THE DUTIES OF DIRECTORS AND OFFICERS WITHIN THE FUZZY ZONE OF INSOLVENCY

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The zone of insolvency adds to the uncertainty of directors and officers who face dramatically deteriorating corporate financial conditions. The complication posed by the multiple, non-operationalized definitions of zone of insolvency affects company stakeholders by the resulting damage to the company's decision processes and increases in transaction costs. This paper reviews recent case law decisions involving zone of insolvency, identifies directors' and officers' fiduciary duties owed to stakeholders as the company operates in the zone, and proffers an approach to improving the operational definition of zone of insolvency that eliminates the fuzziness and helps clarify the leadership priorities of a financially troubled firm.

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I. THE PROBLEMATIC ZONE OF INSOLVENCY

The courts have defined four major financial conditions a company may experience as it deteriorates from solvency to bankruptcy.1 In the first condition, the company is solvent,2 where its current assets exceed its current liabilities.3 A solvent company should have cash reserves, annual surpluses, minimal levels of debt, and the ability to invest in its future operations. The second condition, zone of insolvency, includes a financially distressed company with deteriorating fiscal conditions such as minimal cash reserves, only marginal surpluses, increasing debt, and an inability to invest in future operations.4 In the third condition, insolvency, the worsening of the company's economic condition causes the company to become insolvent as determined by the Bankruptcy Code5 or case law.6 In the fourth condition, bankruptcy, the company either voluntarily files for bankruptcy or is involuntarily pulled into bankruptcy by its creditors.

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1 To address standards applicable in a particular jurisdiction, counsel should examine the laws of the specific jurisdiction involved because questions of director and officer liability and other corporate affairs are determined under the laws of jurisdiction of incorporation. See RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 309 (1971) (“The local law of the state of incorporation will be applied to determine the existence and extent of a director's or officer's liability to the corporation, its creditors and shareholders.”); see also Anu R. Singh & Harold L. Kaplan, The Opportunity and "Duty" to Restructure Nonprofit Health Care Debt, 28 AM. BANKR. INST. J., June 2009, at 14, 66 n.12 (stating that "[w]hen considering application of zone-of-insolvency standards, the state law of the relevant jurisdiction may need to be reviewed").

2 See Mellon Bank, N.A. v. Aetna Bus. Credit, Inc., 619 F.2d 1001, 1014 n.17 (3d Cir. 1980) (stating that "determination of solvency requires a factual review of the borrowers' financial condition and the application of complex and sometimes conflicting accounting practices and valuation theories"); see also Consol. Tank-Line Co. v. Kan. City Varnish Co., 43 F. 204, 207 (C.C.W.D. Mo. 1890) (noting that "it is very difficult for a court to lay down a definition of solvency or insolvency that is applicable interchangeably to every case").

3 Cf. Bowman v. U.S. Dep't of Agric., 363 F.2d 81, 84–85 (5th Cir. 1966) (holding definition of insolvency, where current liabilities exceed current assets, was reasonable). See generally Laker v. Vallette, No. 92-1683, 1993 WL 114515, at *2 (E.D. La. Mar. 31, 1993) (stating that "[j]n determining whether transfers are voidable, the courts look to this balance-sheet solvency/insolvency test—whether the assets outweigh the liabilities").

4 See Rutheford B. Campbell, Jr. & Christopher W. Frost, Managers' Fiduciary Duties in Financially Distressed Corporations: Chaos in Delaware (and Elsewhere), 32 J. CORP. L. 491, 493 (2007) (describing "zone of insolvency" as period when corporation is close to insolvency but not yet insolvent).

5 See 11 U.S.C. § 101(32) (2006) (stating that "[t]he term 'insolvent' means—(A) with reference to an entity other than a partnership and a municipality, financial condition such that the sum of such entity's debts is greater than all of such entity's property, at a fair valuation, exclusive of—(i) property transferred, concealed, or removed with intent to hinder, delay, or defraud such entity's creditors; and (ii) property that may be exempted from property of the estate under section 522 of this title").

6 Insolvency can also be determined by the equity test (company lacks liquidity that prevents paying debts as they become due in the ordinary course of business), see Hill v. Cargill, Inc. (In re Hill), 8 B.R. 779, 780 (D. Minn. 1981); balance sheet test (company's assets are below its liabilities with no reasonable prospect that the business can successfully be continued), see Advanced Telecomm. Network, Inc. v. Allen (In re Advanced Telecomm. Network, Inc.), 490 F.3d 1325, 1333 (11th Cir. 2007); company's ability to support financing of future operations, see Moody v. Sec. Pac. Bus. Credit, Inc., 971 F.2d 1056, 1070 & n.20 (3d Cir. 1992); and if company's liabilities are in excess of reasonable market value of its assets, see Kaye v. Lone Star Fund V (U.S.), L.P., No. 3:09-cv-2263-M, 2011 WL 1548967, at *21 (N.D. Tex. Apr. 26, 2011).
The fiduciary duties7 that directors and officers owe to shareholders, creditors, and the corporation are linked by the courts to each financial condition.8 These fiduciary duties consist of care, loyalty, and good faith,9 and must be carried out at all times.10 Directors and officers owe these duties to the parties regardless of the company's size, industry, and period of existence.11 Table 112 provides a summary of the laws that identify the parties to whom directors and officers owe their fiduciary duties, and how these parties change in priority depending on the financial condition of the company.

Cases regarding breaches of duty of care have generally accreted nonfeasance, where directors and officers failed to supervise or monitor, or misfeasance, where an improper decision was made.13 The duty of care requires the director to be attentive and informed about all material facts prior to taking action on a matter.14 A

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7 See e.g., Carson v. Lynch Multimedia Corp., 123 F. Supp. 2d 1254, 1259 (D. Kan. 2000) (noting that "in a fiduciary relationship, the property, interest or authority of the other is placed in the charge of the fiduciary"); Denison State Bank v. Madeira, 640 P.2d 1235, 1241 (Kan. 1982) (stating that fiduciary relationship is equitable concept where one party acts for benefit of another); Little v. Phipps, 94 N.E. 260, 261 (Mass. 1911) (stating that fiduciary duty is "founded on the highest and truest principles of morality"); Edwin W. Hecker, Jr., Fiduciary Duties in Business Entities, 54 KAN. L. REV. 975, 976 (2006) (noting that "[a] fiduciary relationship is one in which a person transacts business or manages money or property, not primarily for the person's own benefit, but for the benefit of another. It involves discretionary authority on the part of the fiduciary and dependency and reliance on the part of the beneficiary"); Cory Dean Kandestin, The Duty to Creditors in Near-Insolvent Firms: Eliminating the "Near Insolvency" Distinction, 60 VAND. L. REV. 1235, 1241–42 (2007) (stating that fiduciary duties provide guidance as to obligations and relationships among shareholders, corporation, directors, and officers; and shareholders require protection allowed by fiduciary law because of their lack of control over corporation's ordinary business operations and their need to rely on directors and officers to properly manage corporation).


9 In re Fleming Packaging Corp., 370 B.R. 774, 783 (Bankr. C.D. Ill. 2007) (stating that "[c]orporate directors and officers owe the corporation a triad of fiduciary duties: due care, loyalty and good faith" (citing McMullin v. Beran, 765 A.2d 910 (Del. 2000))).

10 Id. (maintaining directors and officers have no exemption from fiduciary duty owed to their company (citing Emerald Partners v. Berlin, 787 A.2d 85 (Del. 2001))); see In re Walt Disney Co. Derivative Litig., 907 A.2d 693, 745–46 (Del. Ch. 2005) (stating that although "the duties of due care and loyalty are largely regarded as separate and distinct under Delaware law, the duty of good faith has . . . been considered, 'inseparably and necessarily intertwined' with the duties of due care and loyalty").

11 See George W. Kuney, Fiduciary Duties of Directors and Officers Operating in the Zone of Insolvency, CAL. BUS. L. PRAC., Summer 2002, at 73–74 (identifying scope and breadth of officers' and directors' fiduciary duties).

12 See infra Table 1 (charting officers' and directors' fiduciary duty across four corporate financial scenarios).

13 The specific concepts described in the duty of care, loyalty, and good faith during solvency also arguably apply in the zone of insolvency, insolvency, and bankruptcy. See Jonathan Friedland, Robert Scheinbaum & Andrea Johnson, Shades of Gray: Recent Developments That Impact Advising Directors and Officers in the Twilight Zone of Insolvency, NORTON ANN. SURV. BANKR. L., 2006, at 285, 286 (explaining duty of care and duty of loyalty when company is in zone of insolvency).

14 Lange v. Schropp (In re Brook Valley VII, Joint Venture), 496 F.3d 892, 900 (8th Cir. 2007) (stating that "the duty of care requires the fiduciary to make good-faith decisions that can be attributed to a rational business purpose"); see, e.g., Malone v. Brincat, 722 A.2d 5, 11–12 (Del. 1998) (noting that directors and officers are required to make appropriate disclosures of pertinent information within board's control); Aronson v. Lewis, 473 A.2d 805, 812 (Del. 1984) (commenting directors have duty to inform themselves of
director must act in good faith and is held to the standard of care that an ordinary prudent director would exercise under similar circumstances.\textsuperscript{15}

The nature and extent of reasonable depends on the type of corporation, its size, and its financial resources.\textsuperscript{16} However, as a general rule, the director should possess at least a rudimentary understanding of the business and become familiar with fundamentals of business operations and the competitive situation in which the corporation is engaged.\textsuperscript{17} Although directors are not required to audit corporate books, they should maintain familiarity with the financial status of the corporation by a regular review of financial statements.\textsuperscript{18} The courts believe that if a director does not have the sufficient business knowledge experience required to perform the job, the director should either acquire the knowledge by inquiry or refuse to act.\textsuperscript{19} The duty of care also extends to protection of corporation and shareholders from perceived harm, whether threats originate from third parties or other shareholders.\textsuperscript{20}

The duty of care ensures that the directors fulfill their function of monitoring management.\textsuperscript{21}

The duty of loyalty becomes relevant when there is a conflict between the interests of the fiduciary and the entity to which he owes loyalty.\textsuperscript{22} The duty of loyalty requires an undivided and unselfish loyalty to the corporation, and demands that there shall be no conflict between the duty and self-interest.\textsuperscript{23} In \textit{Meinhard v. all material information prior to making business decisions); \textit{Model Bus. Corp. Act} § 8.30 (2005) (stating that each member of the board of directors, when discharging the duties of a director, shall act: "(1) in good faith, (2) with the care of an ordinary prudent person in a like position would exercise under similar circumstances; and (3) in a manner the director reasonably believes to be in the best interests of the corporation").

\textsuperscript{15} Meyers v. Moody, 693 F.2d 1196, 1209 (5th Cir. 1982) (defining "due care" as "that degree of care which a person of ordinary prudence would exercise under the same or similar circumstances" in the director as fiduciary context).


\textsuperscript{17} \textit{Id.} at 821 (outlining basic principles for directors to discharge their duties).

\textsuperscript{18} \textit{Id.} at 822 (noting that "[i]n some circumstances, directors may be charged with assuring that bookkeeping methods conform to industry custom and usage").

\textsuperscript{19} \textit{Id.} at 821–22 (describing appropriate level of comfort corporate director should have with business of corporation).

\textsuperscript{20} Unocal Corp. v. Mesa Petroleum Co., 493 A.2d 946, 955 (Del. 1985) (stating that "[i]n the board's exercise of corporate power to forestall a takeover bid our analysis begins with the basic principle that corporate directors have a fiduciary duty to act in the best interests of the corporation's stockholders . . . [and] their duty of care extends to protecting the corporation and its owners from perceived harm whether a threat originates from third parties or other shareholders") (citation omitted).

\textsuperscript{21} See Martin v. Feilen, 965 F.2d 660, 669–70 (8th Cir. 1992) (noting that "[d]epending upon the circumstances, the director's duty to monitor the actions of appointed trustees may impose a duty to prevent wrongful conduct"); Lawrence E. Mitchell, \textit{The Fairness Rights of Corporate Bondholders}, 65 N.Y.U. L. Rev. 1165, 1172 (1990) (discussing reasonable care as applied to corporate management to ensure board monitors management).

\textsuperscript{22} See \textit{Lange v. Schropp (In re Brook Valley VII, Joint Venture)}, 496 F.3d 892, 900 (8th Cir. 2007) (explaining situations where duty of loyalty comes into play).

\textsuperscript{23} Guth v. Loft, Inc., 5 A.2d 503, 510 (Del. 1939) ("The rule that requires an undivided and unselfish loyalty to the corporation demands that there shall be no conflict between duty and self-interest. The
Salmon, Judge Cardozo described the duty of loyalty between fiduciaries as "something stricter than the morals of the market place," and honesty. The duty of loyalty suggests that interests of the corporation and shareholders must take precedence over any personal interests of the corporation's directors or officers. This duty prevents directors and officers from usurping corporate opportunity, competing with the corporation, voting on corporate opportunities where the director has a personal interest, profiting from inside information, assigning excessive compensation, or committing waste with corporate funds.

Directors and officers are considered "interested" if they make personal profit from a transaction by dealing with the corporation, transact business with a second corporation of which they are also a director or officer or are substantially associated, or transact corporate business in their capacity with a family member. There is a violation of fiduciary duty when directors and officers deliberately misinform shareholders about the company's business directly or via a public statement.

The obligation to act in good faith is a component of the duties of loyalty and care. Several courts recognized that the duty of good faith and the duty of loyalty occasions for the determination of honesty, good faith and loyal conduct are many and varied, and no hard and fast rule can be formulated. The standard of loyalty is measured by no fixed scale.

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24 Salmon, 24 Judge Cardozo described the duty of loyalty between fiduciaries as "something stricter than the morals of the market place," and honesty.

25 See id. at 546 (stating that "[a] trustee is held to something stricter than the morals of the market place. Not honesty alone, but the punctilio of an honor the most sensitive, is then the standard of behavior").

26 See Guth, 5 A.2d at 510 ("Corporate officers and directors are not permitted to use their position of trust and confidence to further their private interests.").

27 See Liston v. Gottsegen (In re Mi-Lor Corp.), 348 F.3d 294, 303 (1st Cir. 2003) (stating that "to meet a fiduciary's duty of loyalty, a director or officer who wishes to take advantage of a corporate opportunity or engage in self-dealing must first disclose material details of the venture to the corporation, and then either receive the assent of disinterested directors or shareholders, or otherwise prove that the decision is fair to the corporation").

