Mergers and Acquisitions MBA776A

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EPS Accretion (Dilution) Analysis

- Core analysis model for buy-side M&A used by Investment Banks
- Assesses the impact of M&A on buyer's profitability

Impact of the deal	Condition
Accretive	Combined EPS > Acquirer's EPS
Dilutive	Combined EPS < Acquirer's EPS
Breakeven	No impact on Acquirer's EPS

Accretion and Dilution Calculation

1. Estimate the net income of the combined firm called “pro forma income”
   - Synergies created in the M&A deal (positive or negative)
   - Increased interest expense arising due to the new debt used to finance the transaction
   - Decreased interest income as a result of cash used in the transaction
   - Increased amortization as a result of the intangibles created in the deal
   - Increased depreciation as a result of the write-up of assets in the deal
   - Changes in tax rates (for cross-border M&As)
2. Calculate the new share of the combined firm
3. Divide the estimated net income of the combined firm by new share count

EPS Accretion (Dilution) Analysis: An Example

- An acquirer wants to purchase 100% of a target firm by issuing additional stocks against shares of target firm. Acquirer is traded at 30/share and target is traded at 65/share. Price-to-earnings (P/E) ratio is 6 for acquirer and 10.8 for target. Shares outstanding are 5000 and 1500, respectively, for acquirer and target. If no premium is paid, then calculate the accretion or dilution of the acquirer.

EPS Accretion (Dilution) Analysis: An Example

	Acquirer	Target	Combined
Share price before announcement	30	65	
P/E ratio	6	10.8	
EPS next year	5	6	**4.12**
Shares outstanding	5000	1500	**8250**
Net income next year	25000	9000	**34000**
New Shares Issued	**3250**		
Offer value	**97500**		
Exchange ratio	**2.17**		
Accretion/Dilution	**-17.58%**		**Dilutive**

Parameters which are important…

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- P/E ratio of both
- Acquisition with or without premium
- Exchange ratio much close to or much more than one
- Any synergy gain or not
- Financing mix: Stock only, Stock and cash, or cash only

EPS Accretion (Dilution) Analysis: Example 1

Scenario 1:

- Acquirer pays through stock at market price
- Target P/E > Acquirer P/E
- Exchange ratio more than one

	Acquirer	Target	Combined
Share price before announcement	30	65	
P/E ratio	6	10.8	
EPS next year	5	6	**4.12**
Shares outstanding	5000	1500	**8250**
Net income next year	25000	9000	**34000**
New Shares Issued	**3250**		
Offer value	**97500**		
Exchange ratio	**2.17**		
Accretion/Dilution	**-17.58%**		**Dilutive**

EPS Accretion (Dilution) Analysis: Example 2

Scenario 2:

- Acquirer pays through stock at market price
- **Target P/E < Acquirer P/E**
- Exchange ratio more than one

	Acquirer	Target	Combined
Share price before announcement	30	65	
P/E ratio	6	4.3	
EPS next year	5	15	**5.76**
Shares outstanding	5000	1500	**8250**
Net income next year	25000	22500	**47500**
New Shares Issued	**3250**		
Offer value	**97500**		
Exchange ratio	**2.17**		
Accretion/Dilution	**15.15%**		**Accretive**

EPS Accretion (Dilution) Analysis: Example 3

Scenario 3:

- Acquirer pays through stock at market price
- Target P/E < Acquirer P/E
- **Exchange ratio close to one**

	Acquirer	Target	Combined
Share price before announcement	30	32	
P/E ratio	6	5.3	
EPS next year	5	6	**5.15**
Shares outstanding	5000	1500	**6600**
Net income next year	25000	9000	**34000**
New Shares Issued	**1600**		
Offer value	**48000**		
Exchange ratio	**1.07**		
Accretion/Dilution	**3.03%**		**Accretive**

EPS Accretion (Dilution) Analysis: Example 4

Scenario 4:
- Acquirer pays through stock at market price
- Target P/E > Acquirer P/E
- Exchange ratio more than one
- **Increase in net income due to synergy gain**

	Acquirer	Target	Combined
Share price before ann	30	65	
P/E ratio	6	10.8	
EPS next year	5	6	**4.12** [5.33]
Shares outstanding	5000	1500	**8250**
Net income next year	25000	9000	**34000**
Increase in NI: synergy	**10000**		**44000**
New Shares Issued	**3250**		
Offer value	**97500**		
Exchange ratio	**2.17**		
Accretion/Dilution	**6.67%**		**Accretive**

EPS Accretion (Dilution) Analysis: Example 5

Scenario 5:

- **Acquirer pays through stock at market price + acquisition premium**
- Target P/E > Acquirer P/E
- Exchange ratio more than one

	Acquirer	Target	Combined No prem.	Combined AP: INR 2	Combined AP: INR 5
Share price before announ.	30	65	65	67	70
P/E ratio	6	10.8			
EPS next year	5	6	**4.12**	**4.07**	**4**
Shares outstanding	5000	1500	**8250**	**8350**	**8500**
Net income next year	25000	9000	**34000**	**34000**	**34000**
New Shares Issued			**3250**	**3350**	**3500**
Offer value			**97500**	**100500**	**105000**
Exchange ratio			**2.17**	**2.23**	**2.33**
Accretion/Dilution			**-17.58%**	**-18.56%**	**-20.00%**

EPS Accretion (Dilution) Analysis: Example 6

Scenario 6:
- **Acquirer acquires target firm with 50% cash and 50% through stock at market price (and acquisition premium)**
- Target P/E > Acquirer P/E
- Exchange ratio more than one

	Acquirer	Target	Combined No prem.	Combined No prem.	Combined AP: INR 2	Combined AP: INR 2
			100% stock	50% stock	100% stock	50% stock
Share price b/f ann.	30	65	65	65	67	67
P/E ratio	6	10.8				
EPS next year	5	6	**4.12**	**5.13**	**4.07**	**5.09**
Shares outstanding	5000	1500	**8250**	**6625**	**8350**	**6675**
Net income next year	25000	9000	**34000**	**34000**	**34000**	**34000**
New Shares Issued			**3250**	**1625**	**3350**	**1675**
Offer value			**97500**	**48750#**	**100500**	**50250#**
Exchange ratio			**2.17**	**2.17**	**2.23**	**2.23**
Accretion/Dilution			**-17.58%**	**2.64%**	**-18.56%**	**1.87%**

 # An equivalent amount through cash

To arrive at the right terms of the deal…

- Sensitivity and Scenario analysis based on each of the parameters
  - P/E ratio of both
  - Acquisition with or without premium
  - Exchange ratio much close to or much more than one
  - Any synergy gain or not
  - Financing mix: Stock only, Stock and cash, or cash only

Disclaimer

- The information in this presentation has been compiled from the following textbooks which have been mentioned as reference text for this course on Mergers and Acquisitions.
- Reference Texts:
  - DD: *Mergers, Acquisitions and Other Restructuring Activities*, 8th Edition Donald M. DePamphilis
  - KK: *Mergers and Acquisitions: Valuation, Leveraged Buyouts and Financing*, 1st Edition, Sheeba Kapil and Kanwar N. Kapil