Market Evidence in Corporate Law

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Market prices are frequently given little or no weight in resolving valuation disputes in corporate law. Under Delaware corporate law, for example, market prices can never be the sole determinant of value in appraisal proceedings and, at most, are one factor to be considered.¹ Similarly, corporate managers who negotiate corporate control transactions at significant premiums under Delaware law face significant potential liability for damages because courts dismiss the premium received as irrelevant.² Other jurisdictions, with rare exceptions, have followed the same approach.³

I argue here that courts should rely more heavily on market prices when resolving valuation disputes than has occurred to date. Part I of this Article discusses why market prices are superior to other methods of valuation when market prices are available and addresses the various justifications that have been advanced for limiting reliance on market prices. Part I also briefly discusses other types of market evidence.

Part II surveys some of the leading cases in corporate law to illustrate how adjudication of these cases would have been improved and simplified had courts interpreted the relevant market evidence properly. Part II also extends the analysis outside corporate law to the Winstar litigation—the damage claims filed by over one hundred sav-

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¹ See, for example, Cede & Co v Technicolor, Inc, 1990 Del Ch LEXIS 259, *101 (stating that market value must be considered but that it is “axiomatic that market value . . . is not the sole element to be taken into consideration in the appraisal of stock”), quoting Application of Delaware Racing Association, 42 Del Ch 406, 213 A2d 203, 211 (1965). See also Chicago Corp v Munds, 20 Del Ch 142, 172 A 452, 457 (1934) (holding that the market value of stock is a “pertinent consideration,” but should not necessarily be accepted as “exclusive”).

² See, for example, Smith v Van Gorkom, 488 A2d 858 (Del 1985) (imposing liability on corporate directors who negotiated a merger for a substantial premium over market price).

³ See, for example, In re Valuation of Common Stock of McLoon Oil Co, 565 A2d 997, 1003 (Me 1989) (permitting other generally accepted valuation techniques besides the stock market price); Sarrouf v New England Patriots Football Club, Inc, 397 Mass 542, 492 NE2d 1122, 1127 (1986) (finding that the lower court did not abuse its discretion in declining to consider market value as a reliable indicator). The leading case relying on market prices to establish the value of shares is Armstrong v Marathon Oil Co, 32 Ohio St 3d 397, 513 NE2d 776, 790 (1987) (determining the “fair cash value” of shares by reference to market price, where a significant market existed).
ings and loans against the United States seeking tens of billions of dol-
lars in damages—following the decision by the Supreme Court in
United States v Winstar Corp, which held that the government
breached its contract with affected thrifts by enacting the Financial In-
stitutions Reform, Recovery, and Enforcement Act. Finally, Part III
considers whether market prices should ever be used as a sword
rather than a shield; in other words, whether corporate managers
should be held liable when a decision they make results in a decline in
stock prices.

I. Market Prices and Market Evidence

A. Market Prices versus Other Methods of Valuation

Various methods of valuing an asset exist. One obvious method
is to value the asset at its market price if such a price is observable. An
alternative method is to value the asset based on how comparable as-
sets are valued. The third common valuation method is to discount to
present value of future cash flows generated by the asset.

Although all of the above techniques are accepted by the finan-
cial community for some purposes, market prices, when observable,
should be the dominant valuation approach in corporate transactions
and litigation. Market prices are superior to these other methods in
terms of conceptual clarity, simplicity, and objectivity. They also avoid
many of the pitfalls associated with other valuation methods. A more
detailed discussion of these reasons follows.


The fair market value of an asset is generally defined as the price
at which the asset would change hands in a transaction between a will-
ing buyer and a willing seller when neither is under any compulsion to
buy or sell and both are reasonably informed. This is exactly what a
market price represents (provided the conditions of no compulsion
and possession of reasonable information hold). The other valuation
methods, by contrast, are attempts to predict what a willing buyer
would pay a willing seller. Yet, if the answer to this question is already
known because a market price is observable, no need exists to resort
to these indirect methods. For the same reason, no need exists to “av-

5 For an excellent summary of different valuation techniques, see Bradford Cornell, Cor-
6 See, for example, Rev Rul 59-196, 1959-1 Cum Bul 56 (defining fair market value as “the
price at which the property would change hands between a willing buyer and a willing seller, nei-
ther being under any compulsion to buy or sell and both having reasonable knowledge of rele-
vant facts”).
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2. Simplicity.

Ascertaining a market price requires minimal, frequently de minimis, resources. The same cannot be said for other methods of valuation. Comparables analysis requires multiple judgments concerning what assets are comparable and in what ways. Two firms may be in the same line of business but have different business strategies and capital structures. Are the two firms comparable? This and countless analogous questions typically make the choice of comparables, and how to use the comparables to derive a value for the asset being valued, a messy, time-consuming, and ultimately uncertain exercise.

Discounting future cash flows to present value presents similar problems. Estimating cash flows, both positive and negative, into perpetuity, and then choosing a discount rate to apply to these cash flows, is often a massive undertaking fraught with difficulty. Simple reliance on the market price avoids all of these problems.