28 1 JOSEPH D. ZAMORE, MARY C. SOTERA & SUSAN FERRARO SMITH, BUSINESS TORTS § 2.01 (Matthew Bender, Rev. Ed. 2010) (recognizing conflict when officers and directors determine corporate officials' compensation).


30 Floyd v. Hefner, 556 F. Supp. 2d 617, 649 (S.D. Tex. 2008) (stating that "[a]n officer or director is considered 'interested' if he or she (1) makes a personal profit from a transaction by dealing with the corporation or usurps a corporate opportunity, (2) buys or sells assets of a corporation, (3) transacts business in his or her officer's or director's capacity with a second corporation of which he or she is also an officer or director or is significantly financially associated, or (4) transacts corporate business in his or her officer's or director's capacity with a family member").


32 E.g., In re Fleming Packaging Corp., 370 B.R. 774, 783 (Bankr. C.D. Ill. 2007) (noting that "duty of good faith has, at times, been considered, 'inseparably and necessarily intertwined' with the duties of due care and loyalty" (citing In re Walt Disney Co. Derivative Litig., 907 A.2d 693, 745–46 (Del. Ch. 2005))); Stone v. Ritter, 911 A.2d 362, 370–71 (Del. 2006) (stating that duty to act in good faith is subsumed within duty of loyalty).
The duty of good faith requires directors and officers to act at all times with honesty of purpose and in the best interests and welfare of the corporation. The duty of good faith requires all actions to be of "true faithfulness and devotion" to the corporation and shareholder's interest. The act of a fiduciary constitutes a breach of good faith when the purpose is other than advancing the corporation's best interest, when the intent is to violate the law, or when the intent is to violate or consciously disregard a duty.

While the corporation is solvent, the director and officers owe fiduciary duties only to the corporation and its shareholders. When the corporation becomes insolvent, the fiduciary duties of directors and officers switch to cover the company's creditors. When the company moves into bankruptcy, the directors' and officers' fiduciary duties switch back and are once again owed to the corporation, creditors, and shareholders, with the goal to maximize the bankruptcy estate.

Financial deterioration for a corporation is often a gradual process, and the courts have elected not to declare a "magic dividing line" between solvency and insolvency that would clarify when the recipients of the fiduciary duties of

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34 In re Walt Disney Co. Derivative Litig., 907 A.2d 693, 755 (Del. Ch. 2005) ("To act in good faith, a director must act at all times with an honesty of purpose and in the best interests and welfare of the corporation. The presumption of the business judgment rule creates a presumption that a director acted in good faith.").

35 Mukamal v. Bakes, 383 B.R. 798, 825 (S.D. Fla. 2007) ("The good faith required of a corporate fiduciary includes not simply the duties of care and loyalty, in the narrow sense that I have discussed them above, but all actions required by a true faithfulness and devotion to the interests of the corporation and its shareholders.").

36 Id. (enumerating these three examples of bad faith, but also acknowledging that "[t]here may be other examples of bad faith yet to be proven or alleged").


40 Michael A. Bloom et al., The Fiduciary Duties of Officers and Directors, PA. B. INST., Apr. 2009, at 22 (stating that duty of directors and officers in bankruptcy "is to maximize the total interests of creditors and shareholders as a whole" and preserve bankruptcy estate's value); see In re Truco, Inc., 110 B.R. 150, 152 (Bankr. M.D. Pa. 1989) (determining transfer of funds for personal benefit to be improper and requiring return to bankruptcy estate).

41 Kandestin, supra note 7, at 1237 (noting that "while the law of fiduciary duty is clear when applied to healthy, solvent corporations, its application becomes muddled when applied to financially distressed firms"); see Donald J. Detweiler & Sandra G.M. Selzer, Scope of Directors' Fiduciary Duties to Creditors: New Delaware Decision Sets Bright-Line Limit, 26 AM. BANKR. INST. J., July/Aug. 2007, at 1, 54 n.4 (declaring uncertainty of when corporation is in "zone of insolvency" is likely to lead to increased litigation).
directors' and officers' switch in type or priority. Instead, the transition between solvency and insolvency, called the zone of insolvency, is a quantitatively and operationally undefined period when insolvency is a suspected outcome of continuing operations.

The court in Credit Lyonnais Bank Nederland, N.V. v. Pathe Communications Corp. recognized that directors' duties to a solvent corporation operating near insolvency must also encompass the interests of creditors. Creditors have viewed and applied the Credit Lyonnais decision as a means to scrutinize directors' and officers' actions and decisions during the zone of insolvency period. The recent court holdings in North American Catholic Education Programming Foundation, Inc. v. Gheewalla, Berg & Berg Enterprises, LLC v. Boyle, and Torch Liquidating Trust ex rel. Bridge Associates, L.L.C. v. Stockstill support this view by limiting the fiduciary duties that directors and officers owe to creditors when the corporation operates in the zone of insolvency. However, these latest court decisions leave numerous unanswered legal questions, making the zone of insolvency a topic subject to future litigation.

Each financial condition exposes a corporation's directors and officers to lawsuits from dissatisfied shareholders, investors, creditors, and regulatory bodies. In 2008, over 16 percent of 2,599 companies reported claims relating to director and officer liability in the preceding decade, and approximately 26 percent of

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43 Vincent Ryan, World Turned Upside Down, CFO MAG., May 2009, at 36, available at http://www.cfo.com/printable/article.cfm/13526122 (stating that "zone of insolvency" is a legal term for when a company is "in imminent danger of going bankrupt"); see Anna Manasco Dionne, Living on the Edge: Fiduciary Duties, Business Judgment and Expensive Uncertainty in the Zone of Insolvency, 13 STAN. J.L. BUS. & FIN. 188, 188 (2007) (stating that "[t]he terms 'brink,' 'vicinity,' and 'zone' of insolvency are equivalent").
45 Id. at *34 & n.55 ("[D]irectors will recognize that in managing the business affairs of a solvent corporation in the vicinity of insolvency, circumstances may arise when the right (both the efficient and the fair) course to follow for the corporation may diverge from the choice that the stockholders (or the creditors, or the employees, or any single group interested in the corporation) would make if given the opportunity to act."); see Bloom et al., supra note 40 (stating that "Credit Lyonnais suggests that directors' obligations shift to the 'community of interests' when the entity is operating in the zone or vicinity of insolvency").
46 Brian E. Geer, Fiduciary Duties When the Corporation Is in the Zone of Insolvency, 25 AM. BANKR. INST. J., Nov. 2006, at 26, 56 (reading Credit Lyonnais decision as "a sword for creditors as opposed to a shield for directors").
47 930 A.2d 92 (Del. 2007).
company executives believed that it was likely that their companies would experience some type of director and officer lawsuit in the near future.\(^{52}\)

However, the zone of insolvency and bankruptcy conditions are particularly litigious because the potential financial losses during these periods are especially large. The 2007-2009 recession in the U.S. produced extremely high degrees of these two conditions. According to the Administrative Office of the U.S. Courts, there were 43,546 bankruptcy filings involving business debts in 2008, a 54 percent increase over the prior year.\(^{53}\) The filings during a 12-month period, ending in September 30, 2009, report 58,721 business bankruptcies, which is a 51 percent increase over the same period the prior year.\(^{54}\) Consequently, the economic recession and a significant increase of chapter 11 bankruptcy filings are likely to prompt a wave of litigation pertaining to breaches of fiduciary duties in the zone of insolvency.

Additionally, the latest settlements and class action lawsuits against directors and officers should heighten their concern. The rulings suggest that a portion of these settlements must come from directors and officers personally rather than entirely from their liability insurance.\(^{55}\)

Because there is no clearly defined scope of obligations, responsibilities, and duties during the zone of insolvency, directors and officers find themselves in a fuzzy period of heightened uncertainty. The difficult questions of when the period of zone of insolvency begins and ends and to whom fiduciary duties are owed continue to exist. As a result, directors and officers lack legal guidance as to exactly when creditors or shareholders must be primary recipients of their duties. In an economic environment where shareholders, creditors, and other parties look to recover their investments, this lack of clarity in the law invites lawsuits from


\(^{55}\) E.g., Shawn Young, Ex-WorldCom Directors Reach Pact, WALL ST. J., Mar. 21, 2005, at A6 (noting that directors were required to pay $ 20.2 million from their own funds); Rebecca Smith & Jonathan Weil, Ex-Enron Directors Reach Settlement, WALL ST. J., Jan. 10, 2005, at C3 (stating that directors were required to pay $ 13 million from their own funds).
creditors seeking relief. Creditors will aggressively assert that directors and officers owed them fiduciary duties in the zone of insolvency, if such claim materially expands the period during fiduciary duties were owed, thus enhancing their chances of recovery.

Ambiguous guidelines imposed by the judiciary with regard to the zone of insolvency create uncertainty for directors and officers about to whom their duties are owed, which affect business decisions processes, thereby increasing transaction costs of risky decisions, and allowing creditors to pursue inventive ways to claim recovery. These ambiguous guidelines and their negative consequences also affect highly debt-leveraged businesses engaged in M&A activity, and businesses emerging from chapter 11 bankruptcy. They also affect corporate efforts to recruit reputable directors and officers to run their business, in addition to attorneys, financial advisors, investment bankers, accountants, and shareholders who bear the risk of litigation, and substandard returns when companies operate at suboptimal levels to avoid lawsuits.

The lack of an unambiguous, legal, and operational definition permits creditors, shareholders, courts, and other parties to unreliably, unpredictably, and inconsistently classify companies as operating in the zone of insolvency. The problem posed by the zone of insolvency needs to be addressed to resolve

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56 See Detweiler & Selzer, supra note 41, at 55 (predicting increased litigation over when corporation becomes insolvent).
57 Roger A. Lane, Direct Creditor Claims for Breach of Fiduciary Duty: Is they is, or is they ain't?, 1 J. BUS. & TECH. L. 483, 485 (2007) (stating if creditor can assert zone of insolvency claim and expand time it was owed fiduciary duties, it can enhance damages claims).
58 Dionne, supra note 43, at 189 (noting uncertainty about fiduciary duties generated by vague judicial standards regarding zone of insolvency); see Ryan, supra note 43, at 36, 39 (stating chief financial officers are navigating in poorly defined terrain when their company is operating in zone of insolvency; and that zone of insolvency is realm into which chief financial officers would rather not venture, but they cannot ignore it).
59 Dionne, supra note 43, at 191 (explaining M&A activity often involves risking large portions of corporate assets and increased zone of insolvency fiduciary duties would increase number of corporate directors exposed to lawsuits).
62 Dionne, supra note 43, at 192–93 (noting impact of uncertainty about increased exposure of directors on legal and financial advisors); see Ryan, supra note 43, at 38 (stating that attorneys have job of informing board of directors and management that their company is operating in zone of insolvency and that their new decision-making should include interests of creditors as well as shareholders).
63 See Dionne, supra note 43, at 190 (stating companies operating on close margins might never leave zone of insolvency).
uncertainty in the law, redefine fuzzy and ambiguous standards, specify the scope of the zone, and provide guidance to directors and officers.

II. CORPORATE DIRECTORS' AND OFFICERS' FIDUCIARY DUTIES DURING FOUR FINANCIAL CONDITIONS

The financial condition of the corporation dictates to whom its directors and officers owe fiduciary duties.64 The parties to whom these fiduciary duties are owed vary significantly as the corporation's economic health deteriorates from solvency to bankruptcy.

A. Solvency

When a corporation is solvent,65 directors and officers owe fiduciary duties of care, duty loyalty, and duty to act in good faith66 to the corporation and its shareholders.67 If directors breach their fiduciary duties, the corporation's shareholders may enforce the duties owed to them by directors by bringing derivative action claims on behalf of the corporation.68

When the corporation is solvent, directors and officers do not owe fiduciary duties to constituencies other than the corporation and its shareholders.69 Thus, as long as the corporation is solvent, the creditors are not owed any fiduciary duties by

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64 See Wooley v. Lucksinger, 14 So. 3d 311, 405 (La. Ct. App. 2008) (defining fiduciary duty as "[a] duty of utmost good faith, trust, confidence, and candor owed by a fiduciary (such as a lawyer or corporate officer) to the beneficiary (such as a lawyer's client or a shareholder); a duty to act with the highest degree of honest and loyalty toward another person and in the best interests of the other person (such as the duty that one partner owes to another" (quoting BLACK'S LAW DICTIONARY 523 (7th ed. 1999))).

65 A corporation is solvent when its assets exceed its liabilities at fair value, and it is able to pay its debts as they come due. Cf. SV Inv. Partners, LLC v. ThoughtWorks, Inc., 7 A.3d 973, 987 (Del. Ch. 2010) (suggesting corporation may be insolvent "when its liabilities exceed its assets, or when it is unable to pay its debts as they come due").

66 In re Abbott Labs. Derivative S'holders Litig., 325 F.3d 795, 808 (7th Cir. 2003) (stating that "Delaware law imposes three primary fiduciary duties on the directors of corporations; the duty of care, the duty of loyalty, and the duty of good faith").

67 E.g., In re Doctors Hosp. of Hyde Park, Inc., 474 F.3d 421, 428 (7th Cir. 2007) (stating that "as long as a corporation is solvent, directors typically owe fiduciary duties only to shareholders"); Revlon v. MacAndrews & Forbes Holdings, Inc., 506 A.2d 173, 179 (Del. 1986) (stating that "the directors owe fiduciary duties of care and loyalty to the corporation and its shareholders"); Campbell & Frost, supra note 4, at 499 ("[C]orporate managers' fiduciary duties in normal or solvent periods are defined by reference to the best interest of the company's shareholders. Corporate managers owe a fiduciary duty to maximize total shareholder wealth and a duty not to facilitate wealth transfers detrimental to any of the shareholders.").


69 See Simons v. Cogan, 549 A.2d 300, 304 (Del. 1988) ("Before a fiduciary duty arises, an existing property right or equitable interest supporting such a duty must exist. The obvious example is stock ownership."); see also Katz v. Oak Indus., Inc., 508 A.2d 873, 879 (Del. Ch. 1986) (agreeing with Simons' position on director's fiduciary duty to stockholders).
the corporation's directors or officers. The rationale for this general rule derives from concepts of corporate ownership and management. When the corporation is solvent, shareholders own the corporation, which is managed by the directors. During solvency, directors have fiduciary duties to the corporation and shareholders because the directors' decisions directly affect corporate and shareholder income.

Additionally, creditors are not owed fiduciary duties by the corporation's directors or officers because of the complete lack of privity among these parties. If any duty is owed to creditors, it is contractual in nature. No fiduciary duty exists because in solvency creditors, unlike shareholders, are free to negotiate and solidify their rights through contractual agreements, and are protected by fraudulent conveyance law, implied covenants of good faith and fair dealing, bankruptcy law, general commercial law, and other sources of creditor rights.

