Enterprise Value of firms in insolvency

August 4, 2018

IBBI-IGIDR Insolvency and Bankruptcy Reforms Conference

Authors :

Deepak Panda

Sagar Goyal

Agenda

I. Types of Distress

Types of Distress

Economic Distress

- Affects most of companies in the industry or economy during their life cycle.
- The factors causing economic distress are normally outside the control of a company
- Factors can be temporary or permanent
- Examples – Technological and cultural shifts, recessions, and sometimes wars or other geo-political confrontations.

Financial Distress

- Situation where firm cannot meet or has difficulty in paying off their financial obligations to their creditors due to high fixed costs, illiquid assets or volatile revenues.
- Characteristics – stagnant or declining revenue, shrinking margin, high leverage, ballooning interest costs, working capital blockage, high customer and employee attrition
- Micro factors contributing to financial distress are –
    1. Management
    2. Debt
    3. Force Majeure

Types of Distress

HIGH

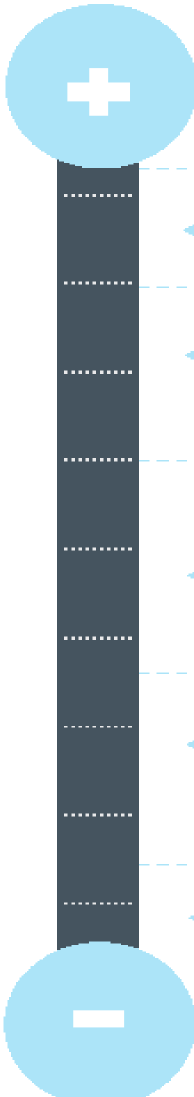
Economic Distress

• Restructuring of the company is relatively difficult. High probability of company going into liquidation. • The company may be run as a cash cow for a limited period with no further investment	Imminent liquidation and asset sale
Healthy Company	• Prospects of business may be sound • Debt restructuring and cost optimization is the appropriate course of action.

LOW Financial Distress HIGH

II. Levels of Value

Levels of Value



Business with no imminent fear of liquidation	**Synergistic Value**		Typically, acquisition value by a strategic buyer
	Orderly Transaction in no Distress Situation		Typically, acquisition value by a financial buyer
Businesses facing liquidation	**Orderly Transaction in Distress Situation (business sale)**	*Based on Resolution Plan*	Sale as a going concern rather than individual assets
	Orderly liquidation (piecemeal basis)	*Liquidation Value Estimate*	Sale as individual assets where sufficient time available for transaction
	Forced liquidation (Piecemeal basis)		Sale as individual assets where sufficient time not available for transaction

Levels of Value

Two routes for a company under Insolvency

1. Liquidate the business, sell off businesses or physical assets in piecemeal; or
2. Restructure its debts to manageable level and continue as a going concern

Two premises to value a company under insolvency

1. Liquidation Value (LV)

Insolvency and Bankruptcy Code (IBC), 2016 - It is estimated as realizable value of the assets of the corporate debtor if the corporate debtor were to be liquidated on the insolvency commencement date. Further, section 35 (2) of IBC requires valuer to determine LV using internationally accepted valuation standards.

International Valuation Standards (IVS) 104 – It is the amount that would be realized when an asset or group of assets are sold on a piecemeal basis, that is without consideration of benefits (or detriments) associated with a going-concern business.

Indian Banks Association (IBA) – is a situation where a group of assets employed together in a business are offered for sale separately, usually following a closure of the business

Levels of Value

Enterprise Value (EV)

- Measure of total value of company's operating assets
- Going concern value which takes into account the best use of assets
- Financial distressed business – Have a going concern surplus (value above LV) as assets are more valuable if kept together as a functioning unit

III. Valuation Framework

Valuation Approaches and Methodologies

Approaches to estimate EV of a firm under insolvency

1. Three approaches – Income, Market and Cost

2. Traditional methods of valuation more suited for healthy companies and cannot be used for distressed companies.

Market Approach

1. Comparison of financial or operating metrics between subject enterprise and a company with a discovered price either through publicly traded shares or a private transaction
2. Applicability is limited for a distressed company as nature of distress can vary from firm to firm
3. Selection of right set of comparables is important.
4. Distressed companies historical revenues and earnings might not be very meaningful. Hence, a *sustainable or normalized* has to be ascertained on which the multiple should be applied.

