Business Valuation Insights

Second Quarter 2018

Our Value Proposition - "Real World" Valuation

We bring a special perspective to business valuation engagements via continuous "real world" exposure to the market that is obtained through our mergers and acquisitions practice. While we possess recognized valuation credentials, adhere to valuation standards, and have substantial valuation experience, we believe it is our experience in the market for buying and selling businesses that is the critical factor grounding our valuations in reality.

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Data Presentations that Change Minds

By: Daniel Tadros, Investment Banking Analyst

The key to persuasion is empathy, and it is especially necessary when using data to persuade. Visualizing data persuasively is a skill that can be honed with experience and diligence. This article was inspired by (and borrows heavily from) *Good Charts* by Scott Berinato of the Harvard Business Review Press.

It's easy to forget, but much of the writing and presenting we do is intended to persuade, not just inform. Words can obviously be persuasive, but a good visual illustration can go a long way toward reinforcing the strength of an argument.

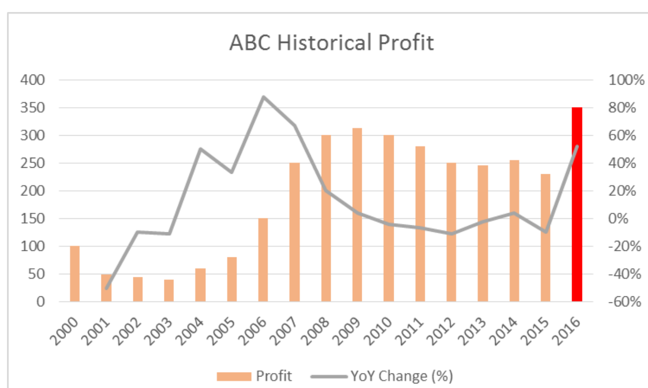
So what exactly makes a diagram or chart "good" or "bad?" The answer to this question is amorphous and relies on insight into the audience's disposition and views. Scott Berinato, senior editor at the Harvard Business Review Press, begins his approach by asking "*What's the context?*", as the context defines the level of a chart's effectiveness. Key considerations such as who will be viewing the charts, what does the reader expect, why is the reader taking the time to review my chart, and lastly how will I show the reader what I think, are all optimally answered when reviewed through a contextual or empathetic lens. However, empathetic persuasion is a skill, and one that is developed through experience.

This is especially true in the investment industry, where new acronyms, complex legislation, and evolving financial theory complicate discussions between business owners and investors, sometimes leading to a lower valuation of the business. The below list of key takeaways is a summary of our experience in financial services and Berinato's book on data visualization:

1) *People do not take in visual input in a linear way*

Unlike with text, where readers normally skim from left to right, charts have no inherent order. The reader is likely to look first at a big spike in the center of your line chart rather than review the title and axis for clarity on the topic.

2) *People notice what sticks out*



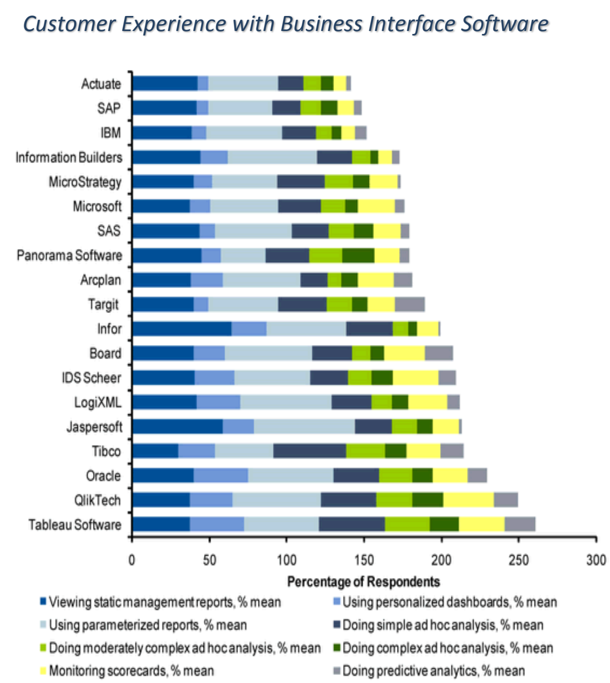
Our brains are wired to ignore what's expected and pay attention to what is not expected. Highlighting the message of a chart with bright colors, enlarging the font of important text, or centrally placing an integral picture, line, or word can guide users' eyes to your most salient point.

