2011

The Behavioral Economics of Mergers and Acquisitions

Donald C. Langevoort
Georgetown University Law Center, langevdc@law.georgetown.edu

This paper can be downloaded free of charge from:
https://scholarship.law.georgetown.edu/facpub/438

Transactions (forthcoming, Spring 2011)

This open-access article is brought to you by the Georgetown Law Library. Posted with permission of the author. Follow this and additional works at: https://scholarship.law.georgetown.edu/facpub

Part of the Business Organizations Law Commons, Law and Economics Commons, and the Law and Psychology Commons
The Behavioral Economics of Mergers and Acquisitions

Transactions (forthcoming, Spring 2011)

Donald C. Langevoort
Thomas Aquinas Reynolds Professor of Law
Georgetown University Law Center
langevdc@law.georgetown.edu

This paper can be downloaded without charge from:
Scholarly Commons: http://scholarship.law.georgetown.edu/facpub/438/
SSRN: http://ssrn.com/abstract=1692777

Posted with permission of the author
The Behavioral Economics of Mergers and Acquisitions

Donald C. Langevoort*

I. INTRODUCTION

One need not spend much time in business settings to observe that reason does not always seem to rule. My own academic curiosity in the psychology of organizational behavior started while I was still in practice, in a law firm and then in government, recently having studied corporate law informed by the law and economics movement of the 1970’s. This was a time when even political progressives had become enamored with marketplace solutions to regulatory problems (the wave of deregulation in the airline industry, banking, etc.) and the rational actor model of competitive behavior had taken a firm grip on policy analysis.

Even though I was a junior lawyer, I was fortunate enough to find myself in a number of projects where I was able to observe (quietly and without any hope of influencing) senior executives of very important companies and very high government officials at work. I also paid close attention to the senior lawyers who advised them. And my impression—which later turned into a particular research interest1—was that ego often seemed the more compelling force in judgment and decision-making than cold, hard rationality, and that senior subordinates were often enablers of egotistical choice. The lawyers and executives I most admired were those clever enough to prompt different, presumably better choices via flattery and other influence techniques that left the top person’s inflated self-esteem relatively intact.

Even then, of course, there was a large body of scholarly work in social psychology and organizational behavior that questioned the

* Thomas Aquinas Reynolds Professor of Law, Georgetown University. My thanks to Bob Thompson, Eric Sundstrom and Joan Heminway for very helpful comments and discussion.

assumption of pervasive rationality in competitive business settings and readily accommodated pervasive egotistical inference and other cognitive biases. Orthodox economics has had its doubters all along. Over time this academic joust has turned into a remarkably fruitful research agenda. While some interdisciplinary tension remains, the collaboration between psychology and economics has become constructive and productive, under the heading of behavioral economics. The genre often referred to as “new institutional economics” readily incorporates ideas such as bounded rationality, information deficiencies, transaction costs, agency costs, moral hazard and the like into theories of behavior that depart considerably from the Bayesean depiction of rational choice commonly used in formal economic models. In turn, scholarship in corporate and securities law has borrowed extensively from this new learning, especially in the last decade or so, to try to incorporate limits on rationality into legal analysis of corporate behavior.

What has become clear for both descriptive and normative analysis is that incorporating insights from psychology into corporate and securities law means having to climb four tall steps to gain plausibility. The first is that what psychologists describe as predictable cognitive traits or biases are not observed consistently even in the decision making of a single individual. Most people are capable or acting more or less rationally depending on a host of situational, emotional and other contingent influences. As a result, we have to know much about the situation as well as the person to make any robust behavioral prediction.

2 In the economics literature, an important symposium published in the Journal of Business in 1986 set forth both the differences and common ground between the traditionalists and the behavioralists, the latter having been particularly influenced by the Nobel Prize-winning work of Amos Tversky and Daniel Kahneman. See The Behavioral Foundations of Economic Theory, 59 J. Bus. S181 (1986). For a review of how this debate quickly diffused into legal scholarship, see Donald C. Langevoort, Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review, 51 Vand. L. Rev. 1499 (1998).

3 Indeed, one of the fundamental messages of contemporary social psychology is that the situation often matters more than the disposition—notwithstanding the so-called fundamental attribution bias, which leads people to think otherwise. See, e.g., Richard Nisbett & Lee Ross, Human Inference: Strategies and Shortcomings of Human Judgment (1980). As to context, one of the important contributions in corporate behavioral economics called doubt on whether something as robust as the endowment effect has significant power when decisions are made by corporate agents. See Jennifer Arlen et al., Endowment Effects Within Corporate Agency Relationships, 31 J. Legal. Studies 1 (2002).
psychologically prudent answer to any question of how someone—e.g., a
CEO in a particular setting, or group deliberation by a board of directors—
will think or act is almost always “it depends,” which does not lend itself to
particularly bold or confident legal analysis.

