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Valuation of Distressed Companies

Valuing a business can be hard work. Valuing a distressed business even more so.

When is a company said to be in distress

A company is said to be in distress when the company is unable to meet, or has difficulty paying off, its financial obligations to its creditors, typically due to high fixed costs, illiquid assets, or revenues being sensitive to economic downturns. Such distress can lead to operational distress as increasing costs of borrowings take a toll on the operations of the company as well.

Distress can be broadly categorized into economic and financial distress. Economic distress is broad-based and afflicts most companies operating in the economy at some point and is normally outside the control of the company. Factors causing economic distress include – general economic recession, technological or cultural shifts, and sometimes, wars or other geo-political confrontations. Some of the factors are temporary, while others may bring a permanent change in the business landscape. Economic distress often leads to financial distress.

Firms in financial distress cannot meet, or have difficulty paying off their financial commitments to their creditors. Some of the characteristics of financially distressed companies are stagnant or declining revenue, shrinking margin, high leverage, ballooning interest costs, working capital blockage, high customer and employee attrition, Shrinking or negative margins, Asset divestitures, Lack of confidence in the management.

Distressed companies are businesses that are in risk of, or already have defaulted on their debts. Creditors of a distressed company should know that, although a company may not be making payments on some, or all of its debt requirements, there still may be some value remaining on the instruments they hold. Just because a company cannot make payments on its debt does not mean the company is entirely worthless. Value is typically tied to the company's assets.

Distress may be a).**Potential distress:** All firms are subject to potential distress •Firms in declining industries, bad management decisions or simply bad luck will eventually end up in distress b). **Realized distress** •Firms already in distress may be worth less than their outstanding debt •Their equity still retains value: perhaps the firm will be bought out, it will be turned around, or there will be an equity bail-out

Literature review

Financial Distress as a phenomenon has been a focal point of study in corporate finance since early 70's (Altman, 1971; Altman & Nammacher, 1985) The terms 'financial distress' and 'bankruptcy', have commonly been often used synonymously; however the two situations differ substantially in terms of the fundamental variables related to firm's financial health as well as in the sequence of events. Bankruptcy or insolvency or liquidation is the situation, preceded by financial distress. Platt & Platt (2002) emphasized that financial distress is the late stage of firm decline, which can be followed by the major events such as bankruptcy, liquidation or insolvency. Developing a theory of financial distress, Gordon (1971) suggested

that the decrease in the earnings capacity of the firm can result in the possibility of inability of the firm to repay the principal or interest component of debt. Such a state represents the distressed financial condition of the firm. Wruck (1990) also explained "financial distress as a situation, where cash flows are insufficient to cover the current obligations".

How is valuation of distressed companies different from financially sound companies ?

The definition of value and its proper application has long been debated. "Value is a word of many meanings…It gathers its meaning in a particular situation from the purpose for which a valuation is being made. Valuation is not merely a mathematical formula. Both quantitative and qualitative factors, inputs and adjustments may be used in the valuation process. Furthermore, value may change based on the Premise of Value and the Standard of Value on which the valuation is based. For situations in distress, the Standard of Value and the Premise of Value may shift with the situation and the purpose of the valuation. Valuation of financially sound companies is based on the premise of going concern i.e. the company is expected to continue its operations in the foreseeable future. The conventional valuation methods used may lead to an overestimation of values of distressed companies, since such companies seldom exhibit characteristics of a going concern entity. Distressed companies are more prone to being liquidated and shut down.

The following two factors discuss why conventional methods are not usefully deployed when valuing companies in distress:

- Conventional valuation methods involve the computation of terminal value i.e. the value of the subject going into perpetuity. This may not hold true for companies in distress for which an assumption of perpetuity is not is not practically relevant and feasible
- Discount rates/Multiples used in traditional methods reflect operations of companies which are operationally as well as financially sound. They cannot be used in their pure forms without adjusting them for the probabilities of failures of the companies in case of distressed companies.

Sources of Valuation Uncertainty for distressed companies arise on account of 'strategic' and 'structural factors'. The strategic factors leading to valuation uncertainty arise because those holding senior claims have an incentive to undervalue the company's business, whereas junior claimants have an incentive to overvalue it. Structural factors leading to uncertainty include exposing the company's business to the market which might result in its undervaluation if the market is going through a down turn or recession as potential buyers may not looking to expand, or because it is difficult to get together a group of investors, because of reputational reasons, etc.

Approach to Valuation of distressed companies

During a crisis, the going-concern capital value deriving from the plan proposed by management and current owners must be compared with that arising from other feasible options, such as - The going-concern value with new owners (through a change of control) while maintaining the current firm's asset base, - The going-concern value in combination with other entities (exploiting various forms of synergy), an option realistically coupled with a change in ownership, - The liquidation value, that is, the sale of company assets on an individual basis (bankruptcy value in a strict sense).

