *Id.* at 33 ("The more likely explanation for the lack of a higher bid is that the deal market was already robust and that a topping bid involved a serious risk of overpayment.").

370 DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346, 375–76 n.154 (Del. 2017) ("[T]he absence of synergistic buyers for a company is itself relevant to its value."); *id.* at 376 (noting that one "objective factor[] that support[s] the fairness of the price paid" was "the failure of other buyers to pursue the company when they had a free chance to do so").

371 *See generally* Kahn v. M&F Worldwide Corp., 88 A.3d 635 (Del. 2014).

372 *See, e.g.*, Corwin v. KKR Fin. Holdings LLC, 125 A.3d 304, 312–13 (Del. 2015) ("[W]hen a transaction is not subject to the entire fairness standard, the long-standing policy of our law has been to avoid the uncertainties and costs of judicial second-guessing when the disinterested stockholders have had the free and informed chance to decide on the economic merits of a transaction for themselves.").

appearing in the Court of Chancery seeking an injunction before a transaction closes.[373]

The Supreme Court at times comes perilously close to endorsing the view that, because bidders are so aggressive,[374] when a transaction is announced publicly,[375] the absence of a topping bid means the deal must be priced at (or above) the fair value.[376] Under this view, the involvement of actual participants in the sales process scarcely matters, because the universe of theoretical potential bidders is so large.

D. Wringing Common Sense from Appraisal

There is a peculiar coda to the Court of Chancery's *DFC Global* opinion. In its opinion, the Court of Chancery calculated a DCF valuation of $13.07, and it gave that a one-third weighting in its final analysis.[377] After the court issued its opinion, the company pointed out that the court's calculation relied on working capital numbers different from those the opinion had expressly adopted.[378] Making that change alone would reduce the discounted cash flow value substantially, to $7.70, well below the $9.50 transaction price.[379] The Court of Chancery corrected that error but also made an additional change at the same time: at the suggestion of the dissenters, the court increased the perpetuity growth rate.[380] The DCF value resulting from both changes was $13.33—roughly in line with the original DCF valuation.[381] The company howled in protest at what the Court of Chancery had done, suggesting that the change revealed a troubling "arbitrariness and manipulability of discounted cash flow models."[382] The Delaware Supreme Court reversed this particular change,

373 *See id.* at 312 (arguing that "*Unocal* and *Revlon* are primarily designed to give stockholders and the Court of Chancery the tool of injunctive relief to address important M&A decisions in real time, before closing. They were not tools designed with post-closing money damages claims in mind . . . .").

374 *DFC Glob.*, 172 A.3d at 367 (Deals occur in a "universe of equally avid capitalists with an incentive to reap rewards by buying the asset if it is too cheaply priced.").

375 *Id.* at 349 (The price "resulted from an open process, informed by robust public information, and easy access to deeper, non-public information, in which many parties with an incentive to make a profit had a chance to bid.").

376 *See id.* at 376 ("[N]o one was willing to bid more in the months leading up to the transaction . . . .").

377 *Id.* at 351, 359.

378 *Id.* at 377.

379 *Id.*

380 *Id.* at 350.

381 *Id.* at 379.

382 Appellant's Opening Brief at 6, DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346 (Del. 2017) (No. 10107-CB). ("The fact that the perpetuity-growth-rate adjustment had the effect of returning the 'fair value' determination to roughly the same level as before the court corrected its mathematical error demonstrates the arbitrariness and manipulability of discounted cash flow models.").

concluding that there was no basis in the record for making that change to the perpetuity growth rate.[383]

It is, of course, easy to mock the "convenient" fact that the Court of Chancery's errors almost exactly cancelled each other out, and the appearance it creates that the calculations were, in effect, reverse engineered to reach a predetermined result. Nonetheless, the Chancellor's approach illustrated an important aspect of valuation: that human judgment is essential to the valuation exercise.[384] Furthermore, one important check on the reliability of inputs to a valuation calculation is that the result comports at least roughly with other potential markers of value.