The second big step to overcome is because the strength and
intensity of dispositional traits and biases observed in both laboratory and
field settings vary considerably among the population—some people are
more likely to display them than others. In other words, even if we know
the situational context, we also have to know something about the
personality and related dispositional makeup of the particular actor.4 And
here is one of the conventional economists’ major gauntlets for
behavioralists to negotiate: people who become CEO’s, CFO’s and board
members are different from the average person, and, by hypothesis,
substantially more “rational.” If rationality leads to competitive success,
then rationality will be favored in the selection and promotion tournaments
that determine who exercises corporate power. To me, this is the most
interesting step in the challenge to behavioral law and economics, about
which I and others have written much.5

The third step is institutional. Even if we decide that some
behavioral trait, such as overconfidence or emotionally-driven risk-taking,
is likely to affect executive judgment and decision-making, there is no
reason to automatically assume that it will affect the firm’s choices. Almost
all important corporate decisions follow a process—multiple people
involved sequentially, and often with group collaboration at various steps
along the way. We have to predict that the process will permit the bias to
survive, as against (presumably) strong competitive incentives to “de-bias”
individual shortcomings. Organizational behavior research has identified
common de-biasing mechanisms frequently used by corporations.6

This third step can only be addressed empirically—psychology itself
stops being concretely helpful once we pass beyond small group behavior.
Organizational scholars trained in sociology push back strongly against

---

4 See Gregory Mitchell, Why Law and Economics’ Perfect Rationality Should Not Be
5 See, e.g., Organized Illusions, supra; see also Donald C. Langevoort, Diversity and
Discrimination from a Corporate Perspective: Grease, Grit and the Personality Types of
Tournament Survivors, in MITU GULATI & MICHAEL YELNSKY, EDS., NYU SELECTED
ESSAYS ON LABOR AND EMPLOYMENT LAW: BEHAVIORAL ANALYSES OF WORKPLACE
6 See, e.g., Chip Heath et al., Cognitive Repairs: How Organizational Practices Can
excessive focus on individual cognition, claiming that broad social and
cultural forces, not psychological ones, are the proper subjects of inquiry for
thinking about the firm. Unfortunately, sociology tends not to generate
simple, tractable behavioral models except when reduced backwards to
something like an economic (rational choice) approach, so that testing
hypotheses rigorously is difficult. Moreover, the empirical questions—
identifying whether outcomes are rational or non-rational and then trying to
isolate causal connections in a corporate choice setting of interest to the
law—can be extraordinarily complicated. Many instances of “poor” firm-
level choice can plausibly be characterized as either behaviorally
problematic or the result of simple, rational opportunism by corporate
insiders, i.e., an agency cost problem.

These are three high steps to climb but still surmountable if taken
carefully, as we shall see. But even if we make it that far, we reach the
normative question—so what? If some form of non-rational behavior is
commonplace, there is a prima facie case for intervention. Deciding what
that intervention should be, however, can itself be vexing. The challenge is
both ideological and practical. Research suggests that, especially among
those with a conservative ideological orientation, behavioral explanations
do not qualify as legitimate excuses, and the right remedy for cognitive bias
is to make the person (or firm) learn painfully from the experience. And
even for those willing to engage in some kind of paternalistic intervention,
such interventions are very costly and hard to accomplish successfully.
Perhaps the most common illustration, which I and others have explored at
length, is that corporate and securities law’s favorite strategy—more or
better disclosure—often fails when up against a well-ingrained,

7 For a useful response from researchers sympathetic to the use of psychology, see Barry
Staw & Robert Sutton, Macro Organizational Psychology, in Keith Murnighan, Ed.,
8 See Philip E. Tetlock, Cognitive Biases and Organizational Correctives: Do Both the
Disease and the Cure Depend on the Politics of the Beholder?, 45 Admin. Sci. Q. 293
(2000).
9 This is especially so when a seller has an interest in taking advantage of the bias. E.g.,
Sendhil Mullainathan et al., Coarse Thinking and Persuasion, 123 Q.J. Econ. 577 (2008);
Jon Hanson & Douglas Kysar, Taking Behavioralism Seriously: The Problem of Market
Manipulation, 74 N.Y.U. L. Rev. 630 (1999); Donald C. Langevoort, The SEC, Retail
Investors and the Institutionalization of the Securities Markets, 95 Va. L. Rev. 1025, 1043-
48 (2009). In addition, there is a strong cultural and historical tolerance for advertising and
marketing techniques that are at heart mildly manipulative, making it difficult to excise
from business practice.
institutionally favored behavioral bias. There may be places where a legal or regulatory “nudge” can work, but many others where it has to be a much stronger shove that judges and regulators will feel both ill-trained and under-resourced to give and follow through on with respect to the expected and unanticipated consequences. In other words, as we shall see, there probably are places where corporate law recognizes the likelihood of persistent behavioral biases that threaten shareholders’ best interests, but is unable to think of a precise, legitimate, cost-efficient response and so just ignores it. That is not necessarily wrong, even if it may seem lamentable.