Consider the chart *ABC Historical Profit* to the right. It's almost certain that the first thing you noticed was the bright red, tall bar on the far right. If the goal of this chart was to communicate ABC's overwhelming profitability in 2016, this chart would have served its purpose. If not, highlighting 2016 might be a mistake.

3) ***People do not see everything at once***

Just as with persuasive essays, diagrams can be dense and may require multiple reviews to fully absorb the information. The nearby diagram *Customer Experience with Business Interface Software* depicts mean customer experience as a percentage score for multiple uses, each use having a maximum score of 100%, allowing summed scores greater than 100%.

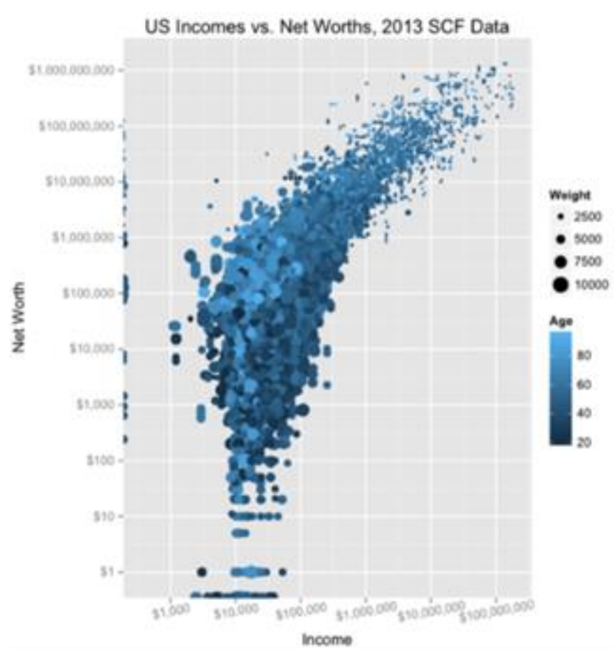
A glance at the bar chart would indicate that Tableau and QlikTech received the highest customer satisfaction means. But comparing each software's customer satisfaction by specific use is complicated given the 8 different services, 19 different vendors, and multiple colored bars with different start and end points. Charts filled with many colors and labels, while informative, can be difficult to decipher, and the message may be lost behind the visual appeal. Remember that artistic expression's influence on persuasion, while material, is limited and can even be counterproductive if used clumsily.



Source: Gartner Peer Insights

4) ***People strive to make connections***

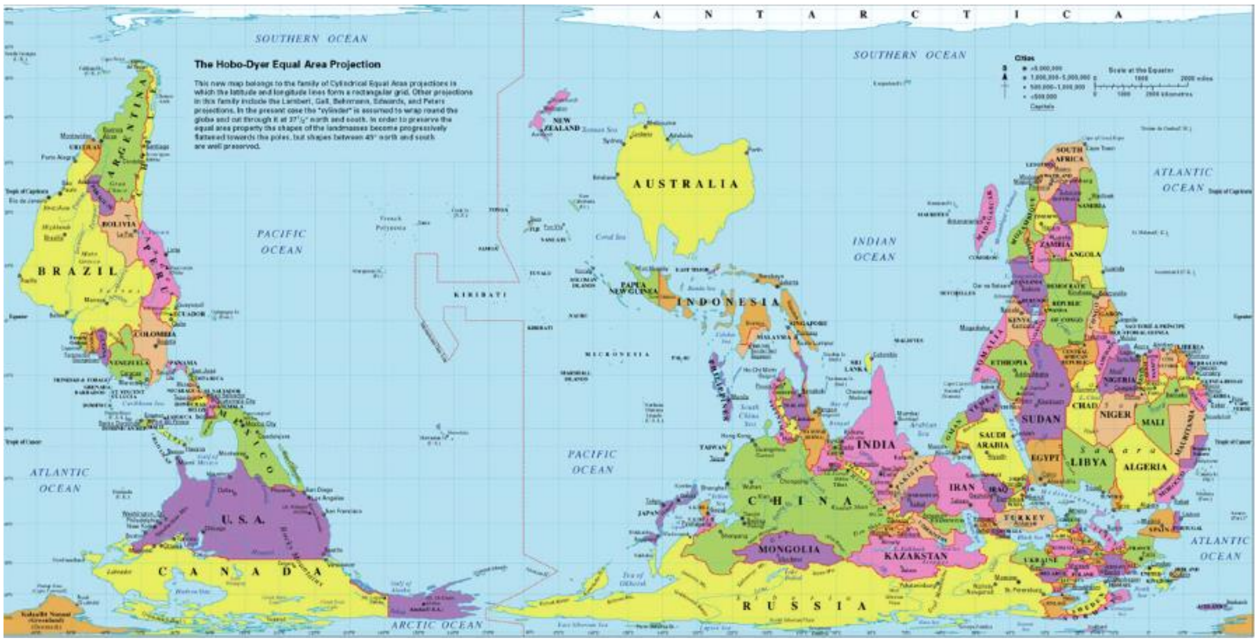
Even after the briefest of glances, readers seek connections and trends in visual data. These connections form the basis of the narrative the reader will rely on to understand and retain the information. It would be almost impossible to organize and record each individually recorded income and net worth in *US Incomes vs. Net Worths, 2013 SCF Data*, but the relation is clear: annual incomes of 100K are a worse indicator of net worth than higher incomes in the 1 to 10 million dollar range.