3. Objectivity.

Buyers and sellers who set market prices act without bias. They have no incentive to set values either too high or too low because they are penalized in the marketplace for doing so. Paid experts in litigation who testify about values derived from analyzing comparables or discounting future cash flows to present value have very different incentives. Such paid experts are not penalized in the marketplace for excessive optimism or pessimism. On the contrary, their value as experts may be enhanced by their ability to exaggerate values in either direction. Moreover, the large number of subjective judgments that need to be made when performing a valuation analysis (choice of comparables, estimating future cash flows, choice of a discount rate, etc.) creates fertile opportunities for widely divergent conclusions. When paid experts on opposite sides have an economic self-interest to slant these subjective judgments in one direction or the other, the probability that the experts will reach wildly different conclusions is greater still. No wonder, then, that paid experts in litigation often reach conclusions about value that differ by a multiple of ten or more—to the great frustration of courts ill-equipped to pore over the

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7 For a general discussion on the problems and flexibility associated with the other valuation techniques in the context of fairness opinions issued by investment banks, see Lucian Arye Bebchuk and Marcel Kahan, *Fairness Opinions: How Fair Are They and What Can Be Done about It?*, 1989 Duke L J 27.
minefield of different assumptions and subjective judgments in resolv-
ing the dispute. Again, reliance on the market price avoids this prob-
lem of bias by eliminating, or at least greatly reducing, the role of paid
experts in litigation.

B. Rationales for Limiting Reliance on Market Prices

Notwithstanding the obvious advantages of market prices for
valuing assets, a number of justifications have been advanced for not
relying on market prices. The main ones—that markets are inefficient,
that transaction volume may be too small to produce accurate prices,
that fair market value is distinguishable from fair value, and that ins-
siders might be affecting the price through opportunistic behavior—
are all unsatisfactory. They need to be considered in turn.

1. Inefficient markets.

Reliance on market prices is most obvious if prices reflect all in-
formation (at least, all public information) about the value of the
firm's assets. But what if, for whatever the reason, prices (at least of
publicly traded securities) reflect mob psychology, fads, and other
similar factors, creating the possibility of speculative bubbles and
other departures from pricing based on the underlying value of as-
sets? Would it then make less sense to rely on market prices to resolve
valuation disputes?

The answer is no. At the most basic level, the market price of an
asset still satisfies the willing buyer/willing seller standard and thus re-
flects the fair market value of the asset being traded. Moreover, the
relevant question is not whether market prices are perfectly "effi-
cient" in the sense of reflecting the underlying values of assets, but
rather whether a better valuation method exists. No direct method ex-
ists for testing how closely prices reflect value, because the "value" of
an asset cannot be measured apart from an observed market price.
Moreover, values derived from an alternative valuation method are as
likely, indeed far more likely, to be attributable to defects in the alter-
native valuation model rather than problems with the market price. It
is important not to commit the Nirvana fallacy of comparing the im-
perfect to a nonexistent perfect, and then concluding that the perfect
is better. Whatever "inefficiencies" exist with market prices, the ineffi-
ciencies of subjective valuations performed by paid experts in litiga-
tion are far greater.

I do not mean to minimize the constant efforts of analysts and
other market professionals who constantly search for mispriced secu-
rities whose prices do not reflect their underlying values. On the con-
trary, it is precisely because of these market professionals, acting with
their own wealth at stake, that valuation methods are already reflected in market prices. No additional need exists for paid experts in litigation, who act without placing their own wealth at risk, to second-guess market prices.

2. Isolated trades.

Sometimes trades are relatively isolated rather than continuous as occurs with publicly traded securities. An inflexible rule that limits the relevance of market prices where trading is infrequent, however, would be a mistake. The informational content of such trades depends entirely on the background facts and circumstances.

To be sure, situations exist where isolated trades have little informational content. Traders may be completely uninformed; some of the trades may be under duress; the timing of the trades may be too removed in time from the valuation date in question. However, other situations are also possible. Consider a series of trades between informed insiders of a company, each under no compulsion to buy or sell. The resulting transaction prices will arguably have as much informational content as, or more informational content than, prices of publicly traded securities because the traders will be more informed. Information, in other words, is a substitute for liquidity. And for those who believe that noise traders and other unsophisticated market participants cause prices of publicly traded securities to deviate from their “true” intrinsic value, less liquid but more informed markets may produce more reliable market prices. No basis exists, therefore, for a legal rule that automatically places less weight on transaction prices solely because the market is less liquid.

3. Fair value versus fair market value.

Some courts have not criticized market prices directly, but rather have drawn a distinction between “fair value” and “fair market value,” where the former is defined as the value of the shareholder’s proportionate interest in a going concern rather than the market price of shares. This raises the obvious question of why the market price of shares held (“fair market value”) should be different from the value of the investor’s proportionate interest in the firm.

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8 See, for example, Friedman v Beway Realty Corp, 87 NY2d 161, 661 NE2d 972, 975-76 (1995) (claiming that “fair value is not necessarily tied to market value,” but that, rather, “the fair value of a dissenter’s shares is to be determined on their worth in a going concern”); In re Valuation of Common Stock of McLoon Oil Co, 565 A2d 997, 1005 (Me 1989) (declaring to “equate the price at which a willing seller would sell and a willing buyer would buy ... stock with its fair value”)

One possibility is the existence of inefficient markets where trading prices either over- or underestimate the value of the firm's assets. As discussed above, this is an example of the Nirvana fallacy. Other valuation methods performed by paid experts in litigation are plagued by far worse defects than simple reliance on market prices.