II. BEHAVIORAL INSIGHTS ABOUT MERGERS AND ACQUISITIONS

Legal scholars have used psychology to analyze many different problems—board of director group behavior in corporate law and marketplace “irrationality” in securities law are particularly well-plowed fields. With the notable exception of work by Jim Fanto roughly a decade ago, however, little attention has been given to integrating behavioral findings into M&A law, even though some classic insights came from that subject area early on. Most of the remainder of this essay will illustrate the methodological challenges and opportunities described in Part I as it applies to corporate M&A law. We are aided here by a number of recent and thorough literature reviews by financial economists on behavioral approaches to corporate financial activity. In law, there is a small but

---


helpful body of scholarship on the related subject of “behavioral antitrust” from which to borrow as well.\(^{14}\)

The starting point here is a stark divide that exists in behavioral corporate finance.\(^{15}\) Classical orthodox law and economics on merger activity assumes the rationality of both the managers (and directors) of the subjects companies and their shareholders. Even if the latter is relaxed somewhat, the assumption remains that the stock price will be set rationally in an efficient market, and that the stock price will be the main reference point for shareholder best interests. As a result, the possibility of irrational individual shareholder behavior is unlikely to be of much consequence.

If, however, we relax the assumption of market price efficiency, then things change dramatically. Ever since the high point of market efficiency theory in the mid to late 1970’s, contrarians have pointed out a number of anomalies in real world market price behavior vis-a-vis the predicted world of near-perfect efficiency.\(^{16}\) Among other things, there is much too much trading behavior, too much volatility, and too many instances of pricing excess (bubbles and crashes) to conform easily to the efficiency hypothesis. To be sure, many classical financial economists still believe strongly in efficiency and work hard to justify the observations as consistent with risk-adjusted models of efficient pricing, but the assumption is today at the very least heavily contested within mainstream finance, if not on the decline.

We need not explore in detail what behavioral finance substitutes for market efficiency: there is certainly no agreed upon model of non-rational stock price movements (if there were, it would promptly be arbitrag ed away). Instead, there are often conflicting predictions of overreaction and underreaction to news, momentum trading, trading on pseudo-news and the like, many of which can be tied to well-known behavioral regularities like loss aversion, ambiguity aversion, the representativeness heuristic, limited attention, etc. We can fairly assume that these traits are prompted by large numbers of situational factors whose interaction can be extraordinarily complex and contingent, making the “irrational” market seem fairly chaotic.

---


\(^{15}\) See Baker et al., supra note --.

\(^{16}\) See sources cited in note --- supra.
and subject to unpredictable mood swings. Numerous book length treatments of this field are available.\textsuperscript{17}

For purposes of legal analysis, we need only assume that stock market prices can diverge from fundamental value for sustained time periods (either for individual securities, industries or asset classes generally) and/or that market prices do not immediately impound all available public information. We then lose confidence in market price as a discipline, which was the primary assumption that motivated the bold predictions of corporate law and economics in the 70’s and 80’s in articulating optimal (often largely deregulatory) M&A legal policy—the celebrated work of Easterbrook and Fischel, etc.

This takes us to the main fork in the road. Irrational markets are plausible because they involve the participation of large numbers of smaller unsophisticated investors (“noise traders”) who, under the right conditions—particularly limited arbitrage because of short selling restrictions and limitations—can have sustained effects on stock prices. The smart money in the form of larger, sophisticated investors is generally, though not inevitably, presumed to be more rational but unwilling or unable to stem the tide of marketplace emotions. If we then assume rationality on the part of corporate managers, there are opportunities to exploit. Most obviously, there will be prices of individual companies that are depressed temporarily vis-à-vis their fundamental value, which makes them vulnerable to cherry-picking in the M&A market for less than a “fair” price\textsuperscript{18} (conversely, if it is the potential acquirer whose shares are overpriced because of irrational exuberance, it is time to do a stock-for-stock deal\textsuperscript{19}).

If structural or governance deficiencies exist on the target side that lead too readily to a sale, we may have an unnecessary and inappropriate transfer of wealth to acquiring firms, with unfortunately collateral consequences to employees, suppliers, etc. when the transactions are highly leveraged and thus carries excessive risk.


\textsuperscript{18} See Reinier Kraakman, Taking Discounts Seriously: The Implications of “Discounted” Share Prices as an Acquisition Motive, 88 Colum. L. Rev. 891 (1988).