Source: www.DQYDJ.com

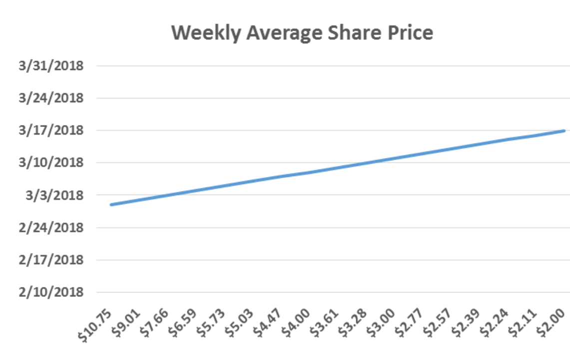
5) *Orientation matters*

Even as infants, we are taught to see the world in a certain way, and this predisposition applies to charts and graphs. Consider the picture of the world map below. Although there is no one correct way to view a map, reorienting it makes us momentarily reconsider what we learned in grade school before recognizing that the map is simply upside down; we have been taught that North America should be on top of South America with Australia always remaining "down under."



Similarly, in cartography, as in other disciplines, how maps present size has consequences: The "normal" Mercator projection we grew up with exaggerates the relative size (and implicit importance) of both Europe and North America while deemphasizing Africa, Australia, and South America. This "upside down" Hobbs-Dyer equal-area projection gives a more balanced, non-Eurocentric view of relative size, but it is disorienting to most of us in the northern hemisphere. It might be a persuasive illustration if you wanted to persuade readers to consider investing below the equator.

The same "orientation predisposition" applies to charts as seen in the *Weekly Average Share Price* line chart. Initially, most viewers would assume that the price is steadily increasing. But after a head tilt or two, the reader would recognize that the share price is actually decreasing! Counterintuitively, the x-axis has decreasing values from left to right – and normally, time is on the x-axis, not value. To quote Berinato, "We mentally store all kinds of metaphors and



> conventions about what information means: up is good, down is bad. North is up and South is down."

Data visualization in the investment banking world

Presenting data clearly and persuasively can be daunting. So can interpreting data that is not presented optimally. We at Hilliard Lyons Investment Banking see this quite a bit – both when clients are trying to put their best foot forward in presenting data about their company, and when prospective buyers are trying to persuade clients that their offer is the best one. The stakes are often high, and the ability to both present data and interpret other parties' data accurately is at a premium.

We welcome the opportunity to guide you through the gauntlet of a business sale. We will use our understanding of and experience in the investment community – including the persuasive use of visualized data – to help you accomplish your goals.

