ECONOMICS AND VALUATION

Discounted Cash Flows (DCF) is the standard framework for valuation. This one-pager encourages you to not be mechanical when presented with a DCF or an alternative valuation method. Focus on what economic factors will determine cash flows and the time horizon.

The standard DCF for valuation of a firm is:

$$\textit{Value} = \textit{Profit in period 1} / (1+r)^1 + \textit{Profit in period 2} / (1+r)^2 + \textit{Profit in period 3} / (1+r)^3 \ldots$$

Expected profit in each period is discounted and expected profits in future periods are more heavily discounted. The parameters in the formula include expected profits (after tax) for each time period (usually years or quarters) and the discount rate. Implied parameters include the tax rate, growth rate, and time horizon.

What economic factors should you assess? Along with macro factors, including exchange rates, here are examples of how to use insights to improve valuation:

1. Many high-tech firms have high fixed costs and low marginal costs. In these cases, expected profits depends mostly on revenue, i.e., price multiplied by quantity.

2. Firms may have market power because switching costs are high, network effects are strong, and entry barriers are high.

3. If a firm can increase quantity sold, e.g., by expanding geographically, then expected profits will be higher. If the total available market (TAM) is growing fast, firms can achieve a high growth rate even without increasing market share. So, economies of scale and economies of scope exert a strong influence on growth in quantity sold. If, however, the firm's user base is at risk, then quantity can fall quickly.

4. If this market is subject to *tipping* whereby the leader gains more relative to others, then the revenue growth of the leading firm should reflect that dynamic.

5. Higher risks => high discount rate (r). This is important for firms with "hockey stick" valuations, i.e., losses for several years and increasing expected profits in later years.

6. Costs of litigation and regulatory compliance reduce expected profits.

7. Potential innovations by rivals, e.g., new payment methods, shorten the relevant horizon.

8. If big ongoing investments are needed to maintain the user base, e.g., developing new content in video streaming, will reduce expected profits.

9. Customer acquisition costs (CAC) are important. Pay attention to net growth in customers.

10. It is worthwhile to evaluate which firms in an industry's value chain have more power.