We see the source here of many of the debates about takeover policy. The less confidence we have in market prices, the less we can trust individual shareholders to make rational decisions about whether to tender or not into a hostile bid. Collective action problems abound, and so most market critics tend toward accepting the need for a shareholders’ “bargaining agent” to make a sophisticated financial analysis of the bidder’s offer and act on their behalf. The poison pill is the mechanism of choice here, which moves us quickly to the question of whether a committee of independent directors of the target is likely to be a faithful bargaining agent. Scholars and practitioners disagree about that.\textsuperscript{20} An alternative might be to force greater disclosure from the bidder and/or target upon the commencement of a contested transaction and let the shareholders vote—a strategy that relies on a number of difficult assumptions about both the efficacy of disclosure and the rationality of shareholder voting decisions.

Again, this legal literature is so well developed that we need not dig any deeper into it. It is enough for now to see the connection of the behavioral finance literature and the unraveling of the law and economics orthodoxy when stock prices become less reliable. But a second branch of behavioral corporate finance relaxes the assumption of managerial rationality instead of (or in addition to) assuming market inefficiency, positing that managers make predictable cognitive errors either in bidding for another company or in responding to a bid, in both negotiated and hostile transactions.

This is a particularly interesting subject for our purposes because it brings into play all four of the steps that behavioral law and economics has to take to claim the desirability of some kind of law reform. M&A transactions are extraordinary financial events and so receive deep and sustained attention, not the kind of setting for “quick and dirty” heuristics. They are negotiated by the most seasoned business professionals—senior executives, aided by teams of lawyers and bankers—not your ordinary psychology laboratory subjects. And they are subject to an extensive multiperson process of deliberation and approval on both sides.

To be sure, there are conflicts of interest and incentive deficiencies that may distort decisions. Putting aside the “merger of equals” transaction, companies either acquire or are acquired, which means a premium will have to be paid to the target company shareholders (and perhaps pay-offs to their

For some time, it has been well known that there are incentives that favor acquisitions quite apart from strategy or profitability—so-called corporate imperialism is an agency cost problem arising from the fact that executive compensation and perquisites are more closely tied to size than efficiency. Hence managers may prefer non-value enhancing growth. And so, the empirical evidence that many acquisitions are “value-destroying” in hindsight comes as no surprise. But that is not irrationality, and requires no keen psychological insight to anticipate.

There is, however, a growing body of work suggesting that the agency cost explanation may not be entirely accurate, offering a behavioral account of bidder overpayment instead. I will not try to summarize all the research on this subject, but just offer an overview. One of the initial contributions here was by a distinguished (and otherwise fairly orthodox) financial economist, Richard Roll, who put forth his “hubris hypothesis”—that there is something akin to a winner’s curse that arises out of any auction-like setting because the winner will by definition have the most optimistic valuation of the asset in question (and thus presumably be an outlier). His use of hubris, a form of poor judgment, prompted others to look more closely at the psychological make-up of the person who controls the bidding: the acquirer’s CEO.

We noted earlier that there is no reason to believe that CEO’s are psychologically similar to the general population; the standard assumption has been that they are more cognitively adept and rational. But there is a significant literature in behavioral economics—both theoretical and empirical—that challenges that assumption and says that CEO’s, on average, are likely to be both overly confident in their abilities and more risk-seeking than a rational choice model would predict. In their overview of behavioral corporate finance, Baker, Ruback and Wurgler offer the basic intuition:

---


There are good reasons to focus on these particular biases in a managerial setting. First, they are strong and robust, having been documented in many samples, in particular samples of managers. Second they are often fairly easy to integrate into existing models, in that optimism can be modeled as an overestimate of a mean and overconfidence as an underestimate of variance. Third, overconfidence leads naturally to more risk-taking. Even if there is no overconfidence on average in the population of potential managers, those that are overconfident are more likely to perform extremely well (and extremely badly), placing them disproportionately in the ranks of upper (and former) management. And fourth, even if managers start out without bias, an attribution bias—the tendency to take greater responsibility for success than failure—may lead successful managers to become overconfident. . . .

This all follows fairly predictably from the tournament theory of organizational selection and promotion: as skill levels become more concentrated up the ladder, the winner of a contest among managers is the one willing to risk the most—and lucky enough not to have it blow up on him or her. Overconfidence leads to diminished risk perception.

In a series of articles, Malmendier and Tate take this idea and test it empirically against patterns of corporate M&A behavior, using a sample of Forbes 500 firms from 1980 to 1994:

We find that overconfident CEO’s are more likely to conduct mergers than rational CEO’s at any point in time. The higher acquisitiveness of overconfident CEO’s—even on average—suggests that overconfidence is an important determinant of merger activity. Moreover, the effect of overconfidence comes primarily from an increased likelihood of conducting diversifying acquisitions. Previous literature suggests that diversifying mergers are unlikely to create value in the acquiring firm.