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Overview of Merger and Acquisition Disputes

By: James A. Gravitt, CPA, CBA, ABV, CFE and John A. Mascarich, Managing Director

Mergers and acquisition (M&A) transactions can be complicated and full of uncertainties. Both buyer and seller do their best to protect themselves with legal agreements about how "post-closing" disputes will be handled. Both problems in structuring these agreements and the fundamental business itself can lead to disagreements involving the financial aspects of the deal. This article is a summary of the types of issues that can arise in M&A disputes.

<u>Post-closing purchase price adjustments</u>

In a typical M&A transaction, the target company's purchase price will be negotiated as a multiple of earnings (often using EBITDA - earnings before interest, taxes, depreciation and amortization). Most deals are on a "debt-free, cash-free basis," meaning the seller retains all cash on the balance sheet and is responsible for paying off any long term debt, (think what happens when you sell your house). An often misunderstood component is how to handle inventory and accounts receivables and payables –collectively "working capital." Often times a buyer and seller agree on a normalized amount of working capital based on a monthly average – a working capital benchmark. This is the amount of working capital required to run the business and included as part of the purchase price.

At closing, a closing balance sheet is provided and any differences to the actual working capital and the benchmark are netted out of the purchase price. There is an agreed upon period of time (usually 60 or 90 days) for the buyer to determine the actual working capital as of the closing and provide the seller with a "true-up" calculation. The legal documentation will spell out how to handle any disputes arising from working capital items and how to seek indemnification for any deficiencies.

Common issues in working capital disputes result from the use of the correct accounting basis (generally accepted accounting principles (GAAP) versus consistency using non GAAP methods), accounts receivable and allowances for doubtful accounts, inventories and related valuation reserves, warranty accruals, contingent items (with respect to their being probable and estimable), and general differences concerning the realization of assets and the existence of obligations.

To illustrate a typical purchase price adjustment dispute over working capital, assume that a seller's warranty reserve, measured in accordance with GAAP by the seller's accounting firm, results in an under accrued liability as assessed by the buyer's accountants. Note here that financial statements under GAAP aren't always black and white – they can include estimates, and the reasonableness of the estimates can be at issue in the dispute. The dispute resolution will depend on the facts and circumstances of the case, for instance the question of consistency with past practices versus the accuracy of a GAAP presentation.

Working capital claims are typically measured on a "dollar for dollar" basis (by the amount of the difference), but if an under accrual such as the warranty reserve in this example is ongoing, a case can be made that the seller fundamentally misrepresented the company's historical profits. Thus it can be measured "at the multiple," meaning that the understated amount will be multiplied by the transaction's EBITDA multiple to determine a purchase price adjustment.

Subsequent events that happen after the closing can cause issues in post-closing purchase price adjustments. Under GAAP, a "recognized subsequent event" is an event about which additional information becomes available that, under GAAP, is used to adjust financial statements on a prior date. The key considerations for a "fact finder" (court or arbitrator) are (a) what was "known or knowable" on the closing balance sheet date, and (b) whether the seller's position is reasonable given that knowledge. A buyer will typically negotiate to hold the books open for as long as possible to fully consider subsequent events.

Earnout provisions

M&A agreements often contain "earnout" provisions that are a contingent element of the acquisition's purchase price. These earnouts often bridge the gap between what a seller wants to receive and what a buyer is willing to pay, but are inherently complicated. The contingent element of consideration is determined based on the acquired company's performance against certain criteria or benchmarks defined in the M&A agreement. Earnout criteria can be financial or non-financial (for example, regulatory approval for a new product), and typically can only increase the purchase price. Earnouts can be an effective negotiating tool when a buyer and seller have differing perspectives on the outlook for the target business, however they are also fraught with uncertainties.

Common M&A earnout disputes include post-closing accounting differences and the post-closing operation of the target business by the new owners. Arguments can be made that the business was subsequently managed to minimize its performance measures and in turn lower the earnout payment. Changes in accounting and business structure, such as combining the target business with other divisions of the buyer's business and allocating costs differently, can further cloud the analysis. Due to these complexities, sellers tend to prefer a performance benchmark subject to less potential for manipulation, such as revenues, while buyers prefer a benchmark based on the bottom line – the target's post-close profit.

