Marginal Costs

Marginal cost is the change in total cost associated with a change in output. It is the first derivative of the total cost function. Marginal cost can be represented mathematically as:

$$MC = \frac{\Delta TC}{\Delta Q}$$

$$\Delta TC = Change\ in\ total\ cost.$$
$$\Delta Q = Change\ in\ output.