B. Zone of Insolvency

Zone of insolvency is a financial condition that exists for a company during an indeterminate period between its solvency and insolvency. A great obstacle for corporate investors and creditors to understanding the duties they are owed by
directors and officers is created by the judicial finding that the zone of insolvency is less objectively determinable than insolvency.  

The zone of insolvency does not have a generally accepted definition and the judiciary provides only limited guidance as to its definitional scope. For instance, the bankruptcy court in \textit{In re Healthco International, Inc.},\textsuperscript{81} suggested that a company is in the zone of insolvency if the company has "unreasonably small capital," which is "a condition of financial debility short of insolvency but which makes insolvency reasonably foreseeable."\textsuperscript{82} This may occur when directors or officers approve a transaction that leaves the company without adequate funds, such as a highly leveraged buyout.\textsuperscript{83} However, any determination of whether a firm has unreasonably small capital requires an objective assessment of the companies' financial projections, where reliance on historical data alone is insufficient.\textsuperscript{84} A company would be considered to be in the zone of insolvency if it fails to "account for difficulties that are likely to arise, including interest rate fluctuations and general economic downturns, and otherwise incorporate some margin for error."\textsuperscript{85} However, addressing the impracticality of this approach in \textit{RSL Communications PLC v. Bildirici},\textsuperscript{86} the court stated that in a recession it is difficult to imagine a coherent

\textsuperscript{78} Berg & Berg Enters., LLC v. Boyle, 178 Cal. App. 4th 1020, 1041 (Cal. Ct. App. 2009) (expressing zone or vicinity of insolvency is less objectively determinable than actual insolvency); see Kipperman v. Onex Corp., 411 B.R. 805, 845 (N.D. Ga. 2009) (stating that when the court has researched term "zone of insolvency" arising out of \textit{Credit Lyonnais} decision, court could not find an opinion that provided an explicit definition; however, the court found other opinions that repeatedly referred to zone of insolvency as "hazy," "ill defined," or "confusing").

\textsuperscript{79} N. Am. Cath. Educ. Programming Found., Inc. v. Gheewalla, 930 A.2d 92, 98 n.20 (Del. 2007) (indicating Court of Chancery did not attempt to set forth precise definition of what constitutes "zone of insolvency"); see Teleglobe USA Inc. v. BCE Inc. (\textit{In re Teleglobe Comm'ns Corp.}), 493 F.3d 345, 356 (3d Cir. 2007) (referring to "zone of insolvency" as "amorphous").

\textsuperscript{80} D.J. Baker, John Wm. Butler, Jr. & Mark A. McDermott, \textit{Corporate Governance of Troubled Companies and the Role of Restructuring Counsel}, 63 BUS. LAW. 855, 862 (2008) (remarking that few courts have attempted to define "zone of insolvency" and courts use varying legal standards).


\textsuperscript{82} Id. at 302 (recognizing that company has unreasonably small capital when transaction creates unreasonable risk, rather than likelihood, of insolvency).

\textsuperscript{83} Kuney, supra note 11, at 76 (stating that "[t]he company also enters the zone of insolvency when the directors consider approving a transaction that leaves the corporation on the brink of insolvency or with unreasonably small capital, such as a highly leveraged buyout").


\textsuperscript{85} Baker, Butler & McDermott, supra note 80, at 862 (quoting Peltz, 279 B.R. at 745) (stating insolvency analysis similar to unreasonably low capital determination under fraudulent conveyance statutes); see \textit{In re Ben Franklin Retail Stores, Inc.}, 225 B.R. 646, 655 n.14 (Bankr. N.D. Ill. 1998) (stating that "the phrase 'vicinity of insolvency' seems to refer to the extent of the risk that creditors will not be paid, rather than balance sheet insolvency").

\textsuperscript{86} 649 F. Supp. 2d 184 (S.D.N.Y. 2009).
limiting principle that would preclude a plausible allegation that a corporation is operating in the zone of insolvency.87

In the zone of insolvency, the directors and officers of the corporation continue to have fiduciary duties to the corporation88 and the corporation's shareholders.89 Additionally, when a corporation is perceived to be on the verge of insolvency, its directors and officers become fiduciaries of the corporate assets for the benefit of creditors.90 In *Credit Lyonnais*, the court established a modern common law notion

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87 Id. at 206 (noting that "it is difficult to imagine a coherent limiting principle in the current economic climate that would preclude a facially plausible allegation . . . that a corporation is in the 'zone of insolvency'" (citation omitted)).


89 *See*, e.g., Hallinan v. Republic Bank & Trust Co., 519 F. Supp. 2d 340, 349 n.10 (S.D.N.Y. 2007) (noting that "once a corporation enters the 'zone of insolvency,' the directors owe fiduciary duties to the corporations' creditors, in addition to its shareholders"); In re Adelphia Commc'ns Corp., 323 B.R. 345, 386 n.140 (Bankr. S.D.N.Y. 2005) (stating that "[m]any courts, including the Second Circuit, this one, and the state courts from which the applicable principles have their origin, have said that when a corporation becomes insolvent or enters into the zone of insolvency, the fiduciary duties of a corporation expand from its stockholders to its creditors"); Kuney, *supra* note 11, at 77 (stating that "directors operating in the zone of insolvency must take care to consider the interests of the corporation's creditors as paramount to those of its stockholders").

90 *See* Carrieri v. Jobs.com, Inc., 393 F.3d 508, 534 n.24 (5th Cir. 2004) (stating that when "[o]fficers and directors are aware that the corporation is insolvent, or within the 'zone of insolvency' . . ., [they] have expanded their fiduciary duties to include the creditors of the corporation"); Helm Fin. Corp. v. MNVA R.R., 212 F.3d 1076, 1081 (8th Cir. 2000) (noting that "[w]hen a corporation is insolvent, or on the verge of insolvency, its directors and officers become fiduciaries of the corporate assets for the benefit of creditors"); Roselink Investors, L.L.C. v. Shenkman, 386 F. Supp. 2d 209, 215 (S.D.N.Y. 2004) (stating that "[o]nce a corporation enters 'the zone of insolvency,' the directors owe fiduciary duties not only to the corporation's shareholders but to its creditors as well"); In re Granite Broad. Corp., 369 B.R. 120, 135 (Bankr. S.D.N.Y. 2007) (stating that "[w]hen a company is in the vicinity of insolvency a board of directors has a responsibility to manage its affairs in the interests of the corporation and all of its constituencies"); In re Classica Grp., Bankr. No. 04–19875, 2006 WL 2818820, at *6 n.7 (Bankr. D.N.J. Sept. 29, 2006) (stating that New Jersey court "is in accord with a recent trend in the law, which expands the fiduciary duties of a corporate director or officer to include not only equity holders, but creditors as well, when a corporation is in the 'zone of insolvency'"); In re Brentwood Lexford Partners, LLC, 292 B.R. 255, 272 (Bankr. N.D. Tex. 2003) (holding that "[w]hen a corporation enters a zone of insolvency, the fiduciary duty shifts from the shareholders to the creditors of the corporation"); David B. Shemano & Jenifer Walder Leland, *The War On Corporate Fiduciaries: Have the Fiduciaries Won?*, BUS. REORGANIZATION COMM. NEWSLETTER (Am. Bankr. Inst.), Apr. 2007, at 5, available at http://www.abiworl.org/committees/newsletters/busreorg/vol6num1/BusReo rg3.pdf (stating there is "voluminous body of law" proposing there is a "shift" or "expansion" of duties to creditors in zone of insolvency). Singh & Kaplan, *supra* note 1, at 66 ("Zone of insolvency concepts, which have been applied to commercial ventures for years to shift some of the duties of the board and officers of a corporation approaching or entering insolvency from the protection of stockholder interests but also the consideration of creditors' interests, have been viewed as increasingly relevant to nonprofit corporations, particularly health care providers. If a nonprofit enters the 'zone of insolvency,' the board and management may be required to consider and refrain from actions unreasonably threatening the interests of creditors in being paid, even if those decisions limit or conflict with the absolute fulfillment of the nonprofit' charitable purpose. As the corporation approaches the zone of insolvency, the board of directors and nondirector officers may have to consider the impact of their decisions on creditors and not to just 'roll the dice' so as to unreasonably sacrifice creditor recoveries.").
that individual directors and officers of financially distressed corporations operating in the zone of insolvency owe a duty to the "community of interests," including creditors.91 A Vermont court, in Gladstone v. Stuart Cinemas, Inc.,92 stated that this duty to creditors does not only apply when the corporation is insolvent, but also "when the corporation operates in the vicinity or zone of insolvency."93 A Louisiana court, in 3 Point Holdings, L.L.C. v. Gulf South Solutions, L.L.C.,94 stated that when directors and officers operate in the zone of insolvency, their fiduciary duties include creditors.95

Other court decisions concentrated on the amount and scope of duty owed to creditors by directors and officers. These decisions state that duties of directors and officers require consideration of creditor interests but not necessarily giving their interests priority.96 The courts stated that in the zone of insolvency the directors and officers of the company should exercise duty of care,97 duty of loyalty,98 and duty to act in good faith.99

However, rulings from Delaware, California, and Louisiana courts suggest a legal trend of limiting and eliminating the directors' and officers' fiduciary duties to creditors while in the zone of insolvency.100 In Gheewalla, the Delaware Court held

92 878 A.2d 214 (Vt. 2005).
93 See id. at 224–25.
95 Id. at *2 (stating that "[o]fficers and directors who are aware that the entity is within the 'zone of insolvency' have expanded fiduciary duties which include the creditors, not just the equity holders").
96 E.g., Berg, 178 Cal. App. 4th at1038 (highlighting requirement that directors take creditors' interest into account upon insolvency, but not necessarily give creditors priority).
97 E.g., id. (stating that "[t]he modern common law notion that the individual directors of a financially distressed corporation operating in the zone of insolvency or even upon insolvency owe a duty of care to its creditors finds its genesis in Credit Lyonnais" (citing Credit Lyonnais Bank Nederland N.V. v. Pathe Commc'ns Corp., No. 12150, 1991 WL 277613 (Del. Ch. Dec. 30, 1991)); see In re Verestar, Inc., 343 B.R. 444, 473–74 (Bankr. S.D.N.Y. 2006) (stating that "[a]ny situation where a wholly-owned and controlled subsidiary enters the zone of insolvency obviously requires all responsible parties to act with the utmost care and responsibility").
100 In RSL Commc'ns PLC v. Bildirici, 649 F. Supp. 2d 184, 202–03, 207 (S.D.N.Y. 2009), a New York court held that directors and officers do not owe a duty of care to the corporation's creditors when the corporation is operating in the zone of insolvency for a period of between thirty to sixty days during which the plaintiff and its parent company were having difficulty raising financing capital to address their liquidity
that creditors of a Delaware corporation that is in the zone of insolvency do not have a right to assert direct claims for breach of fiduciary duty against the corporation's directors. The court stressed that when a corporation operates in the zone of insolvency, directors fiduciary duties do not change with respect to shareholders and the corporation. Directors must continue to exercise their business judgment in the best interests of the corporation and for the benefit of shareholders.

Similarly, in Berg, a California court held that there is no fiduciary duty owed to creditors by directors and officers of the corporation solely by virtue of the corporation operating in the zone of insolvency. The court expressed its concern about creating such duty to creditors as it would conflict and dilute California's statutory and common law duties that directors and officers already owe to the shareholders and the corporation. In focusing on the duties of directors and officers, the Berg court stated that only upon actual insolvency, would the creditors enjoy the protection provided by the trust-fund doctrine.

A Louisiana court, in Torch Liquidating Trust, expanded the Gheewalla holding to prohibit derivative lawsuits in addition to direct lawsuits by creditors. In discussing and interpreting the Gheewalla decision, the court rejected the creditor's argument that a derivative cause of action exists in the zone of insolvency. In Torch Liquidating Trust, the plaintiff argued that Gheewalla states that when a corporation enters the zone of insolvency, fiduciary duties owed to the creditors can

needs. The court stated that no fiduciary duties were owned under the definition of the zone of insolvency defined by the plaintiff. Id. at 207 (stating plaintiff's argument that defendants owed fiduciary duty of care "without any limitations" was unsupported under New York law). This decision signifies that the company is not within the zone of insolvency because it is unable to find financing to improve its cash flow during a one to two month period. However, the court did not outright overrule or ban the zone of insolvency theory. Rather, the court focused on plaintiff's argument and its failure to demonstrate the existence of zone of insolvency during the thirty to sixty day period when parties had problems raising capital to address their liquidity concerns.

101 N. Am. Cath. Educ. Programming Found., Inc. v. Gheewalla, 930 A.2d 92, 94 (Del. 2007) (holding that "creditors of a Delaware corporation in the 'zone of insolvency' may not assert direct claims for breach of fiduciary duty against the corporation's directors").

102 Id. at 101 (highlighting directors of Delaware corporations need to manage business of corporation for benefit of shareholders).


104 Id. (discussing further practical problems with director's ability to concretely determine when state of insolvency actually exists).

105 See id. (stating that scope of any extra-contractual duty owed by corporate directors to insolvent corporation's creditors is limited in California, consistent with trust fund doctrine, to the avoidance of actions that divert, dissipate, or unduly risk corporate assets that might otherwise be used to pay creditor claims); see also CarrAmerica Realty Corp. v. VIDIA Corp., No. 05-00428, 2006 WL 2868979, at *5 (N.D. Cal. Sept. 29, 2006) (noting that "California courts have applied the 'trust fund doctrine' where 'all of the assets of a corporation, immediately on its becoming insolvent, become a trust fund for the benefit of all of its creditors.'" (citation omitted)).


107 Id.
be enforced via a derivative suit. The court concluded that plaintiff's reading of the *Gheewalla* decision was incorrect, because the *Gheewalla* court stated that the derivative claim may be brought against directors and officers for breaches of fiduciary duty only when the corporation is in fact insolvent.

However, the guidance offered by decisions in the cases involving director and officer liability when their company operates in the zone of insolvency, leaves critical issues unresolved. Table 2 provides a summary of zone of insolvency case law. It displays key practical limitations of the findings and shows that courts in *Gheewalla*, *Berg*, and *Torch Liquidating Trust* have dealt successfully with few of the major issues that inhibit the useful application of the zone of insolvency.