The Supreme Court was wrong to reduce the statutory exercise in a case like *DFC Global* to a robotic exercise of arithmetic, aloof from considerations of common sense. In reality, human judgment is essential to the valuation exercise; the multivariate models require experience and care in selecting the appropriate inputs.[385] The Delaware Court of Chancery, given its diet of corporate cases and its disinterested stance, is uniquely well-positioned to exercise that care. Financial models also require a reality check on the ultimate output. As one influential treatise puts it, "estimating the value of a real business requires the application of judgment that can only be developed through experience."[386] The Supreme Court seems to recognize this general principle in its opinions, chiding the Court of Chancery for retreating to "the visual appeal of a mathematical formula to create an impression of precision[, but recognizing that this] is understandable" in the face of a reality that "is sloppy and unpredictable."[387] In *DFC Global*, it is the Supreme Court that appears to place too much confidence in mathematical formulae.

---

383 *DFC Glob.*, 172 A.3d at 350–51.

384 For example, the fairness opinion provided by Houlihan Lokey—DFC Global's financial adviser—was prefaced with the following language, variations of which can be found in every such valuation: "The preparation of such an opinion is a complex process involving various quantitative and *qualitative judgments* and determinations with respect to the financial, comparative and other analytical methods employed and the adaptation and application of these methods to the unique facts and circumstances presented . . . . [M]athematical derivations (such as the high, low, mean and median) of financial data are not themselves meaningful and in selecting the ranges of multiples to be applied were considered in conjunction with *experience and the exercise of judgment*." DFC Glob. Corp., Definitive Proxy Statement (Schedule 14A) 35–36 (May 1, 2014) (emphasis added).

385 BRADFORD CORNELL, CORPORATE VALUATION: TOOLS FOR EFFECTIVE APPRAISAL AND DECISION MAKING 6–7 (Amy Hollands & Jess Ann Ramirez eds., 1993) ("Financial models have not developed to the point where they can be applied without practical experience and judgment.").

386 *Id.* at 6.

387 *DFC Glob.*, 172 A.3d at 388.

The way that the Court of Chancery corrected for its mistake is, perhaps counterintuitively, evidence of a system working well. The court was plainly convinced the sale of DFC Global was inadequate.[388] Chancellor Bouchard was not alone in this judgment. From the moment the transaction was announced, market participants heaped criticism on it. The negotiated price was only 6% above the company's prior stock price.[389] Even before the proxy was filed, a large stockholder called the price "absurdly low" and observed that the "process seem[ed] to have been geared to a single buyer in the absence of competition."[390] After the proxy was filed, another large stockholder protested that management "did not run anything resembling a robust sales process."[391] According to one analyst, the company's U.S. and Canada business alone was worth almost as much as the amount being paid for the entire company.[392] ISS, the proxy adviser, recommended that stockholders vote against the transaction.[393]

As his opinion indicates, the Chancellor, having presided over the trial, became convinced that the sale price fell short of fair value.[394] Under such circumstances, any mathematical valuation exercise that produced an output below the merger consideration would necessarily have to be rejected as unrealistic. If your calculator tells you that 1 + 1 = 3, your calculator is broken. The reliability of any DCF valuation must perforce be measured in view of the degree to which the sales process was deficient—a matter within the special expertise of the Court of Chancery. It is patently absurd to find that the transactional process was bad but nevertheless the resulting price conferred excess value upon the stockholders.[395] To force the Court of Chancery to adopt only one change—and one that would immediately produce results at odds with reality—would be in conflict with, in the parlance of the Delaware Supreme

---

[388] *See generally In re* Appraisal of DFC Glob. Corp., No. 10107-CB, 2016 WL 3753123, at 1 (Del. Ch. July 8, 2016).

[389] SpringOwl Assocs. LLC, *SpringOwl Asset Management Expresses Concerns Over DFC Global Corp. Sale Agreement*, PR NEWSWIRE (Apr. 2, 2014, 4:03 AM), https://www.prnewswire.com/news-releases/springowl-asset-management-expresses-concerns-over-dfc-global-corp-sale-agreement-253616381.html.