A second possible justification for resort to the fair market value standard is concern about minority discounts. Trading prices, the argument runs, reflect the value of marginal minority shares, which are worth less than large blocs (assuming such large blocs exist) in the same firm. Because of this disparity, the market value of, say, a 1 percent minority position is worth less than 1 percent of the value of the entire (all equity) firm. Under the fair value standard the minority shareholder is entitled to receive the higher amount.

But why should the minority shareholder be entitled to more than his shares are worth in the marketplace? No such entitlement can be derived from the willing buyer/willing seller standard, which mandates the opposite result. Minority status is just as much a characteristic of an investment as the firm's management or its business strategy, and is equally factored into the price the investor paid in the first place. No reason exists why some, but not all, of the economic components of an investment should be considered when setting its value. The shaky conceptual underpinnings of the fair value standard, coupled with the practical problems involved with valuing an entire firm when the market price of shares is observable, strongly suggest that this alternative to reliance on market prices should be discarded altogether in resolving valuation disputes.

4. Opportunistic behavior by insiders.

A final argument against reliance on market prices is that such prices can be affected by insider opportunistic behavior. In evaluating this argument, several situations need to be distinguished.

The most obvious situation where reliance on market prices is problematic is where prices reflect the consideration being paid in the valuation-triggering transaction. The shares of a subsidiary, for example, will not trade for a higher price than the expected acquisition price discounted by the probability of occurrence, unless some greater amount will be available in an appraisal proceeding. But if the prevailing market price is the standard for appraisal, then the appraisal proceeding becomes circular and meaningless. This problem can be solved, however, by use of a statistical technique known as regression analysis to predict what the market price would have been had the valuation-triggering event not occurred. With this modification, mar-
ket prices, or more accurately, reconstructed market prices, can still be used to resolve valuation disputes.\(^9\)

A second situation where insiders may want to go forward with a valuation-triggering transaction is where they possess asymmetric information that current market prices are too low. Insiders may even have an incentive to keep secret or delay the release of information to depress market prices and therefore pay less in the valuation-triggering transaction. This scenario, too, provides no basis for rejecting reliance on market prices to resolve valuation disputes.

Three points can be made briefly. First, it is not clear that this problem is important empirically. No evidence exists that asymmetric information is an important component of valuation-triggering transactions.\(^9\) Second, if a problem exists, it is in no way unique to the timing of valuation-triggering transactions. Managers with asymmetric information can capitalize in a variety of ways, such as granting themselves stock options at the current (too low) market price as part of their compensation packages.\(^10\) Third, and most important, this problem has nothing to do with reliance on market prices. Assume, for example, that insiders delay announcing a new valuable technology so that market prices do not reflect this information. Switching to other valuation methods will not solve this problem. The same information that is not reflected in stock prices will also not be reflected in earnings or expected future cash flows. If something is not known, it will not be reflected in any valuation methodology. The problem, if there is a problem, is one for the law of fraud rather than a basis for rejecting reliance on market prices.

A similar analysis applies to a third situation of insider opportunism—where insiders deliberately take actions to reduce the value of shares to be valued. They may do this by reducing the value of the entire firm (although the damage insiders inflict on themselves, particularly if they are significant insiders, is a significant safeguard against this behavior) or by transferring wealth from the shareholders whose stake is to be valued to themselves (such as a parent taking a corporate opportunity rather than sharing it with the subsidiary). In this case, the insiders may be liable for breach of fiduciary duty or other wrongdoing. But regardless of whether they are, the effect of the con-

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\(^10\) See, for example, Myron B. Slovin and Marie E. Sushka, *The Economics of Parent-Subsidiary Mergers: An Empirical Analysis*, 49 J Fin Econ 255, 268–72 (1998) (concluding that parent-subsidiary mergers increase efficiency and wealth, but that buyer returns are negative, consistent with overbidding).

\(^11\) Provided, of course, that the asymmetric information is not material inside information for purposes of the federal securities laws.
duct in question on the value of the shares is real. And, once again, the problem is the same regardless of the method of valuation used. Actions that reduce the value of shares will not only depress market prices, but also earnings and expected future cash flows (indeed, this is why market prices are depressed). Even this most extreme form of insider misbehavior, therefore, provides no basis for rejecting reliance on market prices.

C. A Note on Other Types of Market Evidence

Thus far I have been discussing market prices as the best indicator of an asset's value. Sometimes, however, the relevant issue is not the market price of the asset, but whether the market price has changed in response to a particular event. Suppose, for example, that the issue in a case is whether a shareholder vote approving a merger was procured by material misrepresentations. Such a claim can be analyzed by performing an event study (a type of regression analysis) to determine whether the alleged misrepresentations caused any statistically significant stock price movements when made or when a supposedly corrective disclosure was made, controlling for other possible causes of stock price movements (such as movements of the overall market) and random fluctuations. This simple statistical technique, used in thousands of academic studies and employed routinely in securities fraud litigation brought under the federal securities laws, is virtually unknown in resolving disputes under corporate law and other contexts.\(^\text{12}\)

Other times the decision by an informed market participant to buy or sell will be relevant economic evidence in resolving a particular dispute. Consider a claim that insiders intentionally depressed the price of a subsidiary's shares in order to acquire the subsidiary at an inadequate price for the benefit of the parent. If it turns out that the parent’s insiders are selling their stock during the time period of the alleged scheme, this is economic evidence inconsistent with the claims. Conversely, if a firm involved in a merger is accused of misrepresenting the benefits of the proposed merger to induce its shareholders to approve the transaction, a decision by the firm's insiders to buy its stock during the time the alleged misrepresentations are being made is again economic evidence inconsistent with the claim.