First, the *Gheewalla* decision does not directly prohibit creditors from pursuing derivative claims against directors and officers for breaches of their fiduciary duty while the company is operating in the zone of insolvency. Although the *Gheewalla* decision states that directors do not owe fiduciary duties to creditors in the zone of insolvency, the decision only directly applies to Delaware corporations. Similarly, the *Berg* decision only applies to California corporations, which is considered a director-friendly state.

Second, the *Gheewalla*, *Berg*, and *Torch Liquidating Trust* decisions are in conflict with other courts' holdings, which stated that creditors of insolvent companies do have standing to bring direct claims for breach of fiduciary duties.

108 Id. (discussing plaintiff's argument).
109 Id. ("*Gheewalla* did not create a cause of action or a new claim that the creditors are owed fiduciary duties at any point by the corporation; rather *Gheewalla* provided only that once the corporation is insolvent the right or standing to bring breach of fiduciary duty claims on behalf of the corporation transfers to the creditors.").
110 See Flaum & Lari, supra note 60, at 4 ("[T]he scope of . . . fiduciary obligations—particularly their extension to corporate creditors—once the company is in the so-called 'zone of insolvency' . . . is less well-defined, despite the Delaware Supreme Court's seminal 2007 decision in . . . *Gheewalla*."); see also Chon, supra note 77, at 1096 (stating that most circuit courts have not ruled on enough cases to establish definite trend).
111 See infra Table 2.
112 Dionne, supra note 43, at 201 (stating that it is unclear whether creditors have derivative standing when corporation is in zone of insolvency); see N. Am. Cath. Educ. Programming Found., Inc. v. Gheewalla, 930 A.2d 92, 101–02 (Del. 2007) (addressing derivative standing of creditors of insolvent corporation); see also Detweiler & Selzer, supra note 41, at 55 (stating that while *Gheewalla* decision provides guidance, "the decision is likely to lead to increased litigation . . . over when a corporation becomes or is 'insolvent' and who should control the derivative claim and related litigation"); J. Travis Laster & Nathan Cook, *The Delaware Supreme Court Weighs in on Fiduciary Duties to Creditors*, INSIGHTS, Jun. 2007, at 31, 33 (noting that consequence of *Gheewalla* holding includes consideration of whether "derivative actions by creditors should be treated in the same manner as derivative actions by stockholders").
114 *California Appellate Court Reaffirms Limits on Directors' Fiduciary Duties to Creditors and Rejects Duties in Zone of Insolvency*, GIBSON DUNN PUBLICATIONS (Dec. 7, 2009), http://www.gibsondunn.com/publications/pages/CaliforniaAppellateCtLimitsDirectorsFiduciaryDuties.aspx ("While Delaware has pulled back from a vastly expansive view of fiduciary duties to creditors, it is still not as director-friendly as California.").
against directors and officers, and do allow for the possibility of an affirmative duty to creditors when the corporation is in the failing condition. The case that originated the zone of insolvency, Credit Lyonnais, was not overruled or unanimously declared by jurisprudence as an anomaly that should not be followed. For as long as the precedent of Credit Lyonnais and accommodating cases remain valid, and are not eliminated through Supreme Court or federal legislation, the courts may continue to interpret that in the zone of insolvency directors' and officers' duties extend to creditors.

Third, the finding in Torch Liquidating Trust, which precludes creditor's derivative claims, may be an anomaly that inappropriately interprets and extends the Gheewalla holding because the decision is limited to Louisiana jurisprudence and does not have binding authority on any other courts. According to In re Vartec Telecom, Inc., creditors are free to pursue derivate claims against the directors and officers of corporations operating in the zone of insolvency. Thus, creditors

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116 E.g., Kandestin, supra note 7, at 1238 (stating that in considering fiduciary duties of directors and officers of near-insolvent firms, "[a]t one end of the spectrum, courts allow for the possibility of an affirmative duty to creditors. At the other extreme, courts hold that no real 'duty' is owed to creditors of near-insolvent firms"); see also FDIC v. Sea Pines Co., 692 F.2d 973, 977 (4th Cir. 1982) (stating that "when a corporation becomes insolvent, or in a failing condition, the officers and directors no longer represent the stockholders, but by the fact of insolvency, become trustees for the creditors"); Hallinan v. Republic Bank & Trust Co., 519 F. Supp. 2d 340, 349 n.10 (S.D.N.Y. 2007) (citations omitted) (noting that "once a corporation enters the 'zone of insolvency,' the directors owe fiduciary duties to the corporations' creditors, in addition to its [sic] shareholders").

117 See Kandestin, supra note 7, at 1271 (stating that "[e]ver since the 1991 Credit Lyonnais decision, courts and commentators have disagreed about the scope of what obligations, if any, are owed to creditors of a near-insolvent firm"); Campbell & Frost, supra note 4, at 506 (stating that "courts are likely to apply Credit Lyonnais at face value and thus are likely to apply the rule as there articulated").

118 Torch Liquidating Trust ex rel. Bridge Assocs., L.L.C. v. Stockstill, 561 F.3d 377, 392 (5th Cir. 2009) (affirming district court's decision on procedural grounds without comprehensively addressing issue whether Gheewalla prohibits derivative claims by creditors while company is operating in zone of insolvency).

119 122261 Fondren, LLC v. Riverbank Realty GP, LLC, No. H-09-4074, 2010 WL 1741071, at *2 (S.D. Tex. Apr. 29, 2010) (stating that plaintiff in Torch Liquidating Trust amended its complaint following Delaware Supreme Court's decision in Gheewalla, replacing its references to creditors with new references to creditors and shareholders and couching recovery for damages to be on behalf of creditors and shareholders).


121 Id. (stating that creditors of corporation that is either insolvent or in zone of insolvency have right to bring derivative action on behalf of corporation for breach of fiduciary duty against its directors); see 122261 Fondren, 2010 WL 1741071, at *3–4 (denying defendant's motion to dismiss derivative cause of action while company was insolvent and stating that Gheewalla allows for derivative claims of actions for breaches of fiduciary duties); Hill v. Gibson Dunn & Crutcher, LLP (In re MS55, Inc.), No. 06-CV-01233-ewn, 2008 WL 2358699, at *3 (D. Colo. June 6, 2008) (stating that "creditors have standing to invoke that
may continue to bring derivative suits against directors and officers in the zone of insolvency until Delaware jurisprudence or legislation expressly prohibits them.\footnote{122}{See In re Brown Sch., 368 B.R. 394, 414 (Bankr. D. Del. 2007) (interpreting Gheewalla to hold that "creditors of corporation in zone of insolvency do not have direct, as opposed to derivative, claims for breach of fiduciary duty against corporation's directors;" and stating "it is likely that this litigation will be protracted and further elucidation on this issue by the Delaware Supreme Court may be forthcoming in the interim").}

Fourth, there are no operational definitions of the beginning and end of a zone of insolvency period that would trigger the redirection of directors' and officers' duties to or from creditors, or how the scope of directors' fiduciary duties during this zone of insolvency period is determined.\footnote{123}{E.g., Flaum & Lari, supra note 60, at 4 (commenting on how corporate directors generally owe fiduciary duties only to corporation and its shareholders, but scope of fiduciary obligations once company is in "zone of insolvency" is less well-defined); see Parlin & Mayerson, supra note 115, at 28–29 (stating collapse of financial markets displayed how quickly liquidity can disappear, asset values can plummet, and companies can become insolvent in an instant).}

Following the legal developments in Gheewalla, Berg, and Torch Liquidating Trust, the zone of insolvency continues to exist as an uncertain, problematic, and operationally undefined legal area, which requires further elucidation and strictly construed legal standards. The problems pertaining to duties to creditors while in the zone of insolvency "remains highly salient" for directors and officers, corporations, shareholders, and creditors.\footnote{124}{Dionne, supra note 43, at 189 ("[T]he problem of duties to creditors in the zone of insolvency remains highly salient for Delaware corporations, their directors, attorneys and financial advisors.").}

As a legal issue, the current recommendation concerning the zone of insolvency approaches absurdity. Lacking clearly defined beginning and ending points for the zone of insolvency, some practitioners suggest that directors and officers of a financially declining company should consider it to be in the zone if the company's financial circumstances cause them to seriously consider the possibility that they are in the zone of insolvency.\footnote{125}{Baker, Butler & McDermott, supra note 80, at 862 ("While the legal standards are not particularly clear, directors and officers of a distressed company generally would be prudent to consider their company to be in the zone of insolvency if the company's circumstances cause them to consider seriously the possibility in the first place. Thus, for example, a company with a positive book net worth that does not expect to have liquidity issues until a bond payment is due in six months arguably may be solvent under the two traditional tests but nonetheless may be in the 'zone' or 'vicinity' of insolvency.").}

C. Insolvency

In insolvency, the fiduciary duties of directors and officers extend to a company's creditors,\footnote{126}{N. Am. Cath. Educ. Programming Found., Inc. v. Gheewalla, 930 A.2d 92, 101 (Del. 2007) ("It is well settled that directors owe fiduciary duties to the corporation. When a corporation is solvent, those duties may be enforced by its shareholders, who have standing to bring derivative actions on behalf of the corporation because they are the ultimate beneficiaries of the corporation's growth and increased value. When a corporation is insolvent, however, its creditors take the place of the shareholders as the residual beneficiaries").} even as the duties continue to be owed to the corporation.\footnote{127}{[fiduciary] duty and bring a derivative claim against directors on behalf of the debtor corporation in the zone of insolvency to remedy the injuries the creditor suffered as a result of the injuries to the debtor").}
The courts are divided on the issue of whether directors' and officers' duties to shareholders completely terminate at corporate insolvency. Some courts adopt a view that when the corporation becomes insolvent, directors and officers no longer represent the shareholders, but the creditors. 128 However, other courts have stated that the directors' and officers' duties extend to creditors and become primary, while the duties to shareholders remain, but become secondary in nature. 129 The logic for this second position is that an insolvent corporation's shareholders are 'last in line' for repayment and there is no repayment for shareholders until creditors have been paid. 130

There are five general tests to determine if the company is insolvent: 131

of any increase in value." (emphasis omitted) (footnotes omitted)); see also id. at 103 ("The creditors of a Delaware corporation that is either insolvent or in the zone of insolvency have no right, as a matter of law, to assert direct claims for breach of fiduciary duty against its directors."); Unsecured Creditors Comm. of Debtor STN Enters., Inc. v. Noyes (In re STN Enters.), 779 F.2d 901, 904 (2d Cir. 1985) ("[A]lthough in most states directors of a solvent corporation do not owe a fiduciary duty to creditors, quite the reverse is true when the corporation becomes insolvent."); FDIC v. Sea Pines Co., 692 F.2d 973, 976–77 (4th Cir. 1982) ("W[hen the corporation becomes insolvent, the fiduciary duty of the directors shifts from the stockholders to the creditors."); Automatic Canteen Co. of Am. v. Wharton (In re Con'l Vending Mach. Corp.), 358 F.2d 587, 590 (2d Cir. 1966) ("[D]irectors of an insolvent corporation occupy a fiduciary position toward the creditors, just as they do toward the corporation when it is solvent."); Hallinan v. Republic Bank & Trust Co., 519 F. Supp. 2d 340, 349 (S.D.N.Y. 2007) ("W[hen a corporation becomes insolvent or enters into the zone of insolvency, the fiduciary duties of a corporation expand from its stockholders to its creditors" (quoting In re Adelphia Commc'ns Corp., 323 B.R. 345, 386 n.140 (Bankr. S.D.N.Y. 2005))); Citicorp Venture Capital, Ltd. v. Comm. Creditors Holding Unsecured Claims (In re Papercraft Corp.), 211 B.R. 813, 824 (W. D. Pa. 1997) (finding that during insolvency fiduciary duty of insider extended to creditors); In re Heathcote Int'l, Inc., 208 B.R. 288, 300 (Bankr. D. Mass. 1997) ("W[hen a transaction renders a corporation insolvent, or brings it to the brink of insolvency, the rights of creditors become paramount."); Prod. Res. Grp., L.L.C. v. NCT Grp., Inc., 863 A.2d 772, 798 (Del. Ch. 2004) ("W[hen a firm is insolvent, the directors take on a fiduciary relationship to the company's creditors . . . ."); Guar. Trust & Sav. Bank v. U.S. Trust Co., 103 So. 620, 622 (Fla. 1925) ("The directors . . . of an insolvent corporation occupy toward the creditors of the corporation a fiduciary relation . . . ."); Friedland, Scheinbaum & Johnson, supra note 13, at 291 (stating that "[w]here the corporation is clearly insolvent . . . corporate action taken for the intended benefit of shareholders may adversely affect or prejudice creditors, since creditor recoveries are now at risk" (footnote omitted)).

127 ASARCO LLC v. Ams. Mining Corp., 396 B.R. 278, 395, 415 (S.D. Tex. 2008) (stating directors always owe fiduciary duties to corporation); see Pullins v. Klimley, No. 3:05-CV-082, 2008 WL 85871, at *22 (S.D. Ohio Jan. 7, 2008) (stating that "the officers and directors of a corporation that is insolvent or is on the brink of insolvency owe a fiduciary duty to the corporation itself and to its creditors not to waste corporate assets which otherwise could be used to pay corporate debts").

128 E.g., Arnold v. Knapp, 84 S.E. 895, 899 (W. Va. 1915) (noting that "when a corporation becomes insolvent, or in a failing condition, the officers and directors no longer represent the stockholders, but by the fact of insolvency, become trustees for the creditors").

129 E.g., Bank Leumi-Le-Israel, B.M. v. Sunbelt Indus., Inc., 485 F. Supp. 556, 559 (S.D. Ga. 1980) (stating directors and officers are trustees of corporate properties to benefit creditors first and stockholders second in case of insolvent corporation); In re Xonics, Inc., 99 B.R. 870, 872 (Bankr. N.D. Ill. 1989) (stating that "[w]hen a corporation is insolvent its officers and directors stand in a position of trust not only to the corporation and its shareholders, but also to its creditors").

130 In re Sec. Asset Capital Corp., 396 B.R. 35, 42 (Bankr. D. Minn. 2008) (discussing how shareholders of insolvent corporations are provided for after obligations to creditors are satisfied).

1. Under the equity test, the company is considered insolvent when it is unable to pay its debts as they come due in the ordinary course of business. A company is insolvent in the equity sense if its assets lack short-term liquidity.

2. Under the balance sheet test, the company is insolvent when its assets are below its liabilities with no reasonable prospect that the business can successfully be continued.

3. Under the future operations test, the company's capital is evaluated in terms of its ability to support financing of its future operations.