[390] *Id.*

[391] Royal Capital Mgmt., LLC, *Royal Capital Issues Letter to DFC Global Corp. Board of Directors*, PR NEWSWIRE (Apr. 23, 2014, 9:00 AM), https://www.prnewswire.com/news-releases/royal-capital-issues-letter-to-dfc-global-corp-board-of-directors-256342841.html.

[392] Complaint at 3–4, *In re Appraisal of DFC Glob. Corp.*, WL 3753123, at *1, No. 9520-VCP.

[393] Royal Capital Mgmt., LLC, *supra* note 391.

[394] DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346, 360–61 (Del. 2017).

[395] In the wake of *Dell* and *DFC Global*, the Delaware Supreme Court summarily affirmed an appraisal opinion below that found both (1) a defective deal process; and (2) a fair value substantially below the deal price. *See In re* Appraisal of SWS Group, No. 10554-VCG, 2017 WL 2334852, at *15 (Del. Ch. May 30, 2017), *aff'd sub nom.* Merlin Partners, L.P. v. SWS Group, Inc., No. 295, 2017, 2018 WL 1037477, at *1 (Del. Feb. 23, 2018).

Court's opinions, "established principles of corporate finance."[396] Yet that is precisely what the Supreme Court did.

Delaware's case law, of course, has recognized that the judgment of the Court of Chancery is a necessary ingredient in the statutory appraisal exercise.[397] As a Vice Chancellor, Chief Justice Strine emphasized the importance of the trial judge's judgment in attending to factors that would bear on the value of the business but which would not be captured by inputs in models.[398] The Supreme Court's *DFC Global* opinion—and *Dell*, as well—seemingly abandons this insight. Expecting any judge—let alone judges as sophisticated as the members of the Delaware Court of Chancery—to behave in such a robotic fashion is unrealistic. And it would be undesirable. As has long been recognized, the experience and wisdom of the Court of Chancery is one of the singular attractions in Delaware.[399] It is this very sort of protection that reduces the cost of capital formation in the first place.

Curiously, the Supreme Court did not give up on the role of judgment in appraisal entirely. It abandoned only the role of the Court of Chancery's judgment. In its place, it offered an alternative suggestion for what would constitute good judgment: that the company's sales process "should have given the Court doubts about the reliability of its discounted cash flow analysis."[400] But the Court of Chancery, having shepherded the case for two years and presided over a multi-day trial—had the opposite reaction to the evidence.[401] The Supreme Court is removed from the presentation of trial evidence and from daily exposure to the particulars of corporate disputes. Its determination to substitute its own intuition about the implications of the evidence for that of the trial court further evinces its conviction that the sales price *must* be fully

---

[396] Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 24 (Del. 2017).

[397] Glassman v. Unocal Expl. Corp., 777 A.2d 242, 248 (Del. 2001) ("The determination of fair value must be based on *all* relevant factors, including damages and elements of future value, where appropriate. So, for example, if the merger was timed to take advantage of a depressed market, or a low point in the company's cyclical earnings, or to precede an anticipated positive development, the appraised value may be adjusted to account for these factors.").

[398] Del. Open MRI Radiology Assocs., P.A. v. Kessler, 898 A.2d 290, 315 (Del. Ch. 2006) ("The dangers for the minority arguably are most present when the controller knows that the firm is on the verge of break-through growth, having gotten the hang of running the first few facilities, and now being well-positioned to replicate its success at additional locations—think McDonald's or Starbucks.").

[399] *See generally* Jill E. Fisch, *The Peculiar Role of the Delaware Courts in the Competition for Corporate Charters*, 68 U. CIN. L. REV. 1061 (2000) (discussing the success Delaware has had in attracting public companies to incorporate in its state due to its preferable corporate law).

[400] DFC Glob. Corp. v. Murfield Value Partners, L.P., 172 A.3d 346, 379 (Del. 2017).

[401] *In re* Appraisal of DFC Glob. Corp., No. 10107-CB, 2016 WL 3753123, at *5 (Del. Ch. July 8, 2016).

informative of fair value whenever the directors involved met minimum fiduciary requirements.

III. THE ROAD AHEAD

The defects in the Delaware Supreme Court's *Dell* and *DFC Global* opinions threaten to sow confusion for years to come, in appraisal cases and beyond. In this Part, we sketch out some of the coming debates.