II. SOME LEADING CORPORATE LAW CASES

Much of what has been said so far about the superiority of market prices over other methods of valuation might seem obvious but for the behavior of courts, which consistently employ a contrary analysis. In doing so, courts have transformed cases that should have been easy to resolve within days, if they were filed at all, into protracted, cumbersome, and messy litigation taking years, indeed sometimes more than a decade, to resolve. Some of the leading cases are surveyed below.

A. Weinberger v UOP, Inc\(^{13}\)

This case involved a parent-subsidiary merger between Signal Corporation and UOP. In 1975, Signal initially acquired 50.5 percent of UOP in a cash tender offer for $21 per share. UOP shares were trading at a fraction under $14 prior to the announcement of the offer. Three years later, in 1978, Signal decided to acquire the remaining 49.5 percent of UOP in a negotiated merger. Again, Signal offered $21 per share. The market price of UOP's shares was also basically unchanged, as it was trading at $14.50 per share the day before the merger was announced. Over 92 percent of the voting shareholders approved the merger in a shareholder vote.

The plaintiffs, minority shareholders of UOP, attacked the transaction notwithstanding the 50-percent premium received. The case should have been easy to resolve. Unless the approximately $14 UOP price prior to the announcement of the merger was tainted in some way (such as anticipation of a merger offer much lower than Signal's $21 offer), UOP shareholders received far more than they gave up. This should have been the end of the matter.

Instead, the Delaware Supreme Court attacked the transaction and ignored the 50-percent premium received because: (1) UOP's directors decided to accept Signal's offer in only four business days; (2) UOP's investment banker reached its opinion that the merger was fair in a cursory manner; (3) the merger was not negotiated at arm's length because certain of the UOP directors also represented Signal; and (4) Signal failed to disclose a feasibility study, which concluded that the transaction would have been a good deal for Signal at any price up to $24 per share.

The first two criticisms of the transaction merit little discussion. The beauty of reliance on market prices is that it avoids time-consuming and expensive alternative methods of valuation. How much time does it take to conclude that shareholders are better off re-
ceiving $21 than holding shares worth $14? If anything, UOP appears to have wasted $150,000, the fee it paid to its investment banker, to conclude that the merger price was fair. Professional advice may have been valuable for Signal (the buyer) to determine whether payment of a 50-percent premium was prudent, but it was of no value to UOP (the seller) precisely because of the information communicated by market prices.

The third criticism—that the merger was not negotiated at arm's length—is also unpersuasive. Delaware law does not prohibit interested director or conflict of interest transactions. Rather, these transactions are subject to greater scrutiny to ensure that they are "fair"—that the terms reflect the market value of the asset being traded. Here, however, the market value of the shares being purchased was known and already established by the market. The 50-percent premium paid over this price eliminates any possibility that the shares were being acquired for less than their market value. And because Signal already owned a majority of UOP's shares, no possibility existed of a competing bid for control. Not surprisingly, there was no suggestion in the case that Signal's actions prevented a third party from bidding for a minority stake in UOP.

The final criticism—that Signal failed to disclose the feasibility study concluding that it was worthwhile to acquire the UOP shares at any price up to $24—borders on the frivolous. Since this study shed no light on the pre-transaction value of UOP but rather apparently reflected the benefits to Signal of 100 percent ownership, a strong argument could be made that it was immaterial as a matter of law. The $14 value of the UOP shares absent the transaction was unchanged, and UOP's shareholders still benefited from receiving the 50-percent premium. More fundamentally, no principle of fiduciary duty requires that all of the gains created by a parent-subsidiary merger flow to the minority shareholders of the subsidiary. It is quite enough (perhaps too much) that the UOP minority shareholders appear to have received most of the gains from the transaction, as is generally true in parent-subsidiary mergers. Requiring minority shareholders to re-

14 8 Del Code Ann § 144(a) (1991):
No contract or transaction between a corporation and 1 or more of its directors or officers, or between a corporation and any other corporation . . . in which 1 or more of its directors or officers, are directors or officers, or have a financial interest, shall be void or voidable, [provided that (1) the "relationship or interest" is known or disclosed to and approved in good faith by the shareholders or the board of directors, or (2) the "contract or transaction is fair" to the corporation].

15 See Slovin and Sushka, 49 J Fin Econ at 256–57 (cited in note 10) (concluding that "parent-subsidiary mergers enhance the wealth of minority shareholders, and that their share of the overall gains in value exceeds their proportional ownership of the subsidiary"). In Weinberger itself, the parent apparently concluded, taking the feasibility study at face value, that the transac-
ceive all of the gains from the transaction would only eliminate the incentive to go forward in the first place, leaving the minority shareholders stuck with the lower pre-transaction price. Fiduciary duties should not be interpreted in such an irrational manner.