4. Under the insolvency in fact test, a company is insolvent when it has liabilities in excess of the reasonable market value of assets held. This fourth test is considered to adopt a broad view of insolvency, under which almost any start-up company may be considered insolvent.

5. Under the bankruptcy test, a corporation is insolvent when its debts exceed the fair value of its property.

That generally there are three tests to determine if a company is solvent and that courts employ the balance sheet, cash flow, or thin capital tests to determine company's solvency.

132 Prod. Res. Grp. L.L.C. v. NCT Grp., Inc., 863 A.2d 772, 782 (Del. Ch. 2004) (stating that to plead insolvency, company must exhibit either deficiency of assets below liabilities with no reasonable prospect of business continuing, or inability to meet maturing obligations as they fall due in ordinary course of business); see Kipperman v. Onex Corp., 411 B.R. 805, 836 (N.D. Ga. 2009) ("'Equitable insolvency,' or whether a debtor is able to pay its debts as they become due, is a forward-looking standard. It is unclear whether a plaintiff must show that the debtor subjectively intended to become incapable of paying its debts or whether a plaintiff must merely show that a debtor should have foreseen such an outcome to prove the debtor 'intended to incur, or believed that it would incur debts beyond its ability to pay as such debts matured." (citation omitted)).


134 See id. (stating company with unreasonable cash flow projections leaves company with unreasonably small capital, and therefore at unreasonable risk of insolvency).

135 Stephen M. Packman, Directors and Officers in the Zone of Insolvency: Take action with caution to avoid personal exposure, N.J. L.J., Aug. 18, 2008, at 1, 1 (listing three tests for determining when company enters the zone of insolvency, including test that looks at company's capital in terms of ability to support financing of future operations).


137 Flaum & Lari, supra note 60, at 7 (noting under insolvency test where insolvency occurs at moment when entity has liabilities in excess of reasonable market value of assets held, almost any start-up company would be rendered insolvent).

138 11 U.S.C. § 101(32) (2006) (defining insolvency as financial condition such that sum of entity's debts is greater than all of such entity's property, at fair valuation); see In re Taxman Clothing Co., 905 F.2d 166, 170 (7th Cir. 1990) (establishing test for solvency based on equation: if market value of goods company has on hand minus cost of selling goods, plus company's other assets exceeds company's liabilities, then company is solvent); see also Baker, Butler & McDermott, supra note 80, at 861 (stating that debts are defined broadly to include contingent, unliquidated, and disputed debts that may not be reflected on the balance sheet prepared in accordance with GAAP).
The variety of tests and lack of definitional or pro forma appropriateness of each test adds to the uncertainty of litigants because parties know that the evaluation of the company's financial position is partially dependent on the specific test or tests a court chooses to employ.139

The extension of a director's fiduciary duties to creditors is granted through a trust fund doctrine. In reality, the trust fund doctrine does not involve an application of actual trust, but it allows the court to administer an insolvent corporation's assets first among creditors and thereafter its shareholders.140 Under the trust fund doctrine, the trustee directors owe the duty to protect the insolvent corporation's assets that they hold in trust for distribution to the beneficiary creditors.141 Thus, directors and officers are deemed as trustees for the benefit of creditors.142

The application of the trust fund doctrine is limited to protecting creditor's prior rights to assets upon liquidation and dissolution of an insolvent corporation.143 The trust fund doctrine has been used against directors and officers who used their insider status to make preferential payments or to misappropriate the corporation's

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139 Five insolvency tests add additional uncertainty to the zone of insolvency. For instance, by applying two different insolvency tests a company may not be insolvent under one test, but in zone of insolvency, while insolvent under the other test. See Stephen R. McDonnell, Geyer v. Ingersoll Publications Co: Insolvency Shifts Directors' Burden From Shareholders to Creditors, 19 DEL. J. CORP. L. 177, 196 (1994) ("Different jurisdictions often have varying definitions of insolvency . . . [and] there are several methods which may be used to value a corporation's assets. This makes it very difficult, if not impossible, to confidently predict the methodology a court would use in deciding whether a corporation's directors had breached their fiduciary duties to creditors.").

140 Harvey R. Miller, Corporate Governance in Chapter 11: The Fiduciary Relationship Between Directors and Stockholders of Solvent and Insolvent Corporations, 23 SETON HALL L. REV. 1467, 1483–84 (1993) ("When a court of equity does take into its possession the assets of an insolvent corporation, it will administer them on the theory that they in equity belong to the creditors and stockholders rather than to the corporation itself. In other words, and that is the idea which underlies all these expressions in reference to "trust" in connection with the property of a corporation, the corporation is an entity, distinct from its stockholders as from its creditors. Solvent, it holds its property as any individual holds his, free from the touch of a creditor who has acquired no lien; free also from the touch of a stockholder who, though equitably interested in, has no legal right to, the property. Becoming insolvent, the equitable interest of the stockholders in the property, together with their conditional liability to the creditors, places the property in a condition of trust, first, for the creditors, and then for the stockholders. Whatever of trust there is arises from the peculiar and diverse equitable rights of the stockholders as against the corporation in its property and their conditional liability to its creditors. It is rather a trust in the administration of the assets after possession by a court of equity than a trust attaching to the property, as such, for the direct benefit of either creditor or stockholder.").

141 See Ann E. Conaway Stilson, Reexamining the Fiduciary Paradigm at Corporate Insolvency and Dissolution: Defining Director's Duties to Creditors, 20 DEL. J. CORP. L. 1, 13 (1995) (discussing if firm is insolvent at moment of dissolution, directors owe duty to creditors).

142 Automatic Canteen Co. v. Wharton (In re Cont'l Vending Mach. Corp.), 358 F.2d 587, 590 (2d Cir. 1966) (stating that "directors of an insolvent corporation occupy a fiduciary position toward the creditors, just as they do toward the corporation when it is solvent" and holding those directors "as trustees of the corporation's property on behalf of the creditors, so that as a class the creditors should be able to follow the property into the hands of the directors"); see also Bank Leumi-Le-Israel, B.M. v. Sunbelt Indus., Inc., 485 F. Supp. 556, 559 (S.D. Ga. 1980) ("In the case of an insolvent corporation, the directors and officers stand as trustees of corporate properties for the benefit of creditors first and stockholders second.").

143 Bloom et al., supra note 40, at 20.
assets to them or shareholders, or to wrongfully authorize dividends to shareholders while creditor claims were unpaid.\textsuperscript{144} Although the fiduciary duties of directors and officers extend to creditors when the company is in insolvency, the duties of loyalty and care remain the same and the rules of corporate governance continue to apply.\textsuperscript{145} In addition, courts have recognized supplemental fiduciary duties that directors and officers owe to creditors while the corporation is insolvent. For example, when the corporation is insolvent, fiduciary duties prohibit directors and officers from transferring or encumbering corporate assets, which would enable the director or officer to recover a greater percentage of debt than the corporation's general creditors with otherwise similarly secured interests.\textsuperscript{146} The directors and officers have a fiduciary duty to not engage in self-dealing,\textsuperscript{147} to not commit preferential transfer of assets,\textsuperscript{148} to minimize loss to creditors upon insolvency,\textsuperscript{149} to maximize the corporation's long-term wealth-creating capacity,\textsuperscript{150} and to avoid actions that divert, dissipate, or unduly risk corporate assets that might otherwise be used to pay creditor claims.\textsuperscript{151} The directors and officers must act with due diligence and good faith when pursuing

\textsuperscript{144} Id.
\textsuperscript{146} Ass'n of Mill & Elevator Mut. Ins. Co. v. Barzen Int'l, Inc., 553 N.W.2d 446, 451 (Minn. Ct. App. 1996) (stating that "as fiduciaries to the corporation's creditors, the officers and directors of an insolvent corporation cannot approve a transfer or encumbrance of corporate assets * * * [sic], the effect of which is to enable the director or officer to recover a greater percentage of his debt than general creditors of the corporation with otherwise similarly secured interests" (citation omitted)); see In re Sec. Asset Capital Corp., 396 B.R. at 41 (noting that "[b]reach of fiduciary duty through self-dealing is intensely fact driven").
\textsuperscript{147} See In re JTS Corp., 305 B.R. 529, 538 (Bankr. N.D. Cal. 2003) (discussing bankruptcy trustee's attempt to "recover money that had been paid through self-dealing and fraud").
\textsuperscript{148} Helm Fin. Corp. v. MNVA R.R., 212 F.3d 1076, 1081 (8th Cir. 2000) (noting that "[c]orporate officers and directors cannot grant themselves a preference over creditors").
\textsuperscript{149} See In re Ben Franklin Retail Stores, Inc., 225 B.R. 646, 653 (Bankr. N.D. Ill. 1998) (discussing "insolvency exception" to general rule that directors do not otherwise owe creditors duties beyond relevant contractual terms); N.Y. Credit Men's Adjustment Bureau, Inc. v. Weiss, 110 N.E.2d 397, 400 (N.Y. 1953) (finding trustee in bankruptcy entitled to recover losses resulting from wasting or depleting of assets by corporation's officers, directors, and sole stockholders).
\textsuperscript{150} Credit Lyonnais Bank Nederland, N.V. v. Pathe Comm'n's Corp., No. 12150, 1991 WL 277613, at *34 (Del. Ch. Dec. 30, 1991) (determining corporation's leaders had obligation to make good-faith effort to "maximize the corporation's long-term wealth creating [sic] capacity").
\textsuperscript{151} See Berg & Berg Enters., LLC v. Boyle, 178 Cal. App. 4th 1020, 1041 (Cal. Ct. App. 2009) (noting such actions include "acts that involve self-dealing or the preferential treatment of creditors").
business strategies that require borrowing additional debt. The directors and officers of insolvent corporations are not obligated to liquidate their corporations for unsecured creditors' benefit and, in fact, can pursue risky restructuring plans if they do so in a good faith attempt to become solvent again, even though they are not guarantors of the strategy's success.

In insolvency, a corporation's creditors have standing to maintain derivative claims against the directors on behalf of the corporation for breaches of fiduciary duties. The corporation's insolvency "makes the creditors the principal constituency injured by any fiduciary breaches that diminish the firm's value." Equitable considerations give creditors standing to pursue derivative claims against directors when a corporation is insolvent. As a result, the insolvent

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152 Trenwick Am. Litig. Trust v. Ernst & Young, L.L.P., 906 A.2d 168, 205 (Del. Ch. 2006) (emphasizing failure of strategies "does not in itself give rise to a cause of action," but rather, "in such a scenario the directors are protected by the business judgment rule").
153 See In re Sec. Asset Capital Corp., 396 B.R. 35, 42–43 (Bankr. D. Minn. 2008) ("The driving force behind the plaintiff's breach of fiduciary duty action seems to be the premise that the defendants owed a fiduciary duty exclusively to the insolvent debtor's unsecured creditors; and, that the duty could only have been fulfilled through a Chapter 7 liquidation. That is not the law. The duty remained owing to . . . the corporation, with unsecured creditors protected as included beneficiaries of the duty due to insolvency. But, no particular form of liquidation, or indeed any liquidation at all, was required as a matter of law (unless there be no reasonable future prospect), even if there was no reasonable prospect for a return to shareholders.").
154 Id. at 40 (indicating company may engage in risky good faith attempts to regain solvency); see In re Ben Franklin Retail Stores, Inc., 225 B.R. at 655 (suggesting officers and directors must act in best interest of company to regain solvency).
155 Trenwick Am. Litig. Trust, 906 A.2d at 205 (providing company's board does not become guarantor of business strategy's success).
156 Tooley v. Donaldson, Lufkin & Jenrette, Inc., 845 A.2d 1031, 1036 (Del. 2004) (holding that "[b]ecause a derivative suit is being brought on behalf of the corporation, the recovery, if any, must go to the corporation"); see Spiegel v. Buntrock, 571 A.2d 767, 773 (Del. 1990) (stating that prior to asserting derivative claim, creditors must exhaust intra-corporate remedies by either making a demand on directors or pleading with particularity why demand would have been futile); Zapnick v. Goizueta, 698 A.2d 384, 386 (Del. Ch. 1997) (stating that plaintiff has burden of proof alleging with particularity why demand should be excused as futile); see also Detweiler & Selzer, supra note 41, at 55 (stating that demand is futile where plaintiffs plead facts sufficient to demonstrate that ". . . a majority of the board of directors is interested in or lacks independence as to the challenged transaction or (2) there exists reasonable doubt that the challenged transaction was a valid exercise of business judgment").
157 N. Am. Cath. Educ. Programming Found., Inc. v. Gheewalla, 930 A.2d 92, 101 (Del. 2007) (noting creditors may bring derivative claims on behalf of corporation against directors for breach of fiduciary duty (citing Agostino v. Hicks, 845 A.2d 1110, 1117 (Del. Ch. 2004))); see Torch Liquidating Trust ex rel. Bridge Assocs., L.L.C. v. Stockstill, 561 F.3d 377, 385 (5th Cir. 2009) (stating that ". . . if a corporation becomes insolvent, however, its creditors become the appropriate parties to bring a derivative suit on behalf of the corporation where those in control of it refuse to assert a viable claim belonging to it because the creditors are the beneficiaries of any increase in value"). Creditors do not have standing to bring direct claims against directors and officers for breach of their fiduciary duties. See Big Lots Stores, Inc. v. Bain Capital Fund VII, LLC, 922 A.2d 1169, 1172 (Del. Ch. 2006) (granting motion to dismiss on grounds that "most of the plaintiff's claims are barred as a matter of law because they are derivative in nature, not direct, and thus belong to the bankruptcy estate").
159 Id.
corporation's creditors replace the shareholders as the residual beneficiaries of any increase in the company's asset value and "have the same incentive to pursue valid derivative claims on its behalf that shareholders have when the corporation is solvent."160 Any recovery in these derivative actions belongs to the corporation, thus to creditors and shareholders as a whole, and not to a particular group of creditors or other stakeholders.161

The rationale for expanding fiduciary duties to creditors during the insolvency is that creditors bear the brunt of damages for the conduct of directors and officers, as contrasted to shareholders who have theoretically lost their investment.162 The extension of fiduciary duty to creditors is also justified by the difference of investment risk between shareholders and creditors. The shareholders invest by buying stock with hopes that the corporation will generate profit and increase the value of the shareholder's investment,163 while the creditors lend money to the corporation with hope that they will recover their money with interest.164

During insolvency, directors and officers must be concerned about another variant of the breach of fiduciary duties known as the theory of deepening insolvency.165 Deepening insolvency results from prolonging an insolvent corporation's life by increasing its outstanding debt.166 It is "an injury to the Debtors'..."
corporate property from the fraudulent expansion of corporate debt and prolongation of corporate life. The fiduciary duty prevents directors and officers from approving an action that deepens the insolvency by causing the company to incur additional debt, thereby negligently or fraudulently prolonging its corporate life. Courts have stated that deepening insolvency claims may be brought by bankruptcy trustees, creditors' committees, receivers, insurance company liquidators, equity-holders, lenders, and professional advisers including accountants, financial advisers, and attorneys. Directors and officers must be concerned about this cause of action because it allows and encourages litigation that goes after deep pockets. Due to their involvement in management of the company during insolvency, directors and officers are potential targets for claims that they have contributed to keeping the company on life support by incurring additional debt that is unlikely to reverse the prospects of the company.  