---

23 See Baker et al., supra.
Thus it is consistent with our theory that overconfident managers are particularly likely to undertake them. Second, we find that the relationship between overconfidence and the likelihood of doing a merger is strongest when CEO’s can avoid equity financing, i.e., in the least equity dependent firms. Overconfident CEO’s strongly prefer cash or debt financed mergers to stock deals unless their firm appears to be overvalued by the market.25

Of course, these studies have to identify overconfidence: there are different kinds of metrics that have popular among behavioral economists who work with large data sets, particularly Malmendier and Tate’s choice to use stock option non-exercise as a proxy for overconfidence.26 Recently, however, a study by Graham, Harvey and Puri sought to dig more deeply and was able to administer standard psychology tests to a large sample of CEO’s and CFO’s, and then run regressions to identify correlations between personality types and basic corporate financial decisions, including M&A. The results confirmed the basic intuition that CEO’s, at least, are substantially more optimistic and risk tolerant than in general. They also find a significant relationship (making no claim about the direction of causality, however) between these traits and the frequency of M&A activity, which they find consistent with the hypotheses in both Roll and Malmendier and Tate.27

Although the overconfidence-based theory is the dominant approach in behavioral corporate finance, there are other provocative findings about M&A behavior. For example, a recent paper by Baker, Pan and Wurgler considers the influence of the target’s historic 52 week high (economically

---

26 For earlier work setting the stage for this preference, see Chip Heath et al., Psychological Factors and Stock Option Exercise, 114 Q.J. Econ. 601 (1999).
27 JOHN GRAHAM ET AL., MANAGERIAL ATTITUDES AND CORPORATE ACTIONS, Duke-NBER working paper, July 2009, available at http://ssrn.com/abstract=1432641. An obvious question to consider is how this benefits the firm, so that firms are willing to hire overconfident CEO’s. There are many answers in the literature. The dominant one is that an excess of optimism at the top has positive collateral effects that outweigh the occasional damage, such as encouraging cooperation and enthusiasm in the culture of the firm, or of promoting innovation. See DAVID HIRSHLEIFER ET AL., ARE OVERCONFIDENT CEO’S BETTER INNOVATORS?, April 2010 working paper, available at http://ssrn.com/abstract=1598021; Eric Van Den Steen, Organizational Beliefs and Managerial Vision, 21 J. L., Econ. & Org. 256 (2005).
irrelevant old news) on both bidder offers and target responses. With respect to target psychology, their hypothesis is:

The most obvious application involves the disposition effect, or the reluctance to realize gains relative to the reference point. While for some investors the reference point is likely to be their purchase price, another important reference point—and, importantly, one that is common across shareholders—is the firm’s 52 week high price. This logic predicts that targets are more likely to approve mergers in which the offer price approaches or exceeds the 52 week high. The S-shaped value function, on the other hand, predicts that the further is the current price from the 52 week high, the less influence the marginal dollar has in terms of the perception of losses. Anchoring and adjustment may also reinforce these predictions at the strategical level of negotiations over price.

With respect to bidders:

The bidder’s psychology can be affected by anchoring and adjustment both directly and strategically. The bidder may reason, if the target was valued at that level a few months ago, shouldn’t we, with our ability to realize synergies, value it above or at least near that same level? To the extent that logic is employed, the 52 week high becomes an anchor, and insufficient adjustment from that level becomes the norm. A bit more subtly, it suggests that since the bidder’s investors do not think as hard as its board about the target’s potential valuation, they are less biased by the anchoring phenomenon and so more likely to view 52 week high driven bids as overpaying. Once a valuation is established, the bidder must consider the minimum price that the target will accept. Bidder boards advised by experienced investment bankers are likely to predict that the target’s 52 week high will both be used as a strategic anchor against them in negotiations as well as a reference point that their own investors truly care about.

After considering a number of possible non-psychological alternative hypotheses, they present data showing that the 52 week high exerts a strongly disproportionate effect on deal outcomes, which they attribute largely to the target’s psychology and the bidder’s anticipation thereof.

We could go on at length; there is much more in the behavioral corporate finance literature that speaks to M&A activity either directly or

---

Going back to the hubris hypothesis and the winner’s curse, for example, we can also find emotion (affect) based explanations for the competitive urge that may produce excessive valuations on the part of acquirers, and perhaps reactive devaluation by targets. Commitment, confirmation and sunk cost biases are also likely to come into play. Group-level biases (risky shift, “groupthink”) may as well. The explosion of psychological research on negotiation behavior in the past few decades touches in many ways on issues of importance in M&A deal-making.

