| | | | |
|---|---|---|---|
| International differences in use of financial leverage | 1. Total debt | | |
| | - Japan, Italy, France : more total debt | | |
| | - US, UK : less total debt | | |
| | 2. Debt maturity | | |
| | - North America : longer maturity | | |
| | - Japan : shorter maturity | | |
| | 3. Emerging market differences | | |
| | - Developed countries : more total debt, longer maturity debt | | |
| | - Emerging markets : less total debt, shorter maturity debt | | |
| Factors for the differences in use of financial leverage | <u>Factors</u> | <u>Use of total debt</u> | <u>Maturity of debt</u> |
| | **1. Institutional and Legal factors** | | |
| | - Strong legal system → ↓ agency costs | Lower | Longer |
| | - Less information asymetries → ↑ transparency | Lower | Longer |
| | - Favorable tax rate for dividends to interest → ↓ required return on equity | Lower | N/A |
| | **2. Financial markets and banking system factors** | | |
| | - Larger capital markets, with more liquidity | N/A | Longer |
| | - More reliant o banking system than corporate bond market as source of corporate borrowing | Higher | N/A |
| | - More institutional investors | | |
| | **3. Macroeconomic factors** | Lower | Longer |
| | - Higher inflation → ↓ value of fixed interest payent | | |
| | - Higher GDP growth rate | Lower | Shorter |
| | | Lower | Longer |

**Valuing a target company - Comparable transactions**

Step 1 : Identify a set of takeover transactions - involve firms in same industry, similar capital structure as the target
Step 2 : Calculate various relative value measures based on completed deal prices for sample transactions
Step 3 : Calculate mean/median/range for chosen relative value measures; apply those measure to the target company

**Compare between DCF / Comparable company / Comparable transaction analysis**

| | DCF | Comparable company | Comparable transaction |
|---|---|---|---|
| Advantages | - Easy to model any changes in target's CF due to synergy or change in cost structure<br>- Estimate of company value based on forecast of future fundamental condition rather than current data<br>- Easy to customise | - Data of comparable companies is easy to access<br>- Assumption that similar assets have similar values is fundamentally sound<br>- Estimates of value are directly from the market, rather than assumptions/estimates about the future | - No need to estimate separate takeover premium<br>- Derived directly from recent completed deals, rather than assumptions/estimates about the future<br>- Reduce the risk of lawsuit from target's shareholders against target's managers and BOD for mispricing the deal |
| Disadvantages | - Difficult to apply when CF are negative<br>- Estimates of CF and earnings are highly subject to error<br>- Discount rate changes over time, and have large impact on valuation estimate<br>- Majority of target's estimated value is terminal value, which is highly sensitive to estimates used for constant growth and discount rate → estimation error is a major concern | - Assume market's valuation of comparable companies is accurate<br>- Only provide estimate of fair stock price. Takeover price must be determined separately<br>- Hard to take into account the effect of synergy or change in capital structure<br>- Historical data used to estimate takeover premium may not be timely → not reflect current condition in M&A market | - Assume value of past transactions is accurate. If past transactions are overpriced / underpriced → carry over to the estimated value of the target<br>- May not be enough of comparable transactions to develop a reliable set of data to calculate the estimated target value<br>- Hard to take into account the effect of synergy or change in capital structure |

**Post merger value of acquirer**

$$V_{A+T} = V_A + V_T + Synergy - Cash\ paid\ to\ target$$

In which :
$V_{A+T} = post\ merger\ value\ of\ combined\ company\ (Acquirer + Target)$
$V_A = Pre\ merger\ value\ of\ acquirer$
$V_T = Pre\ merger\ value\ of\ target$

**Gain of the Target**

$$Gain_T = Takeover\ premium = P_T - V_T$$

In which:
$P_T = Price\ paid\ to\ target$
$V_T = Value\ of\ target$

**Gain of the Acquirer**

$$Gain_A = Synergy - Takeover\ premium = Synergy - (P_T - V_T)$$

**Cash Payment vs. Stock payment**

1. Cash offer : profit of target's shareholders is capped @ takeover premium

2. Stock offer : Profit of target's shareholders is determined by value combined firm's stock

$$P_T = N \times PPS_{A+T}$$

In which :
$P_T = Price\ paid\ to\ Target$
$N = number\ of\ new\ shared\ the\ target\ receives$
$PPS_{A+T} = Post\ perger\ price\ per\ share\ of\ combined\ firm$

**Post merger studies**

1. ST performance studies :
   - Targets gains ≈ 30%
   - Acquirer losses ≈ 1% - 3%
   - Reason 1: High premium received by Target, due to Acquirer suffer from *Winner's curse*
   - Reason 2: Managerial hubris - overestimate the synergy and expected benefits of the merger

2. Longer term performance studies :
   - Acquirer ted to underperform their peers
   - Avg. return of acquirer 3 years after a merger ≈ -4%
   - Over 60% acquirer lagging their peer group
   - Reason : due to failure to capture promised synergies

**Characteristics of M&A transactions that create value**

1. Strong buyer : Acquirer shows strong performance (i.e.: earnings ; stock price growth) in the prior 3 years
2. Low takeover premium
3. Few bidders → Greater acquirer's future returns
4. Favorable market reaction

**Divestitures / Equity carve-out / Spin-offs / Split-offs / Liquidations**

1. Divestitures : A company selling / liquidating / spinning off a division or subsidiary, mostly to outside buyer
2. Equity carve-out : Create a new, independent legal, with separate management team, by giving an equity interest in a sub to outside shareholders (issued in a public offering).
3. Spin-offs : Create a new, independent legal, with separate management team, by distributing sub's shares to the parent's shareholders proportionately → Same shareholders with the Parent company
4. Split-offs : Allow shareholders to receive a new shares of a division of the Parent, in exchange for a portion of their shares in the parent company
5. Liquidations : Break up the firm and sell its assets separately. Mostly associated with bankcruptcy

**Common reasons for restructuring**

1. Division no longer fits into management's LT strategy : unable to make profit / no fit with the LT direction of the company
2. Lack of profitability : Division's return < Firm's cost of capital
   - Reason 1 : management made a bad decision to enter the division at the first place
   - Reason 2 : Division's profitability declines over time due to rising costs / or change in customers' preference
3. Individual parts are worth more than the whole (reverse synergy)
4. Infusion of cash : Parent company experiences financing difficulty → selling a division to raise cash and reduce debt