34, 35, available at http://www.cbalaw.org/_files/publications/lawyers-quarterly/Summer%202009%20Complete%20Publication.pdf ("Given that deepening insolvency in its most basic form arises from conduct that is alleged to either fraudulently or negligently prolong the life of a company, it follows that parties who are believed to have fiduciary obligations or perceived fiduciary duties of care are likely to end up as defendants in these cases. At the top of this list of potential defendants are company directors and officers. Others are professionals paid to advise the company, including auditors, investment brokers and attorneys and secured lenders who extend new financing during insolvency while simultaneously acquiring additional security for their loans.").

168 Packman, supra note 135, at 2 (analyzing theory of deepening insolvency).
170 E.g., Official Comm. of Unsecured Creditors, 267 F.3d at 349 (allowing committee's claim).
171 E.g., Hannover Corp. of Am. v. Beckner, 211 B.R. 849, 859 (M.D. La. 1997) (concluding receiver had standing).
173 E.g., Official Comm. of Unsecured Creditors, 267 F.3d at 353 (acknowledging shareholders' claims as legitimate).
175 E.g., Allard v. Arthur Andersen & Co. (USA), 924 F. Supp. 488, 494 (S.D.N.Y. 1996) (explaining courts have permitted recovery under "deepening insolvency" theory and thus defendant auditors were not entitled to summary judgment).
176 E.g., In re Flagship Healthcare, Inc., 269 B.R. 721, 728 (Bankr. S.D. Fla. 2001) (determining even if debtor was already insolvent, additional debt incurred by defendant's negligent valuation may provide for damages award).
178 Friedland, Scheinbaum & Johnson, supra note 13, at 296 ("[T]he concept allows, and arguably encourages, a treasure hunt for deep pockets. . . . Defendants to deepening insolvency claims have included directors and officers . . . ").
179 Id. (viewing directors as "walking targets").
D. Bankruptcy

When a company files for chapter 11 bankruptcy protection, corporate directors and officers owe fiduciary duties to the corporation, creditors, and shareholders. The corporation also experiences a significant change in its governance and business relations with its creditors and shareholders. In bankruptcy, creditors become active participants in all corporate affairs, negotiations, and reorganization processes. In chapter 11, directors and officers continue to operate the business and manage assets as a debtor in possession (“DIP”), where the DIP is a trustee in the position of a fiduciary with rights and powers of the chapter 11 trustee. A bankruptcy trustee, as any trustee, owes a duty of loyalty to the beneficiaries of the trust. Thus, as a DIP, directors and officers must act as fiduciaries and owe duties of care and loyalty to the creditors and shareholders with similar standards used when the corporation is operating outside of bankruptcy.

In bankruptcy, directors' and officers' duty of care is multifold. The duty of care imposed is the same as that exercised by a trustee. This duty of care requires directors and officers to exercise care and diligence that an ordinary prudent person

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180 Commodity Futures Trading Comm'n v. Weintraub, 471 U.S. 343, 355 (1985) (stating that "the fiduciary duty of the trustee runs to shareholders as well as to creditors"); see In re Xonics, Inc., 99 B.R. 870, 872 (Bankr. N.D. Ill. 1989) (discussing fiduciary duties of corporate directors and officers); see also Martin J. Bienenstock, Conflicts Between Management and the Debtor in Possession's Fiduciary Duties, 61 U. CIN. L. REV. 543, 543 n.2 (1992) (noting that debtor in possession must act on behalf of creditors, which include, but are not limited to, creditors holding secured claims, senior unsecured claims, and junior unsecured claims, all of whom have different interests).


183 11 U.S.C. § 1107 ("[A] debtor in possession shall have all the rights . . . and powers, and shall perform all the functions and duties . . . of a trustee serving in a case under this chapter.").

184 U.S. Tr. v. Bloom (In re Palm Coast, Matanza Shores Ltd. P'ship), 101 F.3d 253, 258 (2d Cir. 1996) ("The law of trusts requires that the trustee, in his role as trustee, be disinterested and prohibits him from obtaining interests adverse to the estate. As with any trustee, a bankruptcy trustee owes a duty of loyalty to the beneficiaries of the trust.").

185 Miller, supra note 140, at 1487–88 ("The courts have recognized that a DIP owes the twin duties of care and loyalty to its creditors and stockholders"); see also Wolf v. Weinstein, 372 U.S. 633, 649–51 (1963) (discussing duties of DIP); Fulton State Bank v. Schipper (In re Schipper), 112 B.R. 917, 919 (N.D. Ill. 1990) ("A debtor-in-possession holds its powers in trust for the benefit of the creditors and has the duty to protect and conserve property in his possession for their benefit."); aff'd, 933 F.2d 513 (7th Cir. 1991).

186 E.g., Ford Motor Credit Co. v. Weaver, 680 F.2d 451, 461 (6th Cir. 1982) (holding that "[t]he duties of a debtor in possession are similar to those of a trustee in bankruptcy"); In re Four Score Broad., Inc., 77 B.R. 404, 407 (Bankr. W.D.N.Y. 1987) (noting that "[a]s a debtor-in-possession, the Debtor stood in the shoes of a Trustee").
would exercise under similar circumstances. A mistake of judgment is not by itself a basis for imposing liability, but a failure to conform to a standard of care may impose liability on directors and officers. As DIPs, the directors’ and officers’ duty of care is to maximize and protect the estate’s assets, abstain from wasting assets, furnish information about the estate and its administration, and exercise reasonable diligence and care in formulating a reorganization plan.

187 United States v. Aldrich (In re Rigden), 795 F.2d 727, 730 (9th Cir. 1986) (stating that “[a] bankruptcy or reorganization trustee has a duty to exercise that measure of care and diligence that an ordinary prudent person would exercise under similar circumstances”).

188 See, e.g., United States ex rel. Julien P. Benjamin Equip. Co. v. Sapp (In re S. Found. Corp.), 641 F.2d 182, 184–85 (4th Cir. 1981) (stating that “[w]hen acting within the discretionary bounds of this authority, it is settled that the trustee may not be held liable for any mistake of judgment; that his liability personally is ‘only for acts determined to be willful and deliberate in violation of his duties’ and specifically that he is liable solely ‘in his official capacity, for acts of negligence’” (quoting Sherr v. Winkler, 552 F.2d 1367, 1375 (10th Cir. 1977) (emphasis added)); In re Haugen Constr. Serv., Inc., 104 B.R. 233, 240 (Bankr. D.N.D. 1989) (“As a fiduciary, a trustee may be held liable for any losses proximately caused by his willful and deliberate violation of his fiduciary duties . . . . A trustee is not, however, responsible for mistakes in judgment where that judgment was discretionary and reasonable under the circumstances.” (citations omitted)); see also In re Adelphia Commc’ns Corp., 342 B.R. 122, 129 (S.D.N.Y. 2006) (noting that “a debtor in possession’s duty to protect the property of its estate does not require overzealous pursuit of every claim, fraudulent conveyance, or avoidance action”).

189 In re Rigden, 795 F.2d at 730 (“Although a trustee is not liable for mistakes in judgment where discretion is allowed, he or she is liable ‘for not only intentional but also negligent violations of duties imposed upon him by law.’” (quoting Hall v. Perry (In re Cochise Coll. Park, Inc.), 703 F.2d 1339, 1357 (9th Cir. 1983)); Sw. Media, Inc. v. Rau, 708 F.2d 419, 425 (9th Cir. 1983) (holding trustee not liable, court noted that “[l]iability will not be imposed for the exercise of such [business] judgment, absent negligence”); In re Rollins, 175 B.R. 69, 75 (Bankr. E.D. Cal. 1994) (noting that scope of trustee’s duty is dictated by facts of each case, and discussing particular trustee’s negligence); see Johnson v. Clark (In re Johnson), 518 F.2d 246, 251 (10th Cir. 1975) (“[T]he standard is the exercise of due care, diligence and skill both as to affirmative and negative conduct. Where the trustee is negligent or willful and fails to meet the standard of care required of him, he is liable for loss. The standard or measure of care, diligence and skill is that of an ordinarily prudent man in the conduct of his private affairs under similar circumstances and with a similar object in view. It is not necessary to a surcharge of a trustee’s accounts that he shall have been guilty of fraud or intentional wrongdoing. It is sufficient that the trustee has failed to discharge a duty required by the law.”), cert. denied, 423 U.S. 893 (1975); In re Center Teleprods., Inc., 112 B.R. 567, 578 (Bankr. S.D.N.Y. 1990) (“[A] bankruptcy trustee is immune from suit for personal liability for acts taken as a matter of business judgment in acting in accordance with statutory or other duty or pursuant to court order. Where the trustee negligently fails to discover his agent’s negligence, negligently obtains a court order, or negligently or willfully carries out a court order he knew or should have known he wrongfully procured, however, personal liability will attach.”).

The directors' and officers' duty of loyalty in chapter 11 proceedings is identical to the duty they owe when the corporation is solvent. The duty of loyalty requires directors and officers to refrain from self-dealing, to avoid conflicts of interest and the appearance of impropriety, and to treat all parties to the case fairly.

E. Legal Distinctions of Fiduciary Duties across Four Financial Conditions

The courts have identified four financial conditions that impose legal duties on the directors and officers. With the exception of duties to the corporation, the parties to whom directors and officers owe fiduciary duties change depending on the financial condition of the company. When the company is solvent, the duties are only owed to the corporation and shareholders. As the company's financial condition deteriorates and the company enters the zone of insolvency, directors' and officers' duties extend to creditors. In insolvency, the creditors and the corporation are owed fiduciary duties, while the duties to shareholders become secondary. When the company has filed for bankruptcy, the creditors and the

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191 But see Sheinfeld & Pippitt, supra note 190, at 93 (noting that in chapter 11 proceedings under section 1106 of Bankruptcy Code, directors have additional statutory duties which include fair reporting and investigation of debtor's conduct and financial condition).

192 See Lopez-Stubbe v. Rodriguez-Estrada (In re San Juan Hotel Corp.), 847 F.2d 931, 937, 950 (1st Cir. 1988) (noting that "bankruptcy trustees may be held personally liable for breaches of fiduciary duty" and holding that "self-dealing by a trustee is the quintessence of a conflict of interest"); In re Coram Healthcare Corp., 271 B.R. 228, 235 (Bankr. D. Del. 2001) (noting that "a debtor in possession is bound by a duty of loyalty that includes an obligation to refrain from self dealing, to avoid conflicts of interests and the appearance of impropriety").

193 See Bennit v. Gemmill (In re Combined Metals Reduction Co.), 557 F.2d 179, 196–97 (9th Cir. 1977) (discussing concepts of loyalty and disinterestedness (citations omitted)); see also In re Hampton Hotel Investors, L.P., 270 B.R. 346, 361 (Bankr. S.D.N.Y. 2001) (stating that "a debtor in possession, like a chapter 11 trustee, owes the estate and its creditors a general duty of loyalty").

194 See Sherr v. Winkler, 552 F.2d 1367, 1374 (10th Cir. 1977) (discussing fiduciary obligation of trustees who are appointed and serving in reorganization proceeding to treat all parties fairly); S'holders' Protective Comm. for Moulded Prods., Inc. v. Barry (In re Moulded Prods. Inc.), 474 F.2d 220, 224 (8th Cir. 1973) (articulating trustee's duty to treat all parties fairly in reorganization proceeding), cert. denied, 412 U.S. 940 (1973); In re Spielfogel, 211 B.R. 133, 145–46 (Bankr. E.D.N.Y. 1997) (evaluating trustee's preference for creditors over shareholders when negotiating proposed settlement).

195 See Richard M. Cieri & Michael J. Riela, Protecting Directors and Officers of Corporations That Are Insolvent or in the Zone or Vicinity of Insolvency: Important Considerations, Practical Solutions, 2 DePaul Bus. & Com. L.J. 295, 296, 300–01 (2004) (discussing fiduciary duties owed by directors and officers of companies during each of four financial conditions—solvency, insolvency, zone of insolvency, and bankruptcy).

196 The corporation is present in all of the financial phases because directors and officers are considered its fiduciaries.

197 E.g., Guth v. Loft, Inc., 5 A.2d 503, 510 (Del. 1939) (stating corporate officers and directors are not permitted to misappropriate stockholders' and corporation's trust and confidence to further private interests).

198 William Lenhart & Jack Williams, Director and Officer Liability in the Zone of Insolvency, CORP. GOVERNANCE ADVISOR, May–Jun. 2006, at 28 (stating duty to creditors, as opposed to shareholders, ripens as corporation begins operating in zone of insolvency).

199 See Cieri & Riela, supra note 195, at 300 (suggesting fiduciary duties of directors and officers of insolvent corporations run primarily, if not exclusively, to corporation and its creditors).
corporation are again the primary beneficiaries of directors' and officers' duties, while duties to the shareholders remain secondary.\textsuperscript{200}

The fiduciary duties of care, loyalty, and to act in good faith exist during all corporate financial conditions, although the parties to whom fiduciary duties are owed change in priority. Additionally, when the corporation is insolvent or has filed for bankruptcy, directors and officers should be aware of the reprioritization of beneficiaries of their duties.\textsuperscript{201} The presence of identical fiduciary duties of care, loyalty, and to act in good faith may create a false sense of security because directors and officers may incorrectly prioritize the parties to whom their duties are owed.

III. INNOVATIVE APPROACH TO MONITORING AND OPERATING IN THE ZONE OF INSOLVENCY

To fulfill their fiduciary duties, directors and officers must know when their company enters and exits the zone of insolvency. The systematic application of financial metrics is an innovative approach that can enable directors and officers and other involved parties to determine when a company operates in the zone of insolvency,\textsuperscript{202} and can aid in the prioritization of parties to whom director and officers' owe fiduciary duties. Although financial metrics are in popular use for

\textsuperscript{200} See id. at 300–01 (reasoning that shift due to hierarchy of interests—shareholders' interests are subordinate to creditors' claims); see also 11 U.S.C. § 1129(b)(2)(B)(ii) (2006) (allowing confirmation of plan of reorganization on condition that junior classes of priority, including old equity, do not receive any value until all senior creditors have been paid in full).