In addition, there is laboratory evidence to support the intuition that cultural conflicts may disable mergers even when they make sense on paper by failing to anticipate the learned linguistic and perceptual commonalities that help coordinate productive behavior in the constituent firms but clash and fail upon consolidation. Here again, overconfidence and other egocentric biases may well lead to a failure of prediction that underestimates the difficulty in finding synergies and eliminating redundancies when two distinct entities are merged.

But we need not go any more deeply into these because we have enough for a prima facie case, at least, that behavioral economics and behavioral finance have something potentially interesting to say to M&A law. In other words, I think that the research in this area meets the burden of proof on the first three steps of the analysis set forth in Part I. This work takes seriously the need to focus specifically on behavioral traits as they are revealed in high level corporate executives, not just the general population. It addresses the problem of how such traits might persist—perhaps flourish—in corporate settings by generating competitive gains that, on average, offset the harms predictably associated with rationally risky


31 See, e.g., Kfir Eliaz et al., Choice Shifts in Groups: A Decision-Theoretic Basis, 96 Am. Econ. Rev. 1321 (2006). As the contemporary literature points out, groups can be both more risk seeking and more risk averse, depending on context.

behavior. And it is sensitive to institutional context, conceding that we need evidence of problematic outcomes in the marketplace before the causal possibility of heuristics and bias should seriously be considered. Of course—and this is a point at which lawyers and social scientists often have difficulty with each other—methodological rigor in research in the social sciences cautions against too readily drawing generalizations from data, even when the results are statistically significant: there are always alternative causal explanations, risks associated with highly controlled experimental design, and expressions the need for future research. Law-making, on the other hand, cannot wait for scientific certainty and must try to draw best-available behavioral inferences from whatever knowledge is at hand, even when it is incomplete. My simple point, then, is that when coupled with evidence of poor outcomes for shareholders in many M&A transactions, the work on behavioral corporate finance gives us enough cause for the law to worry about the psychological risks we have been describing, and at least consider whether there are interventions that might help.

III. THE LAW’S RESPONSE TO THE BUY-SIDE PROBLEMS

We know that many mergers are value destroying, with cyclical variations in average frequency. The research just described offers some insight as to why these may occur. So how should law respond?

We should pause here for a predictable interjection from conventional financial economics. As noted, there is also a plausible non-psychological explanation for value-destroying mergers (an agency cost story about empire-building) and so resort to a behavioral account is unnecessarily complicating—outcomes are all that really matters. But for legal analysis, this is simply wrong. Among other things, corporate law tends to work with state-of-mind categories like good faith, gross negligence, scienter, etc. that are necessarily cognitive in nature. For example, intent or good faith standards might be of use in deterring M&A transactions that are deliberately empire-building (the economists’ assumption) but not those generated by overconfidence or similar biases that operate out of consciousness. We have to know something about the underlying behavior in order to know what categories to use, unless we are prepared to rely on strict liability—a strongly disfavored legal standard given the close judgments and nuances typically involved in business judgments.
Thus we come back to the fourth of the steps described in Part I: the normative choice. Staying focused on the bidder side of the transaction, there are a number of possible interventions that could respond to concerns about hubris, overconfidence and the winner’s curse: greater shareholder say over acquisition transactions, greater independent director control, more intense disclosure obligations or more searching judicial review are the four most obvious. Those familiar with corporate law will know that none of these is much of a check on value-destruction. While shareholder voting on the acquirer side is sometimes legally necessary, often it is not—and if there is no approval requirement, both federal and state law disclosure obligations diminish as well. Board approval is required, but without any special role for independent directors (in contrast to conflict of interest transactions, discussed infra). And the business judgment rule puts in place a weak rational basis test for judicial review, which can almost always be satisfied so long as procedural regularities are followed.

Perhaps, then, corporate law is being psychologically naïve in not trying to do more. My sense is probably not, however, and that there is more to the disinterest. After all, there are a fair number of Delaware corporate law cases where judges at both the Chancery Court and Supreme Court levels have made astute-enough psychological observations to show that they are aware of structural biases and egotistical inferences that can affect high-stakes transactional judgment.33

Rather, there are other reasons for what is probably fairly deliberate disregard. One, of course, is that we have to have some confidence in the efficacy and cost-effectiveness of the suggested intervention, and these may be questionable for other psychological and economic reasons. For instance, the law could insist on greater independent director control over acquisitions, on the assumption that they are less likely to exhibit overconfidence. That may be true, but psychology research has offered many reasons to be skeptical of director independence as a cure for bias, most having to do with the mix of reciprocity demands, low-powered incentives and informational deficiencies that can produce excessive

