Valuation of Distressed Firms in India

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Market for Distressed Firms

Enterprise Value for distressed firms =

Liquidation value (LV) + Going concern premium (GCP)

LV

- *piecemeal value* of assets and does not include value of *intangible* assets (like goodwill etc.)
- signals *costs for holding out* to dissenting lenders
- depends on *mode of sale* (fire sale or not) and *asset specificity* (broad usability of asset)

GCP

- includes costs of transitioning out of distress
- varies by synergy gains

Low variability around LV
High variability around GCP

Round 1 in India

- LV set by “independent” valuers
  - Reserve price for bidders
- GCP close to zero
- “Pooling negative equilibrium” – viable and non-viable firms both head for liquidation
- Lenders need massive recapitalization if they go through with these haircuts

Why Can't We Get Good EV in India?

<u>Simple root cause:</u>

- Market players are "learning" as distressed market is in early stage (early stage woes)

<u>Structural root cause(s):</u>

- Pervasive information asymmetry
  - Between firms and current lenders
  - Between current lenders and new investors/lenders
- Inadequate market pressure on lenders (especially state owned lenders) and promoters
- Key institutional gaps (like DIP lending, junk bond market)

<u>Other factors that impact risk premium:</u>

- Trust deficit in process/institutions
- Regulatory overdrive (shifting rules, mandating outcomes etc.)

Proposed Interventions

- Introduction of "fair" value disclosure
  - "Realizable" value between a *willing* buyer and a *willing* seller at insolvency application date
  - Implicit reservation value for GCP
  - Made by valuers
  - Disclosed only to CoC (may not aid in price discovery)
- Dilution of key provisions
  - Reduce threshold of creditor approval
  - Increase time to resolution
  - Increase # of valuations
- Provide evaluation matrix

Open Questions

- What is the baseline value for GCP?
  - Should it be based on today's scenario OR on best case scenario?
- Should we focus on building institutional capacity rather than on influencing outcomes?
  - Information production and dissemination
  - DIP lending

Thoughts on Distress Firm Valuation

Questions to Ask

- Operational distress or financial distress?
  - Financial engineering can help with financial distress but not with operational distress
- Perspective of old or new investors?
  - Depends on the stage of distress
  - Post resolution process, valuation is more important for new investors (likely to be old debt holders who are taking equity of restructured firm as payout)
  - Old equity investors most likely will get nothing
- With old or new management?

Valuation Approaches for Distressed Firms

- Discounted cash flow
  - How to estimate cash flows? Need adjustment for higher volatility as well as possible truncation of CFs
  - What discount rate to apply?
- Market and transaction comparables
  - Earnings/value based multiples may not be appropriate; revenue based multiple better but could have issue as well
  - Recent transactions involving similar firms require proper matching of attributes
- Liquidation valuation
  - Collateralized vs. free assets
  - Distress sale "discount" (can there be orderly liquidation?)
  - Carry forward losses as a potential asset
  - Debt valuation

Start with Enterprise Value (EV) first before determining value of underlying securities

$$\text{Distress Firm Value} = EV_{\text{no distress}} * (1 - p_d) + LV * p_d$$

DCF Approach

- Modified DCF
  - Use probability distributions to determine expected CFs
- Simulated CF
  - Determine valuations under different scenarios where inputs to the DCF are simulated (like raw material prices, market share etc.)
  - Determine probability of default (truncating CFs) and use it to determine expected valuation of the company
- Enterprise valuation under no distress but adjust for distress

Cash Flow Approach

- Historical data is less relevant for forecast
- Forecast period can be broken down into:
  - Transition period (from distress back to sound health)
  - Period after (in sound health)
- Distance to default could be useful to estimate expected CFs during transition period
- Terminal value could based on firm returning to sound health (or assuming liquidation)
- Uncertainty in CFs can be accounted for through changes in discount rate (WACC) as well
  - Both costs of debt and equity are impacted by distress
  - Debt-equity ratio is likely to not remain constant
  - Inadequacies of both book value and market value of debt
  - What beta to use for equity?