As bad as the Delaware Supreme Court’s analysis of the transaction at issue in *Weinberger* is, its discussion of principles of valuation to guide future cases is even worse. Prior to *Weinberger*, valuation under Delaware law was governed by the Delaware block method, under which an appraiser calculated a weighted average of market, earnings, and asset values. The *Weinberger* court rejected this approach, not because calculation of earnings and asset values was unnecessary if market prices were known, but rather for the opposite reason that the block method was too restrictive and did not consider enough factors. For the future, the court announced, “all relevant factors” must be considered when valuing shares. It is difficult to imagine a standard that creates more uncertainty or a greater incentive for wasteful litigation mired in a morass of expensive and pointless valuation techniques which are vastly inferior to simple reliance on market prices.

B. *Smith v Van Gorkom*

In 1980, Trans Union Corporation was merged into a wholly owned subsidiary of Marmon Group, Inc., a corporation controlled by the Pritzker family. The merger, which was negotiated at arm’s length, enabled Trans Union to solve the problem of its unused investment tax credits, which its directors had unsuccessfully attempted to do for years. Trans Union’s shareholders received $55 in cash for their shares, which were previously trading in the mid-$30s, a premium of approximately 50 percent, just as in *Weinberger*. Also as in *Weinberger*, the shareholders overwhelmingly approved the merger.

The Delaware Supreme Court again upheld a challenge to the merger, holding that Trans Union’s directors breached their duty of care by failing to become adequately informed about the merger and its terms. Specifically, the court concluded that the directors “were uninformed as to the intrinsic value of the Company.” The directors’ reliance on the 50-percent premium over market price as a justification for approving the merger was emphatically rejected: “Using market

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18 488 A2d 858 (Del 1985).
19 Id at 874.
price as a basis for concluding that the premium adequately reflected the true value of the Company was a clearly faulty, indeed fallacious, premise. This was because, according to the court, the directors "knew" that Trans Union's stock price was "undervalued" as a result of the company's inability to use its investment tax credits. Rather than relying on the size of the premium over the "admittedly depressed stock market price," the directors should have hired outside experts to opine on the adequacy of the premium after performing "other relevant valuation techniques." Accordingly, the court remanded the case for a potential award of damages "to the extent that the fair value of Trans Union exceed[ed] $55 per share."

The court should have dismissed the action summarily. Contrary to the court's analysis, the directors acted properly in approving the merger based on the premium paid over the preexisting market price. Their belief that Trans Union's stock price did not reflect its true value was simply a recognition of the investment tax credit problem. The stock price was "depressed" only in the sense that it would have been higher had the investment tax credit problem not existed. This is equivalent in every respect to saying that the stock price of every company is "depressed" because each has some problem that causes the price to be lower than if the problem did not exist.

However, even assuming that there was something unique about the investment tax problem causing Trans Union's stock price to be "depressed," so what? The market price, depressed or not, still represented what Trans Union shareholders could realize for their shares. And if investors are so stupid as to set an artificially low price for Trans Union's shares, what assurance is there that this same stupidity will not result in an even lower price in the future? The directors were entirely justified in concluding that the merger was beneficial since it increased shareholders' wealth by 50 percent; the fact that the market price was depressed is irrelevant to this consideration. The only exception would be if directors had the ability to predict future stock price movements with certainty, a most unlikely possibility.

The court's mandated alternative to reliance on market price—that the directors should have informed themselves about Trans Union's "intrinsic value"—is vacuous. What does this mean? The most charitable interpretation is that the court chastised the directors for failing to consider the value of the company sold as a whole rather than focusing on the trading price of a single share. But, as discussed above, this distinction is specious and, in any event, the market price

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20 Id at 875–76.
21 Id at 891.
22 Id at 893.
of shares also reflects the prospect that the company as a whole will be sold at a given price. The 50-percent premium over market price, in other words, already takes into account the consensus judgment of market participants as to the present value of all future outcomes, including the sale of the entire firm. Under the court's analysis, however, the collective opinion of these market participants—who put their own money on the line in deciding whether to buy or sell and at what price, as well as whether to approve the merger—is to be discarded in favor of the opinions of paid experts who risk nothing and necessarily rely on uncertain and biased valuation techniques.

C. *Cede v Technicolor, Inc*[^24]

In late October 1982, Technicolor and MAF Corporation reached an agreement whereby MAF would acquire Technicolor in a two-step transaction: a cash tender offer by MAF at $23 for all of Technicolor's outstanding shares followed by a second-step merger with the remaining shares also converted into $23 in cash. Technicolor's shareholders experienced a windfall from the transaction. The $23 price represented a premium of more than 100 percent over Technicolor's pre-acquisition price. (Technicolor's stock price, which had been falling because of poor company performance, reached a new low of $8.37 in September 1982.) Not surprisingly, Technicolor shareholders, including senior members of its management team who were knowledgeable about the company's operations and prospects, as well as MAF's planned changes of business strategy described in the tender offer documents, enthusiastically embraced MAF's bid. Over 82 percent of Technicolor's shares were tendered in the first-step tender offer. The remaining shares were acquired in the second-step merger completed in January 1983.