A. Clarifying the Conditions for a Fully-Informational Sales Process

The evidence suggests that the appraisal remedy can be a useful tool of corporate governance.[402] The critical judicial task is to apply the remedy in a way that incentivizes managerial behavior that promotes the interest of diversified, public stockholders. Nobody, however, wants courts to routinely second-guess the judgments of the market. Appraisal is only a second-best solution to the problem of pricing public companies, and nobody, to our knowledge, argues otherwise. The idea that price discovery will almost always be best performed by a robust auction commands wide support. The DCF methodology, in particular, is a second-best method for estimating the value of a company that should be resorted to only when the sales process is inadequate. On that point, too, there is little dispute.[403]

The heated dispute, of course, is about what constitutes an inadequate process. As explored above, these two Supreme Court cases suggest (but do not explicitly hold) that the price resulting from any sales process where target directors meet their fiduciary obligations is fully informative of the company's value and should stand as the fair value in an appraisal proceeding. As Guhan Subramanian has said, "[c]ommentators called [*DFC Global*] a 'presumption in everything but name,' and I agree with that assessment."[404]

Unfortunately, collapsing the inquiries in this way will inhibit the utility of appraisal as a tool of corporate governance. For most public companies mergers, the sales processes is adequate and results in a price that is sufficiently informative of the company's value. But the sales process can be deficient for

---

402 *See supra* Section I.B.

403 *See* Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 35 (Del. 2017) ("[A] DCF analysis can provide the court with a helpful data point about the price a sales process would have produced had there been a robust sale process involving willing buyers with thorough information and the time to make a bid."); *id.* at 38 (DCF valuations are "widely considered the best tool for valuing companies when there is no credible market information and no market check ").

404 Subramanian, *supra* note 11 (manuscript at 12).

any number of reasons. As the amici in *DFC Global* emphasized: "To be sure, the price resulting from an arm's-length process *may* accurately reflect fair value. But not always. In numerous seemingly benign cases, a facially disinterested process can still render a price falling short of fair value."[405]

The Delaware Supreme Court's approach could generate a range of possible results. One possibility is that every appraisal action will turn into a mini-fiduciary duty proceeding, increasing litigation costs and possibly increasing the *in terrorem* value of nuisance claims.[406] Another possibility is that the Supreme Court's seemingly bright-line approach will generate a window for opportunism that crafty acquirers—and their abettors at the target company—can exploit. Reducing Delaware merger law to a formalistic checklist that, when followed, will allow well-advised acquirers to dance past the scrutiny and judgment of the Court of Chancery is an unwelcome development, one that will have deleterious effects on diversified, public company stockholders. The utility of the public markets as an engine for capital formation will ultimately suffer along with them.[407]

One issue that will inevitably arise is whether reliance on financial techniques like DCF valuation can improve the statutory fair value analysis when the sales process merely meets minimum fiduciary standards. The Supreme Court has not ruled that out. The Court of Chancery in *Lender Processing Services* engaged in a careful and sophisticated review of the variables that influence the persuasiveness of the transaction price, separate and apart from fiduciary analysis.[408] The court examined, among other things, the level of competition among bidders before the deal was signed, the reliability of the information supplied to bidders, whether the company played favorites or colluded with any bidders, and any post-signing developments that would materially increase or decrease the value of the firm.[409] This approach, whose viability is unclear in the wake of these Supreme Court opinions, supplies

---

405 Brief of Law, Economics, and Corporate Finance Professors as *Amici Curiae* in Support of Petitioners-Appellees and Affirmance, *supra* note 173, at 2.

406 *See* Korsmo & Myers, *Appraisal Arbitrage*, *supra* note 1, at 1586–88 (arguing that the lower and more symmetrical litigation costs associated with appraisal make nuisance claims less likely than in fiduciary duty actions).

407 *See, e.g.*, Subramanian, *supra* note 11 (manuscript at 33) ("The 'law and finance' literature demonstrates that protecting minority shareholders improves capital formation. The intuition for this empirical finding is that prospective investors in the *next* dorm room startup will be wary to commit capital if they do not have adequate protections at exit.").