\textsuperscript{201} In insolvency, additional duties include not allowing preferential transfer of assets; minimizing the loss to creditors; maximizing company's long-term wealth creating capacity; avoiding actions that divert, dissipate, or unduly risk corporate assets that otherwise may be used to pay creditor claims; and being aware of deepening insolvency. See Helm Fin. Corp. v. MNVR R.R., 212 F.3d 1076, 1081 (8th Cir. 2000) ("Corporate officers and directors cannot grant themselves a preference over creditors."); In re Ben Franklin Retail Stores, Inc., 225 B.R. 646, 655 (Bankr. N.D. Ill. 1998) ("[C]reditors have a right to expect that directors will not divert, dissipate or unduly risk assets necessary to satisfy their claims."); Credit Lyonnais Bank Nederland, N.V. v. Pathe Commc'n Corp., No. 12150, 1991 WL 277613, at *34 (Del. Ch. Dec. 30, 1991) (stating directors have obligation to exercise "good faith effort to maximize the corporation's long-term wealth creating capacity"); N.Y. Credit Men's Adjustment Bureau, Inc. v. Weiss, 110 N.E.2d 397, 398 (N.Y. 1953) (noting directors "were obligated to obtain for the corporation the full value of the assets"); Packman, supra note 135, at 2 (noting some courts have held deepening insolvency is legally cognizable claim). In bankruptcy, directors' and officers' additional duty is the same as that of a trustee in bankruptcy and debtor in possession. See Ford Motor Credit Co. v. Weaver, 680 F.2d 451, 461 (6th Cir. 1982) (holding "duties of a debtor in possession are similar to those of a trustee in bankruptcy").

corporate evaluations by other evaluators, especially banks, federal and state courts have not yet employed them to address the need to operationally define a zone of insolvency. This unique application of financial metrics would allow directors and officers to exercise their business judgment and be confident that they had correctly identified the priority of stakeholders when operating in a well-defined and quantitatively operationalized zone of insolvency, additionally enhancing their protection from liability claims.

A. The Altman’s Z-Score Model

The Altman’s Z-Score model provides a method for directors and officers to measure their company’s financial performance and determine whether it is operating in a zone of insolvency. Altman’s Z-Score is a measure of the financial


204 Gregory J. Eidleman, Z Scores–A Guide to Failure Prediction, CPA J., Feb. 1995, at 52, 52 (noting Altman’s model is “tried and tested formula for bankruptcy prediction”). Additional models exist to measure company’s solvency: the Morningstar Solvency Score (“MSS”) and Distance to Default Score (“DD”). See Warren Miller, Introducing the Morningstar Solvency Score, A Bankruptcy Prediction Metric 1, 3 (Dec. 2009) (unpublished manuscript), available at http://ssrn.com/abstract=1516762 (comparing MSS, DD and Altman Z-score models). MSS is an accounting-ratio based metric composed of four ratios that measure a company’s credit-relevant characteristics, such as capital structure leverage, interest coverage, short-term liquidity, and profitability. MSS has superior bankruptcy prediction power within a one-year time scope. MSS incorporates unique information to be useful in combination with other models. Instead of using ratios, which can be problematic when developing an equation through regression analysis, the ratios are transformed into percentiles based on breakpoints that uniformly distributed entire multi-year dataset. Id.

The MSS formula is MSS = (5 * √(TLTA * EBIEp)) + (4 * QRp) + (1.5 * ROICp), where TLTA is the percentile score of Total Liabilities divided by Total Assets, where EBIE is 101 minus the percentile of Earnings Before Interest Taxes Depreciation and Amortization divided by Interest Expense, where QR is 101 minus the percentile of Quick Ratio, and where ROIC is 101 minus the percentile score of Return on Invested Capital. Id. at 3.

The Distance to Default (“DD”) score is a statistically significant model in explaining the default events of firms with poor credit quality and high credit risk. Ming-Yuan Leon Li & Peter Miu, A Hybrid Bankruptcy Prediction Model with Dynamic Loadings on Accounting-Ratio-Based and Market-Based Information: A Binary Quartile Regression Approach, 17 J. EMPIRICAL FIN. 818, 818 (2010). The DD measures the distance between the current value of assets and the debt in terms of volatility, which is the asset’s standard deviation of the growth rate. Ming Xu & Chu Zhang, Bankruptcy Prediction: The Case of Japanese Listed Companies, 14 REV. ACCT. STUD. 534, 539 (2009) (providing “default likelihood indicator” formula). The DD model assumes that a company’s equity can be considered a call option with a strike price equal to the book value of its liabilities and a market price equal to the market value of its assets. Miller, supra, at 13. Unlike the Z-Score or MSS, the DD does not address the cash accounting values that are examined in a default or bankruptcy scenario. Further, DD does not examine the financial covenants, which may be true determinants of whether a distressed company defaults on its obligations.

Company’s DD can be computed using volatility of its current level and market equity value. The probability of company’s default is Pr (E1 ≤ 0) = Φ (–A0 – D) / σA) = Φ (–E0 / σA), where equity value is E1, the current value of debt is E0, the constant value of debt is D, the cumulative normal probably function is Φ
health of the company and was designed to predict bankruptcy by forecasting the probability that a company would enter into bankruptcy within a two-year period. Over four decades, the Z-Score model has been an accepted financial distress measure. The Z-Score model is convenient, easy to compute, and requires a moderately small amount of data. The Z-Score is used by auditors, accountants, security analysts, management consultants, and by bankers as part of many database systems for loan evaluations. The use of the Z-Score model to determine the future risk of bankruptcy has also been recognized and upheld by a court in the D.C. Circuit.

The Z-Score is a composite of seven calculations involving accounting and market-based values. These values are combined into five ratios, which then comprise the Z-Score. The five ratios address and measure a company's liquidity, cumulative profitability, asset productivity, market-based financial leverage, and capital turnover.

The original Z-Score equation is

\[ Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5, \]

where \( X_1 \) is working capital divided by total assets, \( X_2 \) is retained earnings divided by total assets, \( X_3 \) is earnings before interest and taxes (EBIT) divided by total assets, \( X_4 \) is market value of equity divided by book value of total liabilities, and \( X_5 \) is sales divided by total assets.

\( (*) \), company's asset value at the end of the year is \( A_1 \), current asset value is \( A_0 \), and standard deviation is \( \sigma_A \).

Li & Miu, supra, at 821.

The formula shows that the higher the level of the current equity value (the volatility of asset value), the larger the value of DD, and thus the lower the probability of a default. See id.


206 Gina Gutzeit & John Yozzo, Z-Score Performance Amid Great Recession, 30 A M. BANKR. INST. J., Mar. 2011, at 44, 44 (describing Z-Score prediction accuracy as 95 percent within one year and 75 percent within two years). This analysis was developed by Edward Altman, a professor at New York University's Stern School of Business in 1968. The original Z-Score model was modified to create the Z'-Score model, the Z"-Score Model, and the ZETA model. See Miller, supra note 204, at 4 (stating that Z-score model is still common component of credit rating systems).

207 See Joseph Calandro, Jr., Considering the Utility of Altman's Z-Score as a Strategic Assessment and Performance Management Tool, 35 STRATEGY & LEADERSHIP 37, 37–38 (2007) (stating that Altman's Z-Score has been immensely influential in areas such as credit risk analysis, distressed investing, M&A target analysis, turnaround management, and strategy and performance measurement).

208 See Bajaj, Denis, Ferris & Sarin, supra note 205, at 110 (showing Z-Score analysis on simple table); see also Kyd, supra note 203 (listing "Z-Score Ingredients" as only eight variables).

209 Eidelman, supra note 204, at 53 (recognizing beginning of era of computer-assisted statement analysis and likelihood of increased use).

210 Nat'l Wildlife Fed'n v. EPA, 286 F.3d 554, 565 (D.C. Cir. 2002) (allowing use of Z-Score and recognizing it as reliable and objective tool).

211 Miller, supra note 204, at 4 (identifying practitioners' ability to easily comprehend formula because each ratio describes different credit-relevant aspect of company's operations).

212 Eidelman, supra note 204, at 52 (outlining Z-Score formula and identifying terms).
The lower the Z-Score, the greater the possibility of the company becoming bankrupt.\footnote{213} A company with a Z-Score of 1.8 or less has a high probability of failure, while a company with a Z-Score of 3.0 or higher is unlikely to file for bankruptcy.\footnote{214} A company with a Z-Score of 1.81 to 2.99 places the business in the 'zone of ignorance'; a range where results are inconclusive and misclassification may be observed, suggesting that further analysis is necessary.\footnote{215} However, a score below 2.60 suggests that a company is in financial distress.\footnote{216}

A logical parallelism between the Z-Score result and the four financial conditions of the company may be drawn. When the Z-Score is 3.0 or higher the company is solvent. When the Z-Score is below 2.60, the company is in financial distress and may be operating within the zone of insolvency. The Z-Score of 1.8 or lower indicates that the company is insolvent and is likely to file for bankruptcy within a year.

The Z-Score has been used by the financial services community for more than 40 years and has been demonstrated to be reliable in a variety of contexts.\footnote{217} When used to measure potential for bankruptcy in one year, the Z-Score model has an accuracy rate up to 93.9 percent, decreasing to 36.0 percent when estimating the chances of a company declaring bankruptcy within five years.\footnote{218} The Z-Score formula can be modified to accommodate companies with specialized accounting ratios, such as privately held companies and non-manufacturing firms.\footnote{219}

\footnote{213} Jae K. Shim, Forecasting Corporate Bankruptcy: Do It Yourself, 11 J. Bus. Forecasting Methods & Sys., 21, 23 (1992) (discussing significance and accuracy rate of Z-Score); see also Bajaj, Denis, Ferris & Sarin, supra note 205, at 110 (stating that "the higher the Z-Score of a company, the stronger its financial position").

\footnote{214} Shim, supra note 213, at 23. (acknowledging score's 90% accuracy rate in forecasting business failure within year).

\footnote{215} Edward I. Altman, Predicting Financial Distress of Companies: Revisiting the Z-Score and ZETA\textsuperscript{8} Models 20–21 (July 2000) (unpublished working paper) (on file with the Stern School of Business, N.Y. University, available at http://pages.stern.nyu.edu/~ealtman/zscores.pdf) (noting further that Z-score model, an accurate predictor of failure up to two year prior to distress, diminishes in accuracy as lead time increases).

\footnote{216} Bajaj, Denis, Ferris & Sarin, supra note 205, at 110 (suggesting Z-Score below 2.6 indicates financial distress).

\footnote{217} Eidleman, supra note 204, at 52 (heralding virtues of Z-Score method).

\footnote{218} Altman, supra note 215, at 41 (noting that ZETA\textsuperscript{8} model, which is a variation of Z-Score model, has displayed accuracy of 96% when predicting possibility of bankruptcy in one year, and 70% when predicting possibility of company's bankruptcy in five years). ZETA\textsuperscript{8} model calculations are performed by Zeta Services Inc., available at http://zetascore.com/. Z-Score's low accuracy when utilized to determine bankruptcy five years in the future should not affect its implementation among the boards of directors and management because the Z-Score permits them to determine if the company is in the zone of insolvency today.

\footnote{219} Eidleman, supra note 204, at 52 (stating certain businesses with different accounting methods, such as privately held companies, may utilize modified Z-Score formula). Additionally, for privately held firms where X4 cannot be calculated, the Z-Score formula should be modified. The modified Z-Score formula for private companies is $0.717X_1 + 0.847X_2 + 3.107X_3 + 0.420X_4 + 0.998X_5$, where if a company's Z-Score is below 1.23 it is considered likely to file for bankruptcy, a company with a Z-Score between 1.23 and 2.90 is in the zone of indifference, and a company with a Z-Score of above 2.90 is considered to be non-bankrupt. \textit{Id.}
Due to the Z-Score's dependence on accounting measures, it is unable to predict bankruptcies caused by factors that are not indicated on the balance sheet, such as major and unexpected business disruptions. The Z-Score will not determine bankruptcies if the company engages in fraudulent accounting practices, and it may not be useful for new companies with little or no earnings and for small firms with assets of less than $1 million.

Results from regular testing of a company's financials with Z-score analysis will provide quantitative and verifiable analysis to indicate whether the firm is within a zone of insolvency, thus indicating the specific parties to whom directors and officers should give preferential consideration. Similarly, shareholders and creditors can use the test to monitor for possible violations when directors' and officers' duties change, when the company begins to operate in the zone of insolvency, and when it returns to solvency.

B. The Effect of the Business Judgment Rule on the Zone of Insolvency

The standard for determining whether directors and officers fulfill their fiduciary duties is the business judgment rule. The rule absolves directors and officers of liability for honest errors in judgment, in situations where they acted in good faith and in a reasonable manner. It is a presumption that in making a business decision, a corporation's directors were informed and acted in good faith and honest belief in the best interests of the corporation. If a plaintiff can

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For nonmanufacturing firms, where $X_3$ greatly varies by industry, the formula must also be modified. The modified Z-Score formula for nonmanufacturing companies is $6.56X_1 + 3.26X_2 + 6.72X_3 + 1.05X_4$. A company with a Z-Score below 1.1 is considered likely to file for bankruptcy. A company with a Z-Score between 1.1 and 2.6 is in the zone of ignorance. A company with a Z-Score above 2.6 is considered to be non-bankrupt. Id. at 52–53 (outlining additional revised Z-Score formula used for analyzing nonmanufacturing companies).

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220 Narayanan, supra note 205 (discussing scenarios where Z-Score unreliable bankruptcy indicator, such as major and unexpected business disruptions).

221 Id. (stating that bankruptcies caused by accounting fraud practices such as WorldCom will not be determined by Z-Score).

222 Id. (noting Z-Score ineffective for firms with limited assets and new firms with limited earnings).

223 In re Fleming Packaging Corp., 370 B.R. 774, 784 (Bankr. C.D. Ill. 2007) (classifying business judgment rule as standard of judicial review that prevents courts from passing on merits of business decisions).