Cinerama, a Technicolor shareholder, dissented from the merger and filed a series of claims attacking the $23 price paid as inadequate and seeking other relief against Technicolor's directors for various alleged breaches of fiduciary duty. To support its claims, Cinerama presented the analysis of a paid expert who concluded, based on his valuation, that Technicolor's shares were really worth over $60 per share. Technicolor countered with experts of its own who concluded, using a variety of valuation techniques, including reliance on the pre-


[^24]: The following facts are taken from the first reported *Cede* decision on valuation, *Cede & Co v Technicolor, Inc*, 1990 Del Ch LEXIS 259, *1–22.
mium over the pre-acquisition market price, that the offer was fair to Technicolor's shareholders.

As in Weinberger and Van Gorkom, the case should have been resolved quickly and summarily. Delaware law requires that shares must be valued as of the merger date, in this case January 24, 1983, "exclusive" of any value created by the transaction dissenting from. This value could be no greater than $23, the price paid. This is the price at which willing buyers and sellers transacted; it also represents more than a 100-percent premium over Technicolor's pre-acquisition price. Technicolor's most knowledgeable insiders, those in the best position to know Technicolor's "true value," were willing to sell at the $23 price. Under these circumstances, the conclusion of Technicolor's expert—that the shares were really worth more than $60 per share—was absurd on its face and should have been discarded in its entirety. There should have been no issues left to litigate.

There is, however, one exception. The value of the Technicolor shares "exclusive" of any value created by the merger was certainly less than $23. MAF presumably never would have paid $23 if one assumes, as is required by the Delaware statute, that the gains from the merger be ignored. To assume otherwise is to assume that the second-step merger added no value. This would be extremely dubious since owning 100 percent of Technicolor stock at a minimum enabled MAF to avoid the conflicts and related problems that exist when there is a subsidiary with minority shareholders. More fundamentally, if the Delaware statute, as I have argued elsewhere, is interpreted to exclude gains not just from the second-step merger itself, but also resulting from the first-step tender offer as well, because the transaction is best viewed as a unitary one occurring in two steps, the best estimate of the value of Technicolor's shares is the pre-tender offer price adjusted for intervening movements in the overall market and industry. This would undoubtedly yield a value for the Technicolor shares for purposes of the Delaware appraisal statute of far less than $23. But if the court were not persuaded by these arguments, it could simply have awarded Cinerama $23, the same price received by Technicolor's other shareholders. The case should have been over in days (and had the rules been known in advance, the case would never have been filed).

Instead, what followed has to be viewed as one of the most embarrassing episodes in corporate law history. The market evidence, which should have resolved the case, has been completely ignored. Numerous lengthy and turgid opinions have been issued by the Dela-

25. 8 Del Code Ann § 262(h) (1991) (instructing courts to appraise shares by "determining their fair value exclusive of any element of value arising from the accomplishment or expectation of the merger or consolidation").

ware courts, discussing in excruciating detail the various valuations performed by the competing experts in the case and other irrelevant issues. Nothing has been resolved. In 1999, after more than fifteen years of continuous and pointless litigation, the Chancery Court, trying to interpret the latest in a string of incomprehensible opinions on the case issued by the Delaware Supreme Court, gave up and appointed a "neutral expert witness" to value the Technicolor shares.27 To the best of my knowledge, the embarrassment continues: The litigation, which has now gone on for almost two decades, has still not concluded.

D. The Irvine Co v Smith28

The cases discussed thus far have all involved public companies with exchange-listed securities. The Irvine case illustrates how market evidence can be used to resolve valuation disputes involving privately held companies.

The Irvine Company is a real estate company with substantial holdings in Orange County, California. In early 1983, just before the controversy in question, the Irvine Company had approximately ten shareholders, with Donald Bren holding the largest stake at 35 percent. The other shareholders, like Bren, were highly sophisticated and experienced.29

In February 1983, Bren offered to purchase all of the outstanding shares of the Irvine Company for $200,000 per share. A new corporation, Newco, was created and financed to facilitate the purchases. The overwhelming majority of Irvine's shareholders decided to sell their shares to Bren via Newco.

In November 1983, Newco and the Irvine Company merged. As a result of the way the merger was structured, Bren in effect sold back the shares he had purchased in the February transaction at the same price he paid for them. The other existing shareholders who did not sell in February were offered the choice of receiving $208,400 in cash for each of their shares (the amount paid in February plus interest) or the ability to continue as investors in the new company with the same proportionate stake that they held before. Thus, the shareholders had a simple choice to make: they could take the money if they believed their shares were worth less than $208,400 per share, or they could remain as investors with the same proportionate stake if they believed their share of the new company was worth more. Two shareholders,

27 Cede, 1999 Del Ch LEXIS 15 at *2.
28 No 83-27001-CZ, slip op (Mich Cir Ct, Oakland County June 25, 1990).
29 Id at 31 (noting that shareholders were "some of the most sophisticated and successful businessmen in America and served on the board of directors").
however, rejected both alternatives and chose instead to invoke their appraisal rights under the governing Michigan law, claiming that their shares were "really worth" $600,000 per share.

