Zone of Insolvency - A Valuation Perspective

The “zone of insolvency” is an abstraction used to describe the situation wherein a corporation is on the verge of insolvency, or is likely to become insolvent in the near future, but is not yet insolvent. This example of nebulous legal and valuation reasoning, which expanded the time period during which creditors had a right to assert claims against a corporation’s directors and managing officers for breaches of their fiduciary duties, was hatched just over 20 years ago by the Delaware Chancery Court (“Court”) in an opinion that includes a now famous footnote. In *Credit Lyonnais Bank Nederland, N.V. v. Pathe Communications Corporation* the Court held in dictum:

“At least where a corporation is operating in the vicinity of insolvency, a board of directors is not merely the agent of the residue risk bearers, but owes its duties to the corporate enterprise.”

In the famous (or perhaps infamous) footnote 55 to that opinion, the Court further references a corporation operating in the “vicinity of insolvency” when it seeks to mark the precise point at which the scope of the fiduciary duties of the managing officers and directors of a corporation (collectively, "directors") expands from the shareholders to include the corporate enterprise and its creditors.

Prior to *Credit Lyonnais*, most courts determined that the shifting point was actual “insolvency,” since that is the point at which the shareholders no longer have a cognizable interest in the assets of the corporation.

Definition of the zone, or vicinity, of insolvency short of actual insolvency has proven to be elusive for courts, lawyers, and valuation professionals. In a world without nuance, an entity is either “solvent” or “insolvent.” While those two opposites can be defined, the entry point to the zone of insolvency cannot be defined with any degree of reliable specificity. For a concept that has such far-reaching consequences that its existence could alter the scope of the fiduciary duties of corporate managing officers and directors to their various stakeholders, including creditors, greater precision should be a primary concern.

While the Delaware Chancery Court opinions in *Production Resources Group, L.L.C. v. NCT Group, Inc.*, and *North American Catholic Educational Programming Foundation, Inc. v. Rob Gheewalla, et al.* provided some assistance to directors of financially distressed entities to limit the scope of their potential liability while operating in the undefined zone of insolvency, the concept still has vitality; the decisions in *Credit Lyonnais, Production Resources, and Gheewalla* did nothing to assist valuation professionals in defining the zone of insolvency, nor could they.

While the era of “extend and pretend (and pray that it works)” has put off the day of reckoning for trillions of dollars of corporate debt, the arrival of tight credit markets; the demise of “covenant light,” or no covenant, credit agreements; and the lesson that risk is a part of pricing may be bringing greater attention to the existence of the zone of insolvency. The zone of insolvency, however, is

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2 Defined by the `Lectric Law Library’s lexicon as the part of a judicial opinion which is merely a judge’s editorializing and does not directly address the specifics of the case at bar; extraneous material which is merely informative or expanatory
3 *Credit Lyonnais*, WL 277613 at *34.
4 *Credit Lyonnais*, WL 277613 at *34 n.55.
still without precise definition. So therein lies the problem for the valuation professional retained to provide a fairness or solvency opinion to an entity contemplating a business transaction (such as one to raise capital, dispose of assets, issue debt, or secure existing debt, or any combination thereof) or in litigation where solvency is an issue. Though solvency and insolvency can be defined by taking snapshots, this is not so for the subjective area in between.

Relevant Case Law Background
Although this is not a paper that deals with legal issues, except to the extent they might be intertwined with valuation issues, a brief digest of the two cases referenced previously, Credit Lyonnais and Gheewalla, is necessary to provide factual and contextual background.