224 ZAMORE, SOTERA & SMITH, supra note 28 (absolving directors and officers for honest errors made in good faith); see Cuker v. Mikalauskas, 692 A.2d 1042, 1045 (Pa. 1997) ("The business judgment rule insulates an officer or director of a corporation from liability for a business decision made in good faith if he is not interested in the subject of the business judgment, is informed with respect to the subject of the business judgment to the extent he reasonably believes to be appropriate under the circumstances, and rationally believes that the business judgment is in the best interests of the corporation.").

225 Aronson v. Lewis, 473 A.2d 805, 812 (Del. 1984) (defining business judgment rule as "presumption that in making a business decision the directors [and officers] of a corporation acted on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the company").

226 overruled on other grounds, Brehm v. Eisner, 746 A.2d 244 (Del. 2000); see Baldwin v. Bader, 585 F.3d 18, 22 (1st Cir. 2009) (stating that "there is a presumption that the directors have acted properly and the 'business judgment' rule provides substantial latitude for the directors' judgment").
demonstrate that directors had an interest in the transaction at issue, the burden shifts to the directors to prove that the transaction was fair and reasonable. Absent an abuse of discretion, the courts will respect the business judgment of directors.227

The business judgment rule does not apply when the directors have conflicts of interest, stand on both sides of a transaction, or have a personal financial interest in a transaction.228 Courts have generally declined to apply the business judgment rule where there was a breach of the duty of loyalty229 and where directors and officers did not act in good faith.230 The business judgment rule has not applied where directors and officers made uninformed decisions, acted unlawfully, or possessed a conflict of interest.231 Thus, breach of a fiduciary duty may not impose liability on the directors and officers as long as the transaction was fair.232

Directors' and officers' actions in the zone of insolvency may be protected by the business judgment doctrine.233 Because procedural processes are strictly followed in the zone of insolvency, the probability that directors' and officers' actions fall under the protection of the business judgment rule is maximized.234 Strict compliance is necessary because interested stakeholders will review directors' and officers' decisions for possible violations. In the zone of insolvency, protection is increased when directors and officers thoroughly document all decision-making

226 Mobil Corp. v. Marathon Oil Co., No. C-2-81-1402, 1981 WL 1713, at *29 (S.D. Ohio Dec. 7, 1981), rev'd on other grounds, 669 F.2d 366 (6th Cir. 1981) (stating that "the initial burden of proving the director's interest or bad faith . . . always rests with the plaintiff"); see Treadway Cos. v. Care Corp., 638 F. 2d 357, 382 (2d Cir. 1980) (stating burden shifts to director after plaintiff shows director had interest in transaction at issue); LeMenestrel v. Warden, 964 A.2d 902, 911 n.6 (Pa. Super. Ct. 2008) (citation omitted) (stating that "the burden is on the party challenging the decision to establish facts rebutting that presumption").

227 E.g., Aronson, 473 A.2d at 812 (ruling that, without abuse of discretion, court will respect business judgment).

228 In re Fleming Packaging Corp., 370 B.R. at 784 (stating rule does not apply when director has conflict of interest or stands on both sides of deal).

229 E.g., Revlon, Inc. v. MacAndrews & Forbes Holdings, Inc., 506 A.2d 173, 180 (Del. 1986) (declining to apply business judgment rule when board's anti-takeover measures were motivated by own interests).

230 E.g., In re Fleming Packaging Corp., 370 B.R. at 784 (declining to apply rule when directors and officers did not act in good faith when they made fraudulent transfers).

231 Lenhart & Williams, supra note 198, at 32 (concluding business judgment rule does not apply where conflict of interest, uninformed decisions, or unlawful acts exist; fairness of decisions must be shown instead).

232 Baldwin v. Bader, 585 F.3d 18, 22 (1st Cir. 2009) (finding under Delaware law breach of duty not fatal if shown that transaction was fair).

233 Jo Ann J. Brighton, The Trenwick Decision—The Death Knell for Deepening Insolvency?, 25 AM. BANKR. INST. J., Oct. 2006, at 32, 32 (stating that business judgment rule applies even during zone of insolvency); see Bennett Restructuring Fund, L.P. v. Hamburg, No. X02CV010167682S, 2003 WL 178753, at *20 (Conn. Super. Ct. Jan. 2, 2003) (stating that directors' and officers' actions did not qualify as breach of fiduciary duty); Luis Salazar, Is the Tide Turning on D&O Claims?, 24 AM. BANKR. INST. J., Apr. 2005, at 1, 44 (stating that Credit Lyonnais holding "emphasized that the business-judgment rule protects directors if they, in good faith, pursued a less-risky business strategy because they fear that a more risky strategy might render the firm unable to meet its legal obligations to creditors and other constituencies").

234 See Friedland, Scheinbaum & Johnson, supra note 13, at 286 (suggesting increased protection of business judgment rule if right procedures are followed since presumption applies in absence of active wrongdoing).
processes; consider the competing interests of the corporation, shareholders, and creditors; and make informed decisions in good faith.235

The proper consideration of competing interests236 may be achieved through a balancing approach, where the directors and officers conduct an in-depth weighing of creditors' and shareholders' interests.237 The balancing of competing interests ensures that directors and officers are acting for the benefit of the entire corporate enterprise, rather than for the benefit of any single group238 and helps to identify any directors' and officers' action that increase return of a single stakeholder at the cost of another.239 By considering and balancing creditors' and shareholders' competing interests until the company moves out of the zone of insolvency, and identifying the primary stakeholders, directors and officers will fulfill their obligations to all parties and enhance their business judgment rule protection.

IV. PROGRESS IN UNDERSTANDING THE ZONE OF INSOLVENCY

235 R. Paul Yetter, Entering the Sixth Dimension: An Area Called "The Insolvency Zone", 55TH ANN. ROCKY MNT. MIN. L. INST., July 2009, at 24, available at http://www.yetterwarden.com/news/insolvency_zone.pdf (stating that "a company experiencing deepening liquidity could insulate itself from potential liability and bolster application of the business judgment rule by creating a record of corporate decision making that demonstrates that it considered creditor interests in the process").

236 Ryan, supra note 43, at 36 (stating that in zone of insolvency, it is difficult for directors and officers to benefit shareholders and creditors equally due to differences in their demands and competing interests); see A. Mechele Dickerson, Privatizing Ethics in Corporate Reorganizations, 93 MINN. L. REV. 875, 880 (2009) (stating that "[t]he differing interests of creditors and shareholders can create significant agency conflicts for managers, since the managers theoretically run the company for the benefit of both groups"); see also Maaren A. Choksi, Sink or Swim? A Case For Salvaging Deepening Insolvency Theory, 7 J. BUS. & SEC. L. 163, 186 n.125 (2006) (analyzing language in Credit Lyonnias as allowing creditors to challenge officers' and directors' business judgments as breach of fiduciary duty owed to them). For instance, because shareholders have a strong incentive to avoid bankruptcy, they are willing to dissipate the company's assets to stave off a bankruptcy filing. Ryan, supra note 43, at 36. Conversely, creditors desire to preserve the company's assets for possible future liquidation and payment of their claims. Id.

237 Adam M. Slavens, Directors and Creditors in the "Zone of Insolvency", NAT'L CREDITOR DEBTOR REV., Dec. 2007, at 37, 41 (stating that corporate governance best practices suggest and encourage directors and officers to maintain heightened level of sensitivity when dealing with creditors when corporation is in zone of insolvency); see Barrett Howell & Phillip Lamberson, Corporate Duties Rise When Companies Enter the Zone of Insolvency, TEX. LAW., Mar. 30, 2009, available at http://winstead.contentpilot.net/portalresource/lookup/wosid/contentpilot-core-501-8908/pdfCopy.name=/Howell%20and%20Lamberson%20-%202009.pdf (stating that understanding creditors' interests in the zone of insolvency may be achieved by soliciting creditors to input on significant business decisions).


239 The directors and officers of the corporation should not increase shareholder return or be given preference at the cost of impairment of creditors' claims. Similarly, the directors and officers should not engage in significant transactions that only benefit the creditors, as current case law shows creditors' interests in the zone of insolvency do not supersede shareholders' interests. See, e.g., In re Hechinger Inv. Co. of Del., 274 B.R. 71, 89 (D. Del. 2002) (acknowledging that in insolvency directors' duty is not to put creditors' interests ahead of stockholders' interests, but rather to maximize corporation's long-term wealth creating capacity).
This article provides a categorization of the fiduciary duties that directors and officers owe to the corporation, investors, creditors and other interested stakeholders under each of four court-defined corporate financial conditions. These determinations can be used to identify the beneficiaries of directors' and officers' duties as they change with the financial condition of the company.

Our review of the law on the zone insolvency highlights the practical limitations of holdings in *Gheewalla*, *Berg*, and *Torch Liquidating Trust* that were thought to address the difficulties of dealing with the ill-defined period. It shows that zone of insolvency remains a problematic area of law with many unresolved legal issues, principally because of the limited scope of the holdings and the non-operational definitions of the zone on which they rely.

The problems posed by the zone of insolvency pertain to the responsibilities of the directors and officers of the company. The main responsibilities of directors and officers pertain to the strategic management of the company, which involves the formulation and implementation of plans designed to achieve the long-term objectives of the organization. Typically, strategic management decisions involve multiple top-managers, require large amounts of the firm's resources, affect the firm's long-term prosperity, are future oriented, usually have multifunctional or multi-business consequences, and require consideration of the firm's external environment. Such activities require a long timeframe to plan, activate, and refine. When a corporation begins to fail financially, the decisions of its board and directors continue to focus on strategic matters but give increased consideration to broadly-scoped impinging matters. This orientation makes quick shifts among major constituents in strategic decision-making extremely problematic for directors and officers.

Yet, the fall of a company toward serious financial trouble threatens to place it in the fuzzy and nebulous zone of insolvency. In this zone, the directors and officers are legally-required to realign their allegiance in decision making to include creditors and, in some states, even to give them priority consideration. Additionally, the imprecision of the in-coming and out-going boundaries of the zone profoundly hamper decision-making since the timeframe that encompasses the formulation and implementation of strategic plans can involve multiple years. A formulated plan might be fully implemented a year or more in the future, during which time the company might slide in (and out) of a zone of insolvency. Aborting

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241 *Id.* at 4–6 (detailing long-term outlook required by successful management).

242 *See In re Adelphia Commc'ns Corp.*, 323 B.R. 345, 355 (Bankr. S.D.N.Y. 2005) (explaining director's obligation when in zone of insolvency "requires consideration of the needs and concerns of the company as a whole, with due regard to the priorities of stakeholders to the company's assets—which means, as a practical matter, that the needs and concerns of creditors, and not just shareholders, must be taken into account, along with the higher priority that creditors have to an insolvent company's assets").
a new strategic plan prior to its implementation would leave a company with the vestiges of a failed strategy. Abandoning a plan during implementation would send mixed and unsettling messages to a company's customers, investors, creditors, employees, and other stakeholders.

The evidence suggests that these and related problems could be ameliorated by the adoption of financial measures that could operationally define the boundaries of a zone of insolvency in financial terms. Altman's Z-score appears to be an appropriate tool for this purpose, in part because of its long and successful history in the financial services industry as a valid and reliable measure of a corporation's overall financial health and its likelihood of becoming bankrupt within two years. Using Altman's Z-Score and supplemental financial metrics to quantitatively and verifiably define the zone of insolvency will provide guidance to directors, officers and other concerned parties in knowing their legal rights and responsibilities at any point in the company's operations.

The concept of zone of insolvency has value in cautioning directors and officers that their duties may soon be owed principally to different parties, in composition or in priority. Because the decisions of directors and officers principally have long-term foci, such caution may prevent them from committing to business plans with a risk factor that would increase dramatically in the event of a change in the company's financial condition. However, a clearly articulated, conceptually sound, operational definition of the boundaries of the zone of insolvency, made possible by the use of Altman's Z-Score or similar financial analysis, might increase and would enhance its applicability to the monitoring and management of financially troubled companies.
**Table 1: Key Legal Distinctions of Directors’ and Officers' Fiduciary Duties across Four Corporate Financial Conditions**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solvency</th>
<th>Zone of Insolvency</th>
<th>Insolvency</th>
<th>Bankruptcy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parties to whom Directors and Officers owe fiduciary duties of care and loyalty, and to act in good faith.</td>
<td>• Shareholders&lt;br&gt; • Corporation</td>
<td>• Creditors (varies by jurisdiction)&lt;br&gt; • Shareholders (varies by jurisdiction)&lt;br&gt; • Corporation</td>
<td>• Creditors&lt;br&gt; • Shareholders (varies by jurisdiction)&lt;br&gt; • Corporation</td>
<td>• Creditors&lt;br&gt; • Shareholders&lt;br&gt; • Corporation</td>
</tr>
<tr>
<td>Additional duties owed by Directors and Officers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• To make no preferential transfer of assets&lt;br&gt; • To minimize loss to creditors&lt;br&gt; • To maximize the company's long-term wealth creating capacity&lt;br&gt; • To protect assets that might be used to pay creditors&lt;br&gt; • To be aware of potential deepening insolvency</td>
<td>• Duties of a Debtor in Possession, which are the same as of a trustee in bankruptcy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definite in time</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Consistencies in case law</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Table 2: Summary of Zone of Insolvency Cases

<table>
<thead>
<tr>
<th>Case</th>
<th>Holding</th>
<th>Practical Limitations</th>
</tr>
</thead>
</table>
| N. Am. Catholic Educ. Programming Found., Inc. v. Gheewalla, 930 A.2d 92 (Del. 2007). | Creditors of a corporation in the zone of the insolvency do not have a right to assert direct claims for a breach of fiduciary duty against the corporation's directors. | ▪ Creditors are not prohibited from pursuing derivative claims against directors and officers for breach of their fiduciary duties while the company is operating in the zone of insolvency.  
▪ *Credit Lyonnais* states that directors and officers of financially distressed corporations operating in the zone of insolvency owe a duty to the "community of interests," including creditors.  
▪ *Gladstone* and *3 Point Holdings LLC* holding state that directors owe duty to creditors when the corporation operates in the zone of insolvency.  
▪ *Gheewalla* holding applies only to Delaware companies. |
| Berg & Berg Enters., LLC v. Boyle, 178 Cal. App. 4th 1020 (Cal. Ct. App. 2009). | No fiduciary duty is owed to creditors by directors and officers of the corporation solely by virtue of corporation operating in the zone of insolvency. | ▪ See *Credit Lyonnais*, *Gladstone*, and *3 Point Holdings LLC*.  
▪ *Berg* holding only applies only to California companies. |
▪ See *Credit Lyonnais*, *Gladstone*, and *3 Point Holdings LLC*.  
▪ *Torch Liquidating Trust* holding applies only to Louisiana companies. |