



Present Value of Future Stock Price Analysis

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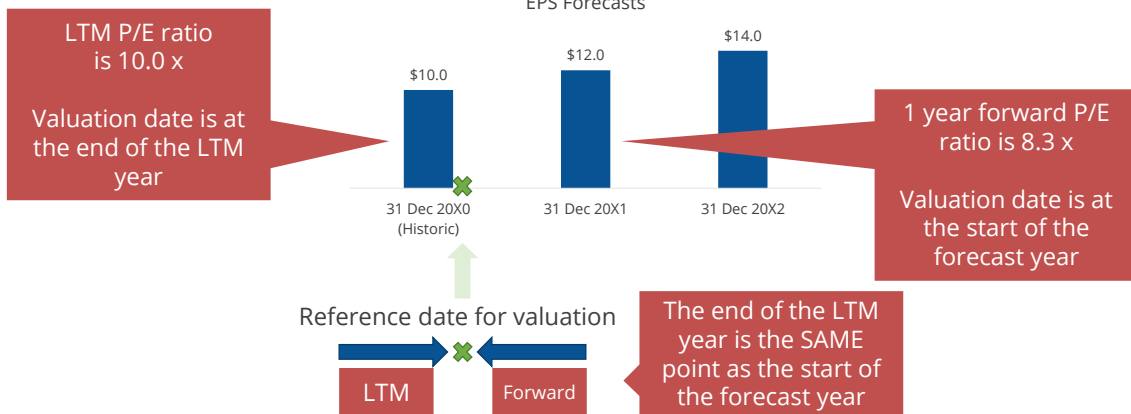
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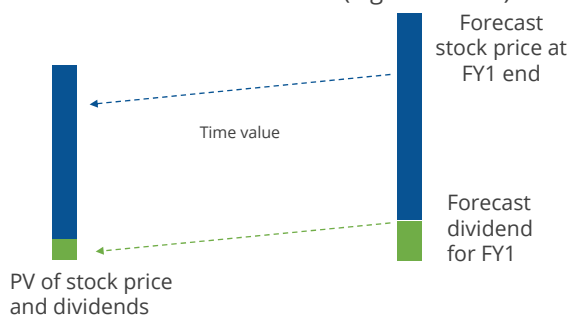
The Timing of LTM and Forward Multiples

A company's share price is \$100.0 at 31 Dec 20X0



What is PV of Future Stock Price Analysis?

Allows us to calculate today's value based on an estimated future stock price and forecast distributions (e.g. dividends)



Helps us compare strategic alternatives with different time horizons

Useful when valuing pre-IPO companies that have no revenues or profits

Allows us to identify the impact of future accretion or dilution on valuation

Calculating PV of Future Stock Price

	20X1	20X2	20X3
EPS forecast			
One year forward P/E		\$6.00	\$7.00
Implied future stock price	\$60.00	10.0 x	10.0 x
Discount period	1	2	
PV of stock price (10.0% cost of equity)	\$54.55	\$57.85	
EBITDA forecast			
One year forward EBITDA		9,000	10,000
Implied EV	45,000	5.0 x	5.0 x
Net debt forecast	1,600	1,700	
Implied equity value	43,400	48,300	
Diluted shares outstanding forecast	701	702	
Implied future stock price	\$61.91	\$68.80	
Discount period	1	2	
PV of stock price (10% cost of equity)	\$56.28	\$56.86	
Dividend per share	\$1.68	\$1.68	
PV of dividends (10% cost of equity)	\$1.53	\$1.39	
PV of stock price and dividends (EBITDA method)	\$57.81	\$59.78	

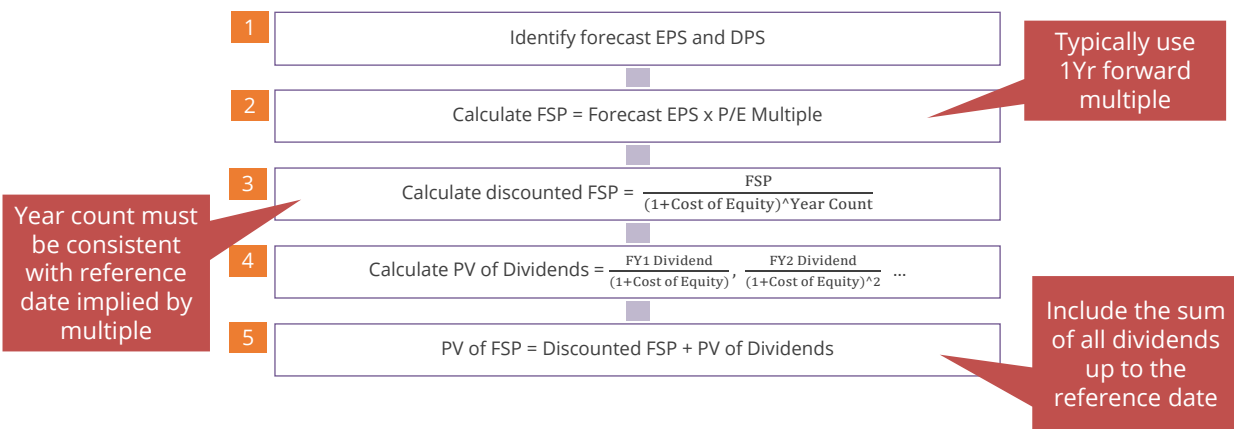
Future stock price calculated using equity or EV multiples

1 year forward multiple means Y2 EPS is valued at end of Y1

Projected share count reflected in EPS and dividend forecasts

Dividends from Y1 and Y2 are included in the Y2 valuation

P/E Multiple Method



Typically use 1Yr forward multiple

Year count must be consistent with reference date implied by multiple

Include the sum of all dividends up to the reference date

EBITDA Multiple Method

- 1 Identify forecast EBITDA, net debt, DPS and shares outstanding
- 2 Calculate Future Enterprise Value (FEV) = Forecast EBITDA x EBITDA Multiple
- 3 Calculate FSP = $\frac{\text{FEV} - \text{projected net debt}}{\text{Projected diluted share count}}$
- 4 Calculate discounted FSP = $\frac{\text{FSP}}{(1 + \text{Cost of Equity})^{\text{Year Count}}}$
- 5 Calculate PV of Dividends = $\frac{\text{FY1 Dividend}}{(1 + \text{Cost of Equity})^1} + \frac{\text{FY2 Dividend}}{(1 + \text{Cost of Equity})^2} + \dots$
- 6 PV of FSP = Discounted FSP + PV of Dividends

Typically use 1Yr forward multiple

Year count must be consistent with reference date implied by multiple

Include the sum of all dividends up to the reference date