33 E.g., In re Oracle Corp. Deriv. Litig., 824 A.2d 917 (Del. Ch. 2003)(discussing many motivations in judging others—“Delaware law should not be based on a reductionist view of human nature that simplifies human motivations on the lines of the least sophisticated notions of the law and economics movement”); Chesapeake Corp. v. Shore, 771 A.2d 293, 297 (Del. Ch. 2000)(questioning possibly unconscious motivations of directors); see also note – infra.
deference to managerial preference. Greater shareholder approval rights may make sense, but are very costly and introduce uncertainty into the deal-making process—and one has to have a strong theory of rational and constructive shareholder voting behavior to predict that the benefits will outweigh these costs. Given the rise of institutional investors, who show some willingness to counter unwise expansion plans by acquiring management when given the opportunity, this possibility is not out of the question. But neither is it self-evident, and by and large voting rights are a legislative rather than judicial issue.

As to the business judgment rule, deference has many familiar justifications even if we accept that psychological biases may exacerbate the problem of value-destroying transactions. The business judgment rule is a rule of abstention based, among other things, on the lack of judges’ confidence in their own second-guessing skills—perhaps even a sense of their own hindsight bias—and how labor and resource-intensive judicial review can be if offered generously by the courts. Going back to the discussion in Part I, there is probably some ideological “just deserts” reasoning going on, too: shareholders who elected overconfident managers have themselves to blame in some abstract sense, and to the extent that executive overconfidence on average is a productive bias, shareholders should internalize the costs of competitive zeal along with the benefits.

In sum, there are significant limits on judges’ ability and willingness to incorporate behavioral insights into M&A law, at least on the buy-side. So does that render this exercise trivial? By no means, because corporate law is more than just about strategies of judicial or regulatory intervention. The practice of corporate law and corporate governance—in which lawyers are centrally involved—requires a great deal of psychological as well as economic astuteness, and the rich body of behavioral M&A research can and should inform how deals are negotiated, structured and approved even in setting of minimal judicial review. Well-motivated independent directors need, as Malmendier and Tate say, “to play a more active role in project assessment and selection to counterbalance CEO overconfidence” whether

---

34 E.g., Donald C. Langevoort, _The Human Nature of Corporate Boards: Law, Norms and the Unintended Consequences of Independence and Accountability_, 89 Geo. L.J. 797 (2001); but see note --- infra.


36 Malmendier & Tate, supra. For evidence that a well structured board does in fact counter executive-level overconfidence, see ADAM C. KOLASINSKI & XU LI, Do
or not the law compels them to, and this research offers a useful assessment of psychological risk from which to structure more intelligent questioning of managers when they aggressively promote a deal. It is not simply a matter of figuring out whether the managers sincerely believe this deal is in the company’s best interest—the test, I suspect, that many naïve directors too readily employ, and in which the company’s lawyers too willingly acquiesce.

IV. TURNING TO THE SELL-SIDE: CONFLICTS OF INTEREST

The overconfidence and winner’s choice literature focuses on value-destroying acquisitions brought on by acquiring company hubris, from which target company shareholders (if not the target company as an entity) presumably benefit. However, at least some of the insights can be transferred to the sell-side with respect to negotiated acquisitions—e.g., managerial overconfidence among potential target companies potentially frustrates deals that arguably should be made, and as Baker, Pan and Wurgler show in their research, other effects like disposition and anchoring and adjustment can work to influence seller behavior. Negotiated deals that do not happen are by and large insulated from judicial review, however, which brings us back to many of the same normative “fourth step” issues just considered.

But judicial review does intensify on the sell-side in a set of M&A transactions: defensive responses to hostile takeover bids under Delaware’s Unocal and Revlon standards, and the entire fairness inquiry under Weinberger and its progeny for conflict of interest transactions. This is much too complicated a body of law to dig into deeply, but worth a few brief observations.

In these areas, independent director control and/or shareholder approval take on much greater significance. As just noted, there may be good psychological justification for this, though that is rarely mentioned explicitly in the case law or the academic literature—fear of disloyalty by target management in trying to hold onto jobs and the other private benefits

---


37 Many have commented on the tensions and uncertainties in the law. See, e.g., Ronald Gilson, Unocal Fifteen Years Later (and What We Can Do About It), 26 Del. J. Corp. L. 491 (2001); William T. Allen et al., Function Over Form: A Reassessment of Standards of Review in Delaware Corporation Law, 56 Bus. Law. 1287 (2001).
of control, and maybe by target directors as well, is the standard explanation for the enhanced scrutiny in the takeover context. In going private transactions, the controlling person’s financial interest in freezing out the minority shareholders a low price is plain, and the assumption is that it is strong enough to overwhelm any inclination of independent directors to do right by the minority.