By focusing on a distressed company's going-concern value, the assumptions and outputs of the reorganization plan critically support the estimation of capital value, conceived as the current value of expected future economic flow. To this end, the valuation process can be structured as follows: a) Analysis of the company's historical financial results and balance sheet at the date of valuation, which reflect the strategy and business model implemented by management, b) Examination and review of the projections forecast by the reorganization plan aimed at overcoming distress, c) Estimation of the firm's enterprise value (EV) and its variability in light of the scenario analysis, which are essential for a plan that is unavoidably affected by elements of uncertainty, d) Calculation of the debt value (D), based on the plan's cash flow for the remuneration and reimbursement of creditors (FCD) and their volatility (closely linked to that of EV), e) Computation of the equity value (E)—equal to EV minus D—which, in the event the plan is approved by creditors, benefits from the possibility of realizing EV (in terms of financial feasibility) and could profit from the debt value reduction (compared to the nominal value of debt). The value of E encompasses the equity components devoted to creditors, provided they were activated in the

financial maneuvers under the reorganization plan.

Methods of valuation of distressed companies

Even though the fundamentals underlying the valuation of distressed companies remain the same. However, the methods are amended or suitable tweaked and modified to address the practical issues that may arise in the valuation of the distressed company

1. **Modified Discounted Cash flow Valuation**

This method is based on the underlying principles of the discounted cash flow method but adjustment for the risk of default needs to be carried out for cash flows as well as discount rate The same can be done as follows:

A) **Estimating the cash flows**: Cash flows under each scenario (from most optimistic to most pessimistic) have to be estimated with the respective probabilities of each scenario. The expected cash flow for a particular year is: Expected cash flow = SUM (Estimated cash flow under each scenario*Probability of respective scenario) It is important to note that the adjustment for distress is a cumulative one and will have a greater impact on the cash flows in the later years. For example, if the probability of distress is 10% each in year 1 and year 2, there is now only an 81% chance that the firm will generate cash flows in year 3

B) **Estimating the discount rate:** The following approaches may be used for addressing the risk of distress in the discount rate: i.) The bottom up unlevered beta should be used and Re levered using the subject company's current debt to equity ratio and the effective tax rate. Since distress companies usually have high debt to equity ratios and have negligible effective tax rates (since they are loss making), the re levered beta which will be higher will take into account the risk of distress. ii.) Another choice is to estimate a distressed premium which is to be added to the cost of equity calculated using standard measures. One of the ways of computing the distress premium is to compare the company's pre-tax cost of debt to the industry's cost of debt. If the company has a pre-tax cost of debt of 16% and the same for the industry is 8%, the distress premium is 8%.

2. Discounted cash flow valuation plus distress value

Per this method, Value of equity = DCF value of equity on going concern basis (1 – Probability of distress) + Distress sale value of equity (Probability of distress). The mechanics of this approach is as under :

Step 1: Value the business on the basis of going concern assumption using conventional valuation methods

Step 2: Determine the probability of distress.

Step 3: Estimate the distress sale value of equity • Using bond ratings: The historical data of bond defaults can be used as a benchmark to determine the probability of default of the subject company based on the corporate rating applicable to the company. • As a percentage of book value • As a percentage of DCF value of equity on a going concern

However, the valuation of distressed companies includes numerous additional elements of uncertainty as well. Examples include: The ability to retain employees, the ability to reorganize, the structure of the reorganized entity, the ability to divest underperforming assets, Litigation risk resulting from the company's distress, access to capital markets post-reorganization, cost of funds post-reorganization, the possibility that the company may be liquidated.When considering the valuation of distressed companies, a combination of subjective and analytical modifications to traditional valuation methodologies is required.

3. Relative valuation

There are two approaches available for relative valuation :

1. Compare the distressed company's valuation to that of other distressed companies.
2. Compare with healthy companies, but adjust for the distress.

In the first approach the problem may be that there may not always be available enough distressed companies at any given time to be able to make comparisons.

In the second approach, it may be assumed the distressed company would probably become healthy in the future. Accordingly, an estimate is developed based on its future value which is then discounted back to arrive at a going-concern value to which the probability of distress and distress sale proceeds are added to arrive at the final value.

Conclusion

"We are in danger of valuing most highly those things we can measure most accurately, which means that we are often precisely wrong rather than approximately right" - Sir John Banham Director General of the Confederation of British Industry 1987-1992.

Distressed firm valuation is a complex topic in which many traditional assumptions and methodologies of value measurement do not work.Valuation in general is a combination of science and art, more so in the case of distressed companies. Hence, a right mix of assumptions, framework, approach, and methodology should be judiciously used to arrive at the appropriate valuation, which balances the theoretical and practical aspects. Arriving at a reasonable enterprise value is essential for attempting appropriate financial restructuring and to ensure the appropriate pay-offs to secured, unsecured and operational creditors and to equity holders. This, in turn, is critical to achieve the best resolution for the subject business.

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