Further gray areas in earnout disputes center around clauses in the M&A agreement such as "the purchaser shall operate the business in a manner consistent with its past practices and operations," and "unusual and non-recurring items will be excluded from the earnings calculation." Unless these items are anticipated in advance (e.g. transaction costs, intangible asset amortization, goodwill impairment) and carefully outlined in the agreement, they can be used to negate the purpose of the earnout provision.

Material adverse change

Material adverse change (MAC) clauses provide a means to terminate an M&A agreement if such a change (as defined in the agreement) occurs. MAC can be defined as changes in the target company, in the industry, or both. Buyers prefer broad MAC definitions and sellers prefer the opposite.

To activate an MAC clause, the buyer will typically need to establish (a) the event's significant impact on the target, (b) the event's duration, (c) the event's disproportionate effect on the target as compared to the rest of the industry, and (d) whether the buyer seeking to avoid the transaction knew of the event prior to entering the agreement.

The significance of a MAC to the target's financial performance can be assessed by comparing its actual performance and post event projections to historical and projected performance at the time the agreement was signed.

To determine the event's impact on the target versus the industry, its performance metrics (revenue growth, profitability, financial ratios) can be compared to similar companies in the industry and to the industry's performance generally. Even in cases where a MAC is not established, the buyer may still be able to rescind the deal based on a breach of seller representations and warranties related to condition of the business at time of closing. Alternatively, analysis may be able to establish that the actual value of the company is significantly less what was previously represented by the seller.

Indemnification claims

The operative language for these provisions in M&A agreements varies, but typically includes words such as indemnify, hold harmless, pay and reimburse. Indemnification provisions can cover representations and warranties, covenants and other items such as pending taxes or litigation. Common limitations of indemnity provisions include time elements, types of eligible/ineligible claims, baskets and thresholds (lower and upper limits for indemnity to apply), caps and ceilings, and setoffs (for example tax benefits and insurance proceeds). Indemnification provisions are required in almost all transactions regardless of size or complexity. It is imperative for sellers to have them capped at some dollar amount, and to have a set time period in which to make any claims.

Common disputes regarding a breach of a seller's representations and warranties involve assurance that financial statements are in accordance with GAAP, disclosure of material information about the business, no "material adverse change" (as defined in the merger agreement), and operation of the business as usual in the "ordinary course" during the "period of acquisition."

Damages for indemnification claims involving representation and warranty disputes employ a "benefit of the bargain" measurement, defined as "a measure that awards the plaintiff the difference between the gain had the misrepresentation been true and what the plaintiff actually received.[1]

For example, assume that a firm was sold for a multiple of 6 times earnings of $100 million, $600 million. Subsequently a lawsuit was filed for a product defect – total damages of $20 million resulted, including legal fees. In addition, ongoing annual raw material costs increased by $5 million to cure the defect. From the plaintiff's standpoint (arguing that the product defect was "known or knowable" in advance), damages with two elements are asserted: (1) a one-time purchase price reimbursement of $20 million, and (2) a second reimbursement of 6 times $5 million, $30 million to account for the company's ongoing reduced earnings.

A more "gray" example of a "benefit of the bargain" issue is the undisclosed loss of a significant customer of the target. Questions to be addressed to get to the heart of a damages measurement include whether the customer will be replaced (and when), if the departure is part of normal

[1] Litigation Services Handbook, 4th Edition, 18.7

customer turnover, and if the customer is an important component of value for the firm (i.e. profitable). The answers to these questions will help determine whether there are damages at all, and if so, whether they are non-recurring or recurring (resulting in loss of business value).

Benefit of the bargain disputes are different from disputes over business valuations in that they can use the benefit of hindsight (known as the "Book of Wisdom" in intellectual property disputes) to assess what actually happened with respect to a specific claim. While a business appraisal considers only what is "known or knowable" at the time of the valuation, a M&A dispute can assess, for example, whether the business grew substantially more than projected following the transaction, thereby delivering the "benefit of the bargain" to the buyer despite the loss of an individual customer.

<u>Conclusion</u>

Post-acquisition disputes usually involve some form of investigative financial techniques, lending themselves to skills possessed by some financial experts. More often than not these disputes also involve business valuation principles. Experts who possess both sets of skills can contribute valuable insights to assist the parties in resolving merger and acquisition related disputes.