With respect to judicial review, the insight that psychology can offer has to do with the subtle, largely unconscious process by which people rationalize a preferred course of action as the right thing to do. Conflicts of interest have a strong pull even when the most obvious sources are removed—in other words, one can remove directly interested directors or shareholders from the deliberative process and still expect a bias in terms of transactional outcomes. Interesting psychological research has shown that “gatekeepers”—even statutorily regulated independent auditors—are prone to motivated inference when there are strong client or customer preferences and some “wiggle room” for coming out the preferred way. For purposes of the standard of review, allowing too much discretion—giving independent directors full sway so long as they act in good faith, for example, or within some far-ranging zone of reasonableness—probably leaves too much room for bias.

But here again, the reasons both for and against business judgment rule-like abstention are complicated, and courts may well choose to look the other way rather than engage in deep inquiries into subjective motivation even when they recognize the psychological risk. The most important message of this research is for those trying to manage the deal process in shareholders’ best interest, who should recognize the pressures driving members of the deal team—not just the most obviously interested parties but the lawyers, bankers and accountants as well—and be demanding and critical even when persuaded that they genuinely believe in doing the deal.

The same can be said with respect to disclosure of conflicts of interest, which may occur (often because legally required) in many different contexts. In a well-known psychology article Cain, Loewenstein and Moore offered striking experimental evidence that disclosure of conflicts actually both makes opportunism by the discloser more likely (because

---

38 This is occasionally remarked upon by the courts. E.g., Paramount Comm. Inc. v QVC Network Inc., 637 A.2d 34 (Del. 1994)(noting the board’s obsessive focus on completing the original deal—“they remained prisoners of their own misconceptions”).

disclosure creates greater moral freedom to so behave because the subject has been warned) and at the same time makes the subject more willing to trust (because the act of disclosing is disarming, at least when it appears to be voluntary).\(^{40}\) Subsequent research has questioned the strength of these effects, at least where the subject can hold the discloser to account later on.\(^{41}\) This remains of interest in the transactional setting, however, because of the pervasiveness of disclosure and the variability in the level of accountability.

Consider, for example, a Second Circuit case, Minzer v. Keegan,\(^ {42}\) wherein a controlling entity engineered a freeze out merger at a price unpopular with many shareholders, who nonetheless voted to approve the transaction, which was at least better than the prevailing distressed market price for the minority stock. The conflicting interest was fully disclosed, but the controlling party neglected to reveal a potentially serious inquiry by a third party, who was prepared to pay more. The court held that there was no liability even if that was a material omission, because the shareholders had no power to compel the majority to consider the alternative bid—hence the freeze out price was their only real choice. In other words, there was no causal injury. Putting aside whether this was the right outcome, one at least has to wonder whether the disclosure of the conflict let the controlling person feel more freedom to cast fiduciary obligations aside, or whether shareholders might have been lulled into thinking that the transaction was being handled responsibly, in part, precisely because the adverse interest disclosure was so clear.

V. CONCLUSION

Research in psychology and behavioral economics sheds interesting, sometimes disturbing light on the processes by which M&A transactions occur. Of course there findings are not limited to M&A. The same research programs described earlier—focused on overconfidence, etc.—have identified other corporate finance contexts in which similar effects are

\(^{41}\) See Brian Church & Xi Kuang, *Conflicts of Interest, Disclosure and (Costly) Sanctions: Experimental Evidence*, 38 J. Leg. Stud. 505 (2009); see also Christopher Koch & Carsten Schmidt, *Disclosing Conflicts of Interest—Do Experience and Reputation Matter?* 35 Acct’g, Org. & Soc’y 95 (2010).
\(^{42}\) 218 F.3d 144 (2d Cir. 2000).
observed. Relevant to the recent financial crisis, one can easily see how hubris and excessive optimism can lead down the slippery slopes to both excessive risk-taking and concealment of those risks from investors, where the insiders may, at least for a time, themselves been blinded to reality.\textsuperscript{43} Categories like bad faith and scienter may be very poor fits for these kinds of situations, too.

As I have emphasized, there are limits on the ability or the willingness of courts and regulators to confront the highly contingent, situational nature of officer/director inference and decision making. But we can at least hope that they will accept the main insight from the behavioral literature, that rationality in corporate judgment cannot be presumed, and often fails. Beyond that, the greatest usefulness of this research is really to participants in the transactional process itself, who very much need to understand better not only that human nature poses a deal risk, but how, why, and under what circumstances there is reason to worry.\textsuperscript{44}


\textsuperscript{44} An excellent resource is PAUL BREST & LINDA HAMILTON KRIEGER, \textit{PROBLEM SOLVING, DECISION MAKING AND PROFESSIONAL JUDGMENT: A GUIDE FOR LAWYERS AND POLICYMAKERS} (2010).