Valuation Approaches and Methodologies

Income Approach

1. Traditional DCF method is not suitable due to the following reasons:
   - Uncertainty over future cash flows
   - Uncertainty around life of the enterprise
   - Challenges around estimation of an appropriate discount rate

To overcome the above challenges, traditional DCF needs some modification to capture the impact of distress:

1. Uncertainty over future cash flows

- Scenario analysis is commonly used for valuing such companies. Liquidation scenario should also be considered as one of the scenario.
- Thorough understanding of the cause of distress helps in identifying possible scenarios.
- Simulation analysis of the key variables like revenue growth, profitability can also be carried out. Monte Carlo Simulation or Probality simulation can be used for this purpose.

Valuation Approaches and Methodologies

2. Life of the Enterprise

- Based on the nature of distress, resources required for turnaround and appetite for such assets in the market.

Permanent Distress → Advisable to shut the business down; hence, limited period life is more appropriate.

Temporary Distress → If the upfront costs for turning around a business is significant then liquidation is the most likely scenario and hence, limited life would be appropriate.

Discount Rate

Beta

- Historically regressed beta for the distressed company can lead to underestimation of cost of equity as they lag distress over a long historical period.
- Bottom up beta approach is suitable where betas of peer group in similar industry are unlevered and re-levered based on financial and operating risks suitably.
- This approach is useful for listed as well privately held companies

Cost of Debt

- Current borrowing rate is significantly higher due to higher leverage or bad economic conditions
- Rate of borrowing should be taken based on the future profitability and capital structure emerging from the restructuring plan.
- A synthetic rating should be estimated based on the financial characteristics of the firm (like interest coverage ratio, capital structure etc) within each class of ratings.

Tax rate

- Current effective tax rate is minimum alternative. The tax rate is low in the beginning of the forecast period and increases as company generates profits.
- Post tax cost of debt should be estimated at different points of time using different tax rates during the projected period.

Discount Rate

Capital Structure / Leverage

- Considering a constant target capital for the company may not be appropriate as the improvement in capital structure towards the industry average is a gradual process.
- Hence, a separate discount rate should be estimated for each till the industry average as per the restructuring plan is achieved.

Historical returns of ARCs

- Lack of sufficient publicly available data related to returns of ARCs in India. Generally, 20% has been considered as thumb rule.
- Implementation of 15/85 scheme (earlier 5/95) in August 2014 has resulted in upfront cash requirement of 15%, increasing the capital required to acquire stressed assets.
- This has also resulted in ARCs being less dependent solely on Management fee based on NAV of the security receipts issued (earlier on outstanding security receipts).
- This has reduced the overall IRR for the ARCs in India which has led to the increase in discount rates to buy NPA assets (~20% to 25%)

Probability of Liquidation

1. An alternative way of incorporating probability of distress while estimating the value of a distressed firm is accounting for distress separately from the going concern value.

2. The value of the firm is then estimated as follows –

   Value of the enterprise under insolvency = Value of Going concern x (1-Probality of liquidation)

   + (Liquidation value x probability of liquidation)

3. Probability of default is considered as a proxy for Probability of liquidation. This is estimated as below –

   1 – {(1+ risk-free rate) /(1+ risky bond YTM)}^(maturity period)

Probability of liquidation is generally lower than the default probability of bonds

IV. Concluding Thoughts

Concluding Thoughts

1. Valuation in general is a combination of science and art, more so in case of distressed companies.

2. Hence, it is paramount that the right framework, methodology and assumption mix is considered to arrive at the right valuation, which balances the theoretical and practical aspects.

3. Arriving at the right enterprise value is critical to arrive at the appropriate pay-offs to secured, unsecured, operational creditors and equity holders, which in turn is critical to ensure the best resolution for the subject business.