408 Merion Capital L.P. v. Lender Processing Servs., Inc., No. 9320-VCL, 2016 WL 7324170, at *15–23 (Del. Ch. Dec. 16, 2016).

409 *Id.*

exactly what Delaware has long been known for: predictability for potential parties to a transaction and safeguards for non-controlling stockholders.[410] The Court of Chancery should continue to develop this line of reasoning to avoid opening a window for opportunism, and the Supreme Court should support that effort.

B. The Fall of Defensive Tactics?

The explicit adoption of strong form market efficiency in *Dell* and *DFC Global* also generates a deep contradiction in Delaware's jurisprudence.[411] Delaware law had long permitted a board of directors to fight off an unwanted takeover—even one at a large premium to the market price, and manifestly favored by the stockholders—solely for the reason that the offer is at an "inadequate price."[412] Over twenty years ago, the Supreme Court pronounced that "the directors of a Delaware corporation have the prerogative to determine that the market undervalues its stock and to protect its stockholders from offers that do not reflect the long term value of the corporation under its present management plan."[413] These conclusions enable a board to deploy significant defensive firepower to keep even willing stockholders from receiving a bid from a willing acquirer.[414] The foundations for this body of law have now been washed away. The predicate ideas—of an "inadequate price" or that a corporation has some value separate from its trading price—are in direct conflict with *Dell* and *DFC Global*.

Under the Supreme Court's approach in *Dell* and *DFC Global*, any market-clearing price for the stock is necessarily adequate and cannot constitute a cognizable threat to corporate policy. As the *Dell* opinion explained, "[w]hen an asset has few, or *no*, buyers at the price selected, that is not a sign that the asset

---

410 *See* Fisch, *supra* note 399.

411 Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 24 (Del. 2017) ("[T]he Court of Chancery's analysis ignored the efficient market hypothesis long endorsed by this Court. It teaches that the price produced by an efficient market is generally a more reliable assessment of fair value than the view of a single analyst, especially an expert witness who caters her valuation to the litigation imperatives of a well-heeled client.").

412 *See*, *e.g.*, Unitrin, Inc. v. Am. Gen. Corp., 651 A.2d 1361, 1385 (Del. 1995) ("The record appears to support Unitrin's argument that the Board's justification for adopting the Repurchase Program was its reasonably perceived risk of substantive coercion, *i.e.*, that Unitrin's shareholders might accept American General's inadequate Offer because of 'ignorance or mistaken belief' regarding the Board's assessment of the long-term value of Unitrin's stock."); Air Prods. & Chem., Inc. v. Airgas, Inc., 16 A.3d 48, 57 (Del. Ch. 2011) ("Inadequate price has become a form of 'substantive coercion' as that concept has been developed by the Delaware Supreme Court in its takeover jurisprudence.").

413 *Unitrin*, 651 A.2d at 1376.

414 *See Air Prods. & Chem.*, 16 A.3d at 111–13.

is stronger than believed—it is a sign that it is weaker."[415] If an acquirer is willing to pay some price above the prevailing market price, it is not clear what grounds would exist upon which a board could justify resistance.[416]

Moreover, the Supreme Court conflates the market for the entire company with the spot market for the individual shares, assuming they reflect a valuation on the same underlying set of property rights.[417] In that sense, the company is always for sale. The idea of a company being not for sale, as Time Inc. was said to be in *Paramount Communications*,[418] is in unavoidable conflict with *Dell* and *DFC Global*. The resolution of these issues will no doubt figure in future cases before the Court of Chancery and the Supreme Court. Ultimately, the Supreme Court will be forced to decide whether its respect for market pricing is consistent or merely situational—strong when it disfavors appraisal petitioners; weak when it disfavors corporate managers.

C. Defining and Quantifying the Concept of "Synergies"

The appraisal statute entitles dissenting stockholders to the fair value of the company, excluding any "element of value arising from the accomplishment or expectation of the merger or consolidation."[419] In an appraisal proceeding, the court must exclude from the deal price any value attributable to "synergies."[420]

The concept of a "synergy" has received little judicial or scholarly attention. The landmark *Weinberger* case suggested that the Court of Chancery should not "take speculative effects of the merger into account."[421] Likewise, the court in *Cavalier Oil* noted that the company must be valued "without regard to post-merger events or other possible business combinations."[422] The idea is to ignore the acquirer's plans for the target company in assigning some value to it. In *DFC Global*, the Delaware Supreme Court offered brief ruminations on the synergy

---

415 *Dell*, 177 A.3d at 37.

