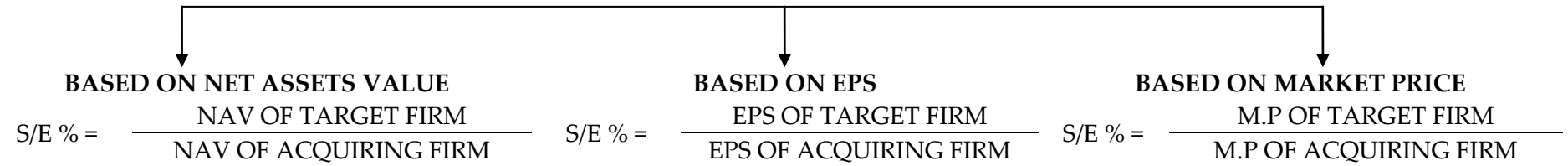


MERGERS& ACQUISITIONS**BASIS FOR SHARE EXCHANGE RATIO**

$$P/E \text{ RATIO} = \frac{MP}{EPS}$$

$$P/E \text{ RATIO OF A MERGED FIRM} = \frac{\text{TOTAL MARKET VALUE OF THE COMBINED FIRM}}{\text{TOTAL EARNINGS}}$$

**DIVIDEND GROWTH MODEL**

$$P_o = \frac{D_1}{(K_e - G)}$$

$$K_e = \frac{D_1}{P_o} + G$$

P_o =CURRENT M.P OF THE SHARE
 G =EXPECTED GROWTH

D_1 = EXPECTED DIVIDEND AT THE END OF YEAR1
 K_e = COSTOF EQUITY

Out of these valuation models P/E ratio based and NAV based values may be used in case of majority (or) controlling interest acquisition where as dividend based value would be appropriate when minority stake is to be acquired. The reason being that, in case of controlling interest the acquirer will like to pay based on total earnings (or) total assets of the firm

However, in case of minority stake dividends expected to be a major factor for acquisition

In case of constant growth rate for CASH FLOWS (CF'S)

$$P_0 = \frac{CF_1}{(K_e - G)}$$

DIVIDEND POLICY

EFFECTS THE VALUE OF THE FIRM

- Walter Approach
- Gordon
- Graham & Dodd
- Lintner
- Radical Approach

DOESNOT EFFECT THE VALUE OF THE FIRM

- Modigliani & Miller Approach

WALTER METHOD

$$P = \frac{D}{K_e} + \frac{\frac{R(E-D)}{K_e}}{K_e}$$

P = CURRENT MARKET PRICE OF THE EQUITY SHARE

D= DIVIDEND PER SHARE E= EARNINGS PER SHARE

R=RATE OF RETURN K_e= COST OF EQUITY CAPITAL.

GORDON MODEL

$$P = \frac{EPS(1-b)}{K_e - br}$$

P = CURRENT MARKET PRICE OF THE EQUITY SHARE

K_e= COST OF EQUITY CAPITAL r =RATE OF RETURN

B = RETENTION RATIO br = GROWTH

GRAHAM & DODD MODEL (TRADITIONAL MODEL)

$$P = \left[D + \frac{E}{3} \right] \times M$$

P = CURRENT MARKET PRICE OF THE EQUITY SHARE

D= DIVIDEND PER SHARE E= EARNINGS PER SHARE

M=MULTIPLIER

LINTNER MODEL

$$D_1 = D_0 [E_1 \times \text{TARGET PAYOUT RATIO} - D_0] \times \text{ADJUSTMENT FACTOR}$$

D_1 = DIVIDEND FOR YEAR 1

D_0 = DIVIDEND FOR YEAR ZERO

E_1 = EPS PER YEAR ONE

RADICAL MODEL

- Most models assume a situation of no tax the radical approach considers both corporate tax and persona; tax. It also takes into a/c the fact that dividends and capital gains are not necessarily taxed at the same rate.
- The existence of differential tax on different types of payout means that the composition of payout determines the market value.
- If the tax on dividends is higher than the tax on capital gains a company offering capital gains rather than dividends will be priced better
- If the tax on dividends is less than the tax on capital gains a company offering rather than capital gains will be priced better.

MODIGLIANI & MILLER APPROACH

$$P_0 = \frac{D + P_1}{1 + K_e}$$

P_0 = CURRENT MARKET PRICE OF THE EQUITY SHARE

D_1 = DIVIDEND FOR YEAR 1

K_e = COST OF EQUITY CAPITAL

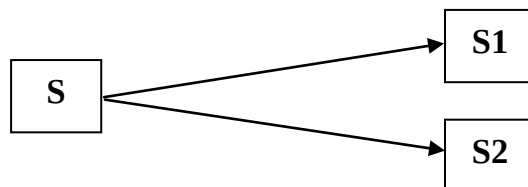
P_1 = EXPECTED M.P AT THE END OF YEAR 1

DIVIDEND APPROACHES

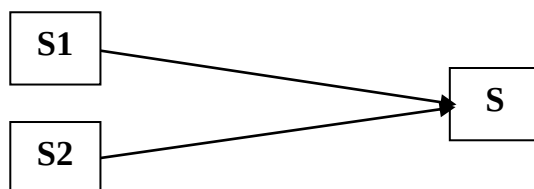
➤ CONSTANT DIVIDEND APPROACH	→ FIXED DIVIDEND PAID IRRESPECTIVE OF EARNINGS
➤ CONSTANT PAYOUT APPROACH	→ FIXED PAYOUT RATIO
➤ CONSTANT DIVIDEND + APPROACH	→ FIXED LOW DIVIDEND ALWAYS PAYABLE ADDITIONAL DIVIDEND PAID IN Yrs OF GOOD PROFIT
➤ RESIDUAL APPROACH	→ (PAT- CAPITAL EXPENDITURE)

STOCK SPLIT

1 share is taken and 2 shares are issued indicated as 2:1

**REVERSE SPLIT**

1 share is issued for every 2 shares taken

**BUY BACK**

$$\text{THEORETICAL POST BUY BACK PRICE} = \frac{\text{CURRENT M.V OF THE FIRM}}{\text{NO.OF SHARES REMAINING AFTER BUYBACK}}$$

Or

$$\text{THEORETICAL POST BUY BACK PRICE} = \frac{S \times P_0}{S-N}$$

S=NO.OF SHARES BEFORE BUYBACK P_0 =CURRENT M.P OF THE SHARE
N=NO.OF SHARES TO BE BOUGHT BACK.