Again, the case should have been a no-brainer. Extremely knowledgeable buyers and sellers set the value of Irvine shares at $200,000 per share. Bren was both a buyer and a seller at this price. The shareholders who did not sell in February were given a second choice in November of either receiving the same price the selling shareholders accepted in February and Bren himself accepted in November, or continuing as investors with the same stake as before. A fairer transaction is hard to imagine. As in Cede, the only question worth litigating was whether the dissenters should have received less than $208,400 per share to avoid awarding them some of the gains created by the transaction from which they were dissenting.

But nothing like this occurred. Instead, the court rejected the market evidence in its entirety as unreliable and conducted a marathon trial lasting more than a year, dominated by conflicting testimony from multiple valuation experts offered by both sides. Ultimately, the court concluded that the dissenters were entitled to $271,000 per share plus interest, or approximately 30 percent more than all other selling shareholders received.

The decision, as well as the misuse of the legal system that produced it, is an outrage. Is it really plausible that the court, no matter the length of the trial or the number of experts who testified, knew more about the value of Irvine shares than the highly sophisticated shareholders themselves, including Bren, who was both a buyer and a seller at the same price? And is it conceivable that a more-than-a-year-long trial can be justified when market evidence is so powerful and the dissenters by their own actions revealed that they did not believe their own claim that the shares were worth more than $208,400 per share (if they really believed this, they would have continued as investors)? The Irvine case, like the cases discussed above, is a poster child illustrating why corporate law would be vastly improved if courts were more receptive to market evidence when resolving valuation disputes.

E. Other Applications: Glendale Federal Bank, FSB v United States

Market evidence is underutilized in contexts other than resolving valuation disputes in corporate law. The Glendale case dramatically illustrates how market evidence can improve and simplify decisionmaking in other contexts.

Savings and loan institutions are subject to minimum capitalization requirements. The lower the minimum capital requirement, the more thrifts can borrow (take-in deposits) for a given dollar of equity. If the capital requirement is 3 percent, for example, for every dollar of equity thrifts can borrow $33 (100/3); if the requirement is 2 percent, thrifts can borrow $50 (100/2) and so on. If a thrift cannot meet the minimum capital requirement, regulators can close it down.

In the early 1980s, the thrift industry as a whole was insolvent on a market value basis. In response, Congress and thrift regulators adopted a policy of forbearance, which enabled insolvent thrifts to remain open. Thrifts were allowed, for example, with government approval to utilize a variety of gimmicks which enabled insolvent thrifts to meet existing capital requirements with phony accounting entries such as “supervisory goodwill” and thereby remain open.

In 1989, Congress reversed course and enacted a new law, the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (“FIRREA”), which eliminated thrifts’ ability to count supervisory goodwill and other tangible assets as capital. The law was immediately challenged, and in United States v Winstar, the Supreme Court held that Congress had breached contracts with multiple thrifts by changing the rules regulating what counts as capital.

Over one hundred thrifts filed suits against the government claiming tens of billions of dollars in damages. Glendale, which itself claimed two billion dollars in damages under various theories, was the first of these cases to go to trial in Winstar’s aftermath.

But Glendale, a publicly traded company, faced an immediate and obvious problem in pursuing its damage claim—an event study of its stock price on relevant dates demonstrated that FIRREA did not cause Glendale’s value to fall. On the contrary, Glendale’s stock value increased by over $100 million as a result of FIRREA’s enactment. This result, which is consistent with every published study on the effect of FIRREA on the thrift industry, including a study focusing on

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33 518 US at 870 (stating that the federal government breached its contracts with the thrifts as a result of “the new regulatory capital requirements imposed by FIRREA”).
34 Event study for Glendale Federal Bank, FSB (on file with author).
35 See, for example, Leonard Bierman, Donald R. Fraser, and Asghar Zardkoohi, On the Wealth Effects of the Supervisory Goodwill Controversy, 22 J Fin Rsrch 69, 70 (1999) (finding that the Supreme Court’s decision in Winstar had “substantial, positive effects on the market value” of the involved thrifts, while there were “no negative market value effects of the FIRREA-mandated change in accounting regulations”); Jeff Madura, Alan L. Tucker, and Emilio R. Zarruk, Market Reaction to the Thrift Bailout, 17 J Bank & Fin 591, 592 (1993) (observing that “commercial banks experienced a slight positive share price response [to FIRREA] while thrifts experienced a strong positive share price response”); Sridhar Sundaram, Nanda Rangan, and Wallace N. Davidson III, The Market Valuation Effects of FIRREA, 16 J Bank & Fin 1097, 1099
a subset of the industry that had sued the government after *Winstar* alleging injury from FIRREA, fundamentally contradicted Glendale's damage claim. How could Glendale have suffered $2 billion in damages from a law that caused its value to increase by more than $100 million?

The court was not troubled by this glaring anomaly, however, because it concluded that event studies are "speculative and unreliable." Why did the court reach such a sweeping conclusion, notwithstanding the thousands of academic studies that have utilized event study methodology to analyze the effects of countless events, including FIRREA, on stock prices?

The court explained its rationale in a footnote to its opinion. Shortly after Glendale concluded its case, but before the government presented its defense, the court held a status conference with the parties to communicate its view of the plaintiff's case. At this status conference, the judge stated that Glendale's case was the "strongest" he had ever seen in all his years as a judge. Immediately following the judge's comments, which were reported in *The Wall Street Journal* and elsewhere, the value of Glendale's trading certificates (a special security whose value was tied to the outcome of the litigation) and the securities of other thrifts with similar breach of contract damage claims against the government increased significantly. The court interpreted this stock price reaction as demonstrating the market's irrationality because, according to the court, the status conference, properly understood, communicated "very little" information to market participants.