416 *See id.* at 29 ("Fair value entails at minimum a price some buyer is willing to pay—not a price at which no class of buyers in the market would pay.").

417 *See supra* notes 340–47.

418 Paramount Commc'ns, Inc. v. Time Inc., 571 A.2d 1140, 1149–51 (Del. 1990).

419 DEL. CODE ANN. tit. 8, § 262(h) (West 2018) (citing to most recent electronic version).

420 M.P.M. Enters., Inc. v. Gilbert, 731 A.2d 790, 797 (Del. 1999) ("[S]ection 262(h) requires that the Court of Chancery discern the going concern value of the company irrespective of the synergies involved in a merger.").

421 Weinberger v. UOP, Inc., 457 A.2d 701, 714 (Del. 1983).

422 Cavalier Oil Corp. v. Harnett, 564 A.2d 1137, 1144 (Del. 1989).

concept along these lines, indicating that one policy goal is to preserve the incentive for the acquirer to move forward with the transaction.[423]

The approach to synergies that makes the most sense from an economic perspective is to exclude only those elements of value that are unique to the particular acquirer. This comports with case law in Delaware that excludes as synergies the value that arises "solely from the deal."[424] Importantly, it also preserves the acquirer's incentives to pursue the efficiency-generating transactions. On this account, any element of value that would be common to any acquirer is one that should be shared with the target stockholders. One preliminary approach in practice to estimating this element of value would look to competing bids. The deduction of synergies is only relevant when the court relies on the transaction price, and generally speaking that is only appropriate in circumstances where, among other things, there are multiple bids for the company. The second-highest bid might be a starting place for a rough estimate of the lower bound of the value excluding synergies, as it would capture any value that is common to more than one buyer and thus not unique to the actual acquirer.

CONCLUSION

In *Dell* and *DFC Global*, the Delaware Supreme Court suggested that it only sought to apply "established principles of corporate finance."[425] Yet the opinions are built on misunderstandings of the financial ideas at issue in the cases, and misapply standard economic concepts. This Article has cataloged the four foundational finance errors that the court made. First, it ignored the differences between the pricing of risk in public markets and in private markets. Second, the court failed to attend to the distinction between the well-supported evidence of information efficiency in securities markets and the more contested idea of value efficiency. The court magnified this error by attributing value efficiency not simply to the securities market but also to the very different market for entire companies. Third, the court muddied the legal standards at play in the fiduciary duty and appraisal contexts, leaving trial courts with the unfounded implication

[423] DFC Glob. Corp. v. Muirfield Value Partners, L.P., 172 A.3d 346, 368 (Del. 2017) ("[T]hat statutory language could be interpreted to address the narrower, if still important, policy concern that the specific buyer not end up losing its upside for purchase by having to pay out the expected gains from its own business plans for the company it bought to the petitioners.").

[424] Merion Capital L.P. v. BMC Software, Inc., No. 8900-VCG, 2015 WL 6164711, at *14 (Del. Ch. Oct. 21, 2015) ("[T]he appraisal statute requires that the Court exclude any synergies present in the deal price—that is, value arising solely from the deal.").

[425] Dell, Inc. v. Magnetar Glob. Event Driven Master Fund Ltd., 177 A.3d 1, 24 (Del. 2017); *see DFC Glob.*, 172 A.3d at 349.

that conditions of pricing efficiency are met whenever directors satisfy their minimum fiduciary obligations. Last, the court attempted to strip the judicial valuation exercise of human judgment, relying instead on mechanical, arithmetical calculations. The consequence of these mistakes will mean that opportunistic transactions may escape meaningful scrutiny in the Delaware courts, a decidedly unwelcome result that will leave ordinary investors exposed and inhibit capital formation through Delaware firms.