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Court Case Insights

The lesson of the following shareholder redemption case is this: take good care when writing corporate buy-sell agreements.

***Hornberger v. Dave Gutelius Excavating, Inc.,* 2017 Pa. Super. LEXIS 1044 (Dec. 15, 2017)**

A land surveyor worked for the defendant excavation construction business. In 2006, the plaintiff bought 1% of the company's common shares. A shareholder agreement gave the company the right to redeem shares if the stockholder died or left employment. In case of death, the value of the deceased stockholder's shares was the stock's fair market value as determined by the company's independent CPAs. In case of termination, the agreement the value of shares had to be calculated based on the "adjusted net book value," also as determined by the company's independent CPAs, subject to provisions excluding goodwill and trade name value, and adjusting accounts receivable and payable and tangible assets to their fair market values.

The surveyor left the company's employment, and the company obtained a valuation from an independent CPA, who valued the plaintiff's shares applying a 30% minority discount and a 5% discount for lack of marketability (DLOM). The plaintiff refused to surrender his shares, and the defendant sued.

At trial, the plaintiff's CPA expert testified that discounts were not appropriate in this instance since the shareholder agreement did not specifically call for them, although it did specify other adjustments. When questioned by the trial court, the expert admitted that, if the agreement had not included a list of particular adjustments, he would have considered applying a minority discount and DLOM to calculate the adjusted net book value. The defendant's expert maintained that the specified provisions in the agreement did not limit any other adjustments the CPA firm thought appropriate to value the contested shares based on "current valuation methodologies." He noted that the intent behind the agreement was "to keep the value of each share much lower so as not to reward any shareholder/employee who decides to voluntarily leave."

The defendant also offered testimony from a second CPA who opined that, when calculating the adjusted net book value in a closely held corporation, it was customary to apply minority and marketability discounts (presumably to obtain a per share value for a minority interest). The initial valuation was thus correct under the agreement, this expert concluded.

In its opinion, the trial court noted the agreement did not include a definition of "adjusted net book value." Rather, the agreement said to use the adjusted net book value with three qualifications. When a contract term lacked a definition, "we have to look to the standard, the normal and accepted practices within the industry," the trial court added. Based on the initial expert report and the trial testimony of both CPAs, the court endorsed the use of the minority discount and DLOM.

The plaintiff appealed, arguing that the trial court's conclusion was erroneous, as the shareholder agreement did not expressly include the application of such discounts. The plaintiff further noted the agreement specified different methodologies to determine the value of a deceased shareholder's interest as opposed to the value of a terminated shareholder's interest. Because the agreement did not include the phrase "fair market value" in prescribing how to value the shares of a terminated stockholder, it was improper to apply fair market value discounts, the plaintiff argued. The company again argued that just because the agreement identified certain adjustments, this did not preclude the independent CPAs from making additional adjustments that they determined "to be customary in the accounting industry."

In its ruling, the appeals court agreed with the defendant, noting that the plaintiff expert's conclusion that adjustments were not appropriate here was not based on the expert's accounting or valuation expertise, but on his interpretation of contract language. The court disagreed with that interpretation. It noted that the agreement expressly provided for a valuation by the company's CPAs. "That valuation, by its terms, is an adjustment to book value based on the expertise of (the company's) CPAs." Under the agreement, "the application of that expertise" was subject to the three express provisions related to goodwill, accounts payable/receivable, and the valuation of real and personal property. Requiring the accountants to make the three adjustments "cannot reasonably be understood to preclude the application of any other adjustments that valuation experts would ordinarily make," the appellate court said.

The outcome of the following Delaware statutory appraisal case turned on the importance of the "deal price" versus other possible indications of value.

Dell, Inc. v. Magnetar Global Event Driven Master Fund Ltd., 2017 Del. LEXIS 518 (Dec. 14, 2017)

This matter arose out of the 2013 leveraged management buyout (MBO) led by the company's founder, Michael Dell (Dell). The deal price of $13.75 per share represented a 37% premium over the company's then publicly traded share price. In contrast, the fair value as determined by the Delaware Chancery Court was $17.62 per share. The Chancery thus concluded that the buyout price was about $7 billion too low.