The court's discussion is revealing. Of course the judge's comments were important. Glendale was seeking billions of dollars in damages in the first case after *Winstar*. The case was being tried by the highly influential and respected Chief Judge and was widely seen as likely to have a major effect on the outcome of all future *Winstar*-related cases. Under these circumstances, investors' positive reaction to the court's comments was entirely predictable and understandable. Indeed, it would have made more sense for the court to interpret the market participants' reaction to its comments as validating the use of event studies rather than as impeaching their validity.

(1992) (indicating that "FIRREA was perceived positively by the stock market, and that the shareholders of both banks and [thrifts] generally benefited from its passage").

36 See Bierman, Fraser, and Zardkoohi, 22 J Fin Rsrch 69 (cited in note 35).

37 *Glendale*, 43 Fed Cl at 402 n 5.

38 Id.


40 *Glendale*, 43 Fed Cl at 402 n 5.
Having rejected reliance on market evidence, the court conducted the familiar year-long trial, dominated as usual by multiple experts, and then took another year to issue an opinion. After all that, the court concluded that Glendale was entitled to damages of $909 million, a judgment which was then reversed by the Court of Appeals. The case is currently back on remand with no end in sight. Once again, it is hard to escape the conclusion that market evidence, whatever its limitations, provides a more accurate, faster, and less costly method for resolving many disputes than has been recognized to date.

III. USING MARKET EVIDENCE AS A SWORD TO ATTACK BUSINESS DECISIONS

All of the examples discussed in the preceding section involved situations where, I have argued, an increase in stock price or the receipt of a premium over market price should have defeated a claim for liability and damages. What about the converse? Consider a situation where a company takes an action (for example, it announces a change in business strategy or a merger, or successfully resists a takeover attempt) and its stock price plummets as a result. Does the decline in stock price establish or even suggest that the corporate managers who made the decision should be liable in damages?

I believe the answer is no. Numerous reasons exist why a decline in stock price should be irrelevant for establishing liability when business decisions are challenged.

1. Difficulty of distinguishing performance from breach.

Courts are ill equipped to distinguish between bad decisions and good decisions that turn out poorly. This is one of the rationales underlying the business judgment rule. Penalizing managers when stock prices fall following a corporate decision will cause them to be sued in many situations even though they have done everything right. Nothing is gained from a senseless application of liability rules.

2. Managers' risk aversion.

A related point is that managers are risk averse. If they face punishment when they make good decisions ex ante that turn out poorly ex post, they will have an incentive to avoid risky but positive net present value projects. Investors as a class will be worse off as a result.

41 Glendale Federal Bank, FSB v United States, 239 F3d 1374, 1384 (Fed Cir 2001) (vacating the trial court's award of damages and remanding for a determination of "total reliance damages").
3. Asymmetric information.

Corporate managers are hired because they have expertise. They may even have access to information that is not yet publicly known. They may turn out to be right, in other words, even if the market believes them to be wrong. Legal rules should not discourage corporate managers from acting on their special expertise and access to that information.

4. Unclear causation.

Sometimes stock prices will decline when a decision is announced because of what the decision signals about the state of the company rather than because of the decision itself. A stock price decline following a company announcement of a merger may, for example, communicate new information about the company’s inability to survive on its own. The merger announcement in this example reveals information about the company that was eventually going to become known in any event. Similarly, the stock price decline was also going to occur even had no merger announcement been made and, in fact, it might have been larger had the company done nothing. In this situation, the merger announcement makes things better, even if the stock price falls at the time, and it would thus be a mistake to penalize the corporate managers responsible for the decision.

I am not suggesting that corporate managers should never be held liable for their decisions, only that such liability should not be based on whether the stock price falls or not. Take perhaps the hardest case—when a target’s management successfully resists a takeover at a significant premium and the stock price plummets. Frank Easterbrook and I have argued elsewhere that takeover defenses are socially harmful and should be prohibited. If this proposed rule were adopted (and thus far it has not been), takeover defenses would be banned regardless of their effect on stock prices. But if defenses are permitted in some circumstances, they should not be prohibited when lower stock prices are the result. Such a rule would, for example, penalize managers for unsuccessfully attempting to trigger an auction or negotiating for a higher price. If the goal is otherwise lawful, and no other grounds exist, procedural or otherwise, for attacking what managers did, the lower stock price should be irrelevant.

CONCLUSION

Courts should give more, often conclusive, weight to market evidence when resolving valuation disputes in corporate law. This seems so obvious, at least to me, that it is worth speculating why so many courts have been hostile to market evidence. One possibility is ignorance, although the points are so simple that this is hard to believe. A second possibility is that lawyers and experts who benefit from long, complex, and indeterminate proceedings have influenced the development of legal rules in this area. Why judges have been so receptive to anti-market arguments, however, is less clear. Hopefully, this phenomenon will soon end. Greater reliance on market evidence will enable courts to resolve valuation controversies far more accurately at a fraction of the cost incurred under current law.