Oversimplified for sake of the reader, the Credit Lyonnais case arose from a leveraged buyout (“LBO”) that, as Chancellor Allen of the Delaware Chancery Court so deftly stated, “failed to meet its sponsor’s expectations.” Through a tangled web of advances, the LBO was financed in large measure by Credit Lyonnais (“Bank”), which advanced substantial sums to the purchasing entity to assist it in acquiring MGM/UA Communications Co. (“MGM”) from a third party. The acquisition closed on November 1, 1990, and almost immediately encountered serious financial, operational, and management difficulties, resulting in the failure to pay critical vendors, suppliers, and service providers. To keep MGM going, the Bank advanced significant additional amounts. More disclosures of financial weaknesses and improprieties followed, and in late March 1991, an involuntary Chapter 7 proceeding was filed against MGM in bankruptcy court in Los Angeles, California. To facilitate an exit from bankruptcy, the Bank advanced additional sums, but conditioned such advances on the terms of a corporate governance agreement that, among other things, sought to limit the ability of the individual shareholder (Giancarlo Parretti) of MGM’s parent (Pathe Communications Corporation) and his cronies to influence, disrupt, or interfere with MGM and its new management. The bankruptcy case was dismissed and, not surprisingly, as soon as the dismissal order was final, the individual shareholder Parretti started doing what the corporate governance agreement sought to prevent - interfering with and disrupting the management of MGM in a serious way. Following more corporate machinations by and directed by Parretti, the Bank exercised its contractual rights under a voting trust agreement and voted the MGM shares to oust Parretti and his cohorts from the MGM board, replacing them with the Bank’s own designees. This litigation was thereafter instituted by the Bank to seek a judicial determination that its designees constituted the lawfully elected board of directors of MGM. (Note that it was not a creditor who initiated the breach of fiduciary claims; rather, it was Parretti as shareholder against MGM management.) In the course of its decision in favor of the Bank and upholding its actions, the Delaware Chancery Court stated in dictum,

In these circumstances where the company was in bankruptcy until May 28 and even thereafter the directors labored in the shadow of that prospect, Mr. Ladd and his associates were appropriately mindful of the potential differing interests between the corporation and its 98% shareholder [Parretti]. At least where a corporation is operating in the vicinity of insolvency, a board of directors is not merely the agent of the residue risk bearers, but owes its duties to the corporate enterprise.  

In relevant part, footnote 55 states,

But that result will not be reached by a director who thinks he owes duties to the agents directly to shareholders only. It will be reached by directors who are capable of conceiving of the corporation as a legal and economic entity. Such directors 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.
Hence, the birth of the theory that directors of a corporate entity operating in the zone of insolvency owe fiduciary duties to a constituency that includes creditors, and that creditors have the right to bring breach of fiduciary duty claims (perhaps even direct claims) against those directors and managing officers when the corporate entity is operating in the zone of insolvency.

For years after *Credit Lyonnais*, although nothing in the opinion states it directly, it became gospel that the directors of a corporation operating in the zone of insolvency owed fiduciary duties to their creditors, ahead of or at least along with their shareholders, and that creditor litigation was available to recover losses they suffered. But because the Court in *Credit Lyonnais* did not define the zone of insolvency, governing bodies of financially distressed entities were left to wonder precisely when they owed fiduciary duties primarily to shareholders, and precisely when those duties shifted to include creditors. In 2004, *Production Resources* clarified *Credit Lyonnais* somewhat by reasoning that even in actual insolvency, a director’s fiduciary duties remain owed to the corporate enterprise and that a creditor’s rights to bring an action for a preinsolvency breach of fiduciaries was derivative only, not direct (except in the extreme factual circumstances present in that case).

There it stood until 2007 when in *Gheewalla* the Delaware Supreme Court clearly delineated the shifting line of the fiduciary duties of directors at actual insolvency, not somewhere in the elusive zone of insolvency. It is at the point of actual insolvency that the creditors of a corporation take their place along with (or ahead of) shareholders as the beneficiaries of fiduciary duties owed by directors and can assert derivative claims (not direct claims) on behalf of the corporation for breach of those fiduciary duties.