By way of background, in mid-2012, Dell informed the company's board of directors that he wanted to pursue a management buyout but would not go ahead without the directors' approval. The board formed a special committee that hired JPMorgan Chase & Co. as its financial advisor. JPMorgan noted that "there was a low probability of strategic buyer interest in acquiring the Company." Ultimately the committee and the buyout group negotiated the sale of the company for the total merger consideration to $13.75 per share as well as pay a special cash dividend of $0.13 per share and a $0.08 third quarter dividend. The total value of the deal was $13.96 per share. Although a majority of stockholders approved the deal, a number of shareholders petitioned the Delaware Court of Chancery for a fair value determination under the state's appraisal statute.

In its finding, the Chancery opined that a statutory appraisal determination was different from an inquiry into a breach-of-fiduciary-duty claim. An appraisal was an inquiry into whether the stockholders received fair value for their shares in the transaction. Even if a sales process was fair in terms of a breach of fiduciary claim, it could prove suboptimal for purposes of an appraisal.

The sales process the company undertook, the Chancery said, "easily would sail through if reviewed under enhanced scrutiny," and those in charge of the merger "did many praiseworthy things." But the court found a number of factors compromised the sales process and caused a mispricing whose effect could not be quantified. For this reason, the Chancery decided to disregard the deal price altogether.

One of the problems the Chancery noted was a "valuation gap" between the company's intrinsic value and its market value because the company's investors were too focused on short term profit. The court also noted that no strategic buyers had participated in the sales process, which meant there were only financial sponsors that all used the leveraged buyout analysis to determine their bid price rather than valuing the company as a going concern. The effect was a deal price below fair value. Using its own valuation process, the court arrived at a statutory fair value of $17.62 per share. The company appealed the Chancery's decision to the Delaware Supreme Court.

The company's overarching argument to the Supreme Court was that the Chancery abused its discretion in giving no weight at all to the deal price. The company noted that Delaware law did not require that the deal price had to be the "most reliable" or "best" evidence of fair value in order for the deal price to be considered in a fair value determination. Moreover, the law did not require the Chancery to disregard the deal price entirely if the court was unable to "unequivocally quantify the precise amount of sale process mispricing." The company also accused the Chancery of creating a rule that said that deal prices resulting from MBO transactions were suspect and should be disregarded. Finally, the company contended that the Chancery's ruling against the deal price had no support in the facts of the case. The petitioners responded by stating that the Chancery had considered "all relevant factors," as required under the appraisal statute, and had provided ample reasons why the deal price did not reflect fair value.

The Supreme Court agreed with the petitioners that the Chancery considered all the relevant factors, but found that the Chancery's decision not to assign any weight to any market based indicator of fair value contradicted its own factual findings and justified a remand. There was "a dissonance" between the rationale the Chancery gave for disregarding the deal price and the facts the Chancery found, the Supreme Court said.

In its opinion, the Supreme Court found the Chancery's reasoning for disregarding the deal price was flawed, since it erroneously presumed there was a valuation gap between Dell's market price and fundamental price. But the evidence showed that analysts had scrutinized the company's long-term prospects and the market had been able to account for the company's recent mergers and acquisitions, the Supreme Court said. It noted that the Chancery's analysis ignored the efficient-market hypothesis "long endorsed by this Court." The theory "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," the Supreme Court stated. In the instant case, there was no indication that the market was not efficient. There were no signs that it lacked a sufficiently strong base of public stockholders, that the company's stock was not actively traded, that investors had limited access to company information, or that the company had a controlling shareholder. The investors were not shortsighted, as the Chancery presumed, but "they just weren't buying Mr. Dell's story," the Supreme Court said.

"The Court of Chancery ignored an important reality: if a company is one that no strategic buyer is interested in buying, it does not suggest a higher value, but a lower one," the Supreme Court said. All prospective bidders, excepting the buyout group, decided against pursuing a deal because there was trepidation about the prospects of the PC industry and the success of Dell's turnaround strategy, the court noted.

In summary, the Supreme Court reversed and remanded. It said it would not dictate the use of the deal price even though there were sound economic and policy reasons to do so. But if the Chancery decided to adopt the deal price, it could do so "with no further proceedings." If the Chancery decided to go "another route," it had to provide an explanation "consistent with the record and with relevant accepted financial principles."

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