Cash Flow Adjustments For Distress

- Adjustments are needed to account for distress:
  - Stretched WC needs
  - Market share pressures
  - Difficulty to retain key employees
  - Increase in financing costs
  - Unique distress related costs including litigation costs
- Tax shields may or may not be valuable
  - Carry forward losses could be valuable to the new investor
- Retention rate may be negative in the earlier years
- Use simulation to determine likely cash flows from a probability distribution

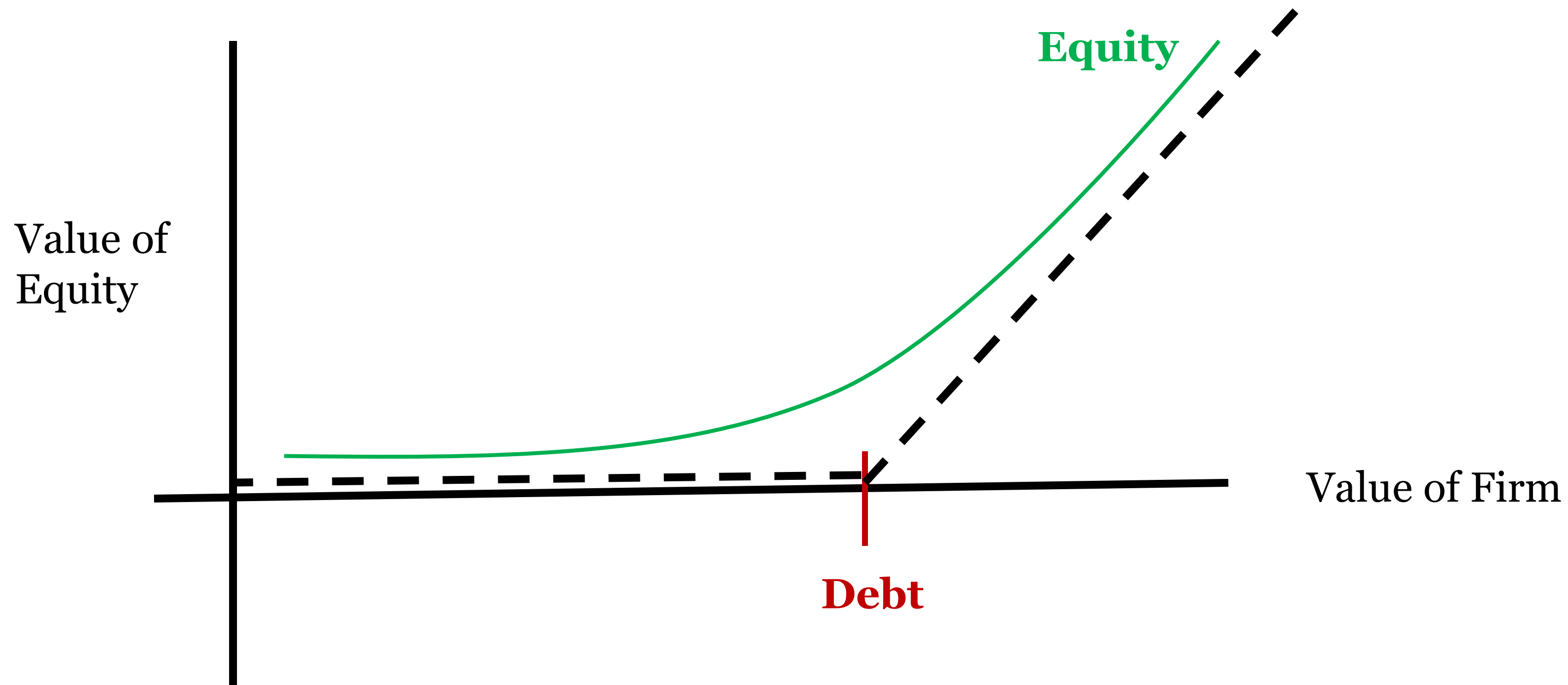
Andrade and Kaplan (1998) – Indirect cost of distress are 10-23% of firm value

Comparables Approach

- Choosing the right comparables
  - Only distressed firms?
  - Regular firms but make adjustments for distress in the multiple?
  - Mix of firms that have liquidated and transitioned out of distress in the past?
- Choose the right multiple
  - Revenue based or earnings based?
  - Link multiples to objective measures of distress (like bond ratings) using data
- Get earnings adjusted for distress
  - Growth rates of bottom percentile firms in the industry can be used
- Transaction comparables require apples-to-apples matched firms (control premium could be different)
- Can be used for validation of other approaches

Equity as a Call Option

- Equity is like a call option (with strike price = debt value)



Option valuation models can provide probabilities of default

Other Issues

- Frequent updation of inputs/valuation

- Right people
  - Value of the promoter (or existing management)

- Process of distress resolution
  - IBC (analogous to Chapter 11 in the US)
  - Will there be absolute priority violations?