*Gheewalla* is a breach of fiduciary duty case brought in the Delaware Chancery Court by the holder of certain radio-wave spectrum licenses who was party, along with other such holders, to an agreement for the acquisition of these licenses by Clearwire Holdings, Inc. (“Clearwire”). When the market for these licenses collapsed, Clearwire could not reach an accommodation with the plaintiff, and, eventually, Clearwire itself collapsed. The plaintiff sued three of the directors of Clearwire, who were appointed to its board of directors by Clearwire’s funding source, alleging that those directors breached their fiduciary duties to the plaintiff because the plaintiff was a creditor of Clearwire and Clearwire was either insolvent or was operating in the zone of insolvency. The suit was brought directly by the plaintiff on its own behalf, not derivatively. The Delaware Chancery Court granted the directors’ motion to dismiss the complaint on the grounds that, as a matter of law, plaintiffs as creditors were not able to assert direct claims against the directors of an entity that is insolvent or is operating in the zone of insolvency, and the Delaware Supreme Court thereafter affirmed. The Court found that entering the zone of insolvency did not cause the fiduciary duties that directors owed to the shareholders of a corporation to spread to its...
creditors; that point was actual insolvency. Further, the Court found that the rights conferred on creditors did not include
direct claims against the directors, only derivative claims. However, as noted previously, Gheewalla neither defined the
parameters of the zone of insolvency nor assisted valuation professionals in determining those parameters.

In summary, where we are now is as follows: Prior to actual insolvency, including while operating in the nebulous zone
of insolvency, directors of a corporation owe their fiduciary duties of loyalty, care, and good faith solely to the corporation
itself and to its shareholders, not to other constituencies such as creditors. Therefore, individual creditors of a corporation
that is either solvent or operating in the zone of insolvency (however determined) cannot bring direct claims for breach of
fiduciary duty to recover their individual losses against the corporate directors. (Whether creditors can bring derivative
claims on behalf of the corporate entity is unclear at this point.) Upon the entity becoming insolvent, those fiduciary duties
shift and expand to include shareholders (directly) and creditors (on a derivative basis on behalf of the corporate entity, not
directly). This is because, in theory at least, it is not until actual insolvency that creditors’ interests are impaired; again, in
theory, the claims of the creditors still would be fully paid were the entity to liquidate.

Approaches to Assessing Insolvency

The Bankruptcy Code, the source of most insolvency litigation, defines insolvency with reference to a balance sheet
framework as “financial condition such that the sum of such entity’s debts is greater than all of such entity’s property at
a fair valuation.” The Bankruptcy Code definition of insolvency is a useful starting point, as are Subsections (I), (II), and
(III) of Bankruptcy Code Section 548 (a)(1)(B) (ii), which sets forth certain tests for fulfilling the criteria related to financial
condition when examining a transaction that is being challenged as a fraudulent conveyance.

These tests measure solvency and insolvency on objective financial bases (Subsection [B][ii][I]) and financial distress
short of insolvency-in-fact on a financial basis (Subsections [B][ii][II] and [B][ii][III]). More particularly, do liabilities exceed
assets at a fair valuation on the date of a transaction or as a result thereof (Subsection I)? Does the entity’s property
remaining subsequent to a transaction constitute “unreasonably small capital” to enable the entity to engage in business
(Subsection II)? Do the obligations incurred create a foreseeable danger to the entity’s ability to pay its debts as they
mature in the ordinary course (Subsection III)? Clearly, if an entity fails any one of these tests, the subject transaction
is endangered for bankruptcy and fraudulent conveyance purposes. Valuation professionals employ certain standards
to measure these possibilities, and these may provide guidance to the analysis of the zone of insolvency, as they each
implicate before and after tests.

Short of failure and insolvency, no bright line exists to determine when an entity would be in the zone of insolvency.

Two competing approaches to assessing insolvency are “equitable insolvency” and “balance sheet insolvency.” In
Gheewalla, the Delaware Chancery Court opined that insolvency may be demonstrated by meeting the definition of
equitable insolvency or balance sheet insolvency.

Equitable insolvency is “an inability to meet maturing obligations as they fall due in the ordinary course of business” and
is often associated with the cash flow test of solvency, which is the ability to pay debts and other obligations as they fall
due. Equitable insolvency ignores the balance sheet (i.e., it ignores the test of assets exceeding liabilities) and focuses
only on the corporation’s ability to pay its maturing current debts. What is interesting about equitable insolvency is that,
for example, in the short term, a company may look very solid with robust cash flows due to contractual orders. However,
the order pipeline beyond the current, short-term contractual orders may be low or nonexistent due to the dynamics of
the industry that the company serves, and the company may not have the ability to meet maturing obligations beyond
the immediate time period.

12 id.
Balance sheet insolvency is “a deficiency of assets below liabilities with no reasonable prospect that the business can be successfully continued in the face thereof.” This can be exemplified by the balance sheet test of solvency.

Because the zone of insolvency definition is nebulous, it is often quite difficult to determine when a corporation is “near” or “in” the zone of insolvency. Whether defining the zone of insolvency with the equitable insolvency definition or the balance sheet insolvency definition, testing and analysis for solvency purposes is necessary, either by the corporation itself or by consultants with expertise in those disciplines.

Equitable Insolvency - Cash Flow Test
Cash flow testing for solvency or insolvency purposes requires a reasonable projection of all debt obligations of the corporation as well as realistic revenue and expense projections in order to determine corporate cash flow. Key factors considered in testing include the following:

- Any contingent items that might not be recorded pursuant to Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 450; examples of these items include pending lawsuits (net of insurance recoveries and tax, if applicable) whereby the corporation is at risk of being held at fault
- Analysis of receivables aging, historic write-offs, and the potential for default or lapses in payment by current customers, including analysis of the uncollectible reserve
- Analysis of payables including current payment terms and the potential to work with vendors to mitigate collection demands and claims
- In-depth discussions with management as to (i) realization of projected revenue streams and backorder status, and (ii) expense analysis by major account
- Ability to sell both tangible and intangible assets including the valuation of those assets as well as the impact on current productions (revenues and expenses) if those assets are sold; this involves thorough analyses of which assets may be illiquid as well as the worth of the assets if the corporation is liquidated or if a portion of the corporation remains in operation
- Ability to generate additional liquidity through private investors, additional public stock sales, renegotiating debt covenants, and the like

Various operating scenarios can be developed with and without additional cash infusions, lengthening payables, factoring receivables, closing facilities, licensing the right to use intangible assets, reallocating production, and selling assets,
Monte Carlo methods are used to value and analyze instruments, portfolios, investments, assets, and businesses by simulating various sources of uncertainty affecting their value, and then determining their average value over the range of resultant outcomes.  

**Balance Sheet Insolvency - Balance Sheet Test**

The balance sheet test for insolvency or solvency, in the context of the zone of insolvency, would focus on the traditional approaches to value a business: the income, market, and cost approaches. The value of all liabilities, including those reported according to generally accepted accounting principles (“GAAP”) as well as those that either are probable but the amount of which is not estimable for accounting purposes or those for which the probability cannot yet be assessed but the outcome is estimable, would be subtracted from the business value.

The approaches to determine fair value and present fair saleable value of a business are as follows:  

- The income approach, which is based on a proper method of discounting cash flow as projected by management
- The market approach, utilizing the guideline public company method and/or the guideline transaction method
- The cost approach, utilizing the original cost of an asset, adjusting for depreciation, and determining the replacement cost

When undertaking the income approach, consideration must be given to an analysis of management’s financial projections including (i) whether those projections and the underlying assumptions on which they were based were reasonable when they were prepared, (ii) how much time has elapsed since they were prepared, and (iii) how actual performance compared to projected performance during the period since preparation.

Use of the market approach requires careful consideration of comparable companies and comparable transactions, often making adjustments for differences in size, geographical reach, and the like.

The valuation of certain types of assets and liabilities presents challenges in the balance sheet test as well. Valuing unliquidated or contingent claims such as litigation outcomes; earn-out provisions; or obligations based on levels of profits, guaranties, and alternate theories of liability may require assumptions, including probability assumptions, that appraisers may not be qualified to make or cannot make with any degree of certainty. Valuation of financial instruments and derivatives, especially where there is no market, requires knowledge of financial markets and a great degree of guesswork.

**Application of Tests**

The decision in *Kipperman v. Onex Corporation, et al.* provides some interesting material to analyze. Onex Corporation (“Onex”) was a publicly traded private equity fund that serially acquired a number of construction-industry-related entities (collectively, “Magnatrax”) utilizing leveraged buyout financing. In May 2003, as a result of the construction industry becoming a victim of the recession and higher tariffs being imposed on its major material imports, Magnatrax filed for Chapter 11 protection. Under its Chapter 11 plan, a litigation trust was established and, in 2005,
Richard M. Kipperman (plaintiff), who was the litigation trustee under the plan, filed an action against, among others, Onex and certain of its directors, alleging numerous causes of action, including breach of fiduciary duty, fraudulent conveyances, and preferences. Certain of these claims against the defendants survived a motion to dismiss. The litigation history is long and complex, and involved issues related to the financial condition of the Magnatracx entities’ insolvency under the bankruptcy code and state fraudulent conveyance laws, including whether Magnatracx (i) was insolvent or in “poor financial condition” at the time the questioned transfers were made, or was rendered insolvent thereby, and (ii) received a less than reasonably equivalent value in consideration for such transfers. To establish those critical elements of its causes of action, the plaintiff retained an expert, Dennis E. Logue.

In *Kipperman*, Logue determined that although the Magnatracx entities involved in the several prebankruptcy LBOs were solvent at the time of the transactions, the entities were operating in the zone of insolvency. An objection to this proffered testimony was properly raised and the court excluded such testimony as irrelevant and unreliable since there was no acceptable definition for this subjective term, and because Logue’s conclusions as to the “zone” could not be tested. Such testimony would not be helpful to the court since the issue was actual insolvency, not proximity to actual insolvency. The court noted, however, that this would not prevent the expert from testifying that the entities were statutorily insolvent, were equitably insolvent, or had unreasonably small capital to operate their business, provided that the expert’s methodologies in arriving at these determinations were scientifically valid and applied correctly to the facts, thus making those determinations reliable.

To test solvency (fair value of the assets is less than value of the company’s liabilities), Logue used the comparable company multiple analysis and the discounted cash flow analysis to determine fair value. The court determined that (i) the projects submitted were “reasonably prudent” and “anchored in the company’s history,” and as a matter of law, it was inappropriate for Logue to modify the projections; (ii) Logue had no firm basis for his modifications because the projections were based on actual performance and reasonable forward assumptions, and were prepared by competent management for whom Logue was substituting his own judgment; and (iii) Logue’s reasonably equivalent value analysis was faulty in that he did not compare the values of the assets exchanged in the transactions. Finding these methodologies were not applied correctly and, thus, not reliable, the court determined that Logue’s testimony was not reliable, and it was ruled inadmissible under the Daubert standards.\(^{17,18}\) Logue’s determination that “reasonably equivalent value” was received in the LBOs met the same fate and also was ruled inadmissible.


\(^{18}\) To the extent that expert testimony may be admissible in a judicial proceeding in federal courts (and in the courts in a majority of the states), a judge must determine at the outset of a judicial proceeding that such evidence meets certain standards (see Federal Rules of Civil Procedure 702.17). To meet the Daubert standards regarding the admissibility of expert witness testimony, the evidence must be “relevant to the task at hand” and based on “reliable principles and methods,” and the expert’s principles and methods must have been “reliable and reliably applied.”
Conclusion
The zone of insolvency is a nebulous concept. As a result, if the directors of an entity believe it is experiencing financial distress and may be nearing insolvency, they have a fiduciary duty to their shareholders to engage valuation professionals who can assist in determining appropriate strategies for rectifying the balance sheet or enhancing cash flows. Valuations from reputable, independent advisers with appropriate professional designations and licenses can provide additional assurance (not insurance) and an added level of ammunition in the context of shareholder litigation. Over the past several years, the valuation community has often been involved in situations in which an entity is disposing of assets at a distressed price, closing facilities or retail locations, or selling or discontinuing product lines, all to mitigate insolvency. These activities could be clear signals that a company is in severe financial distress, or is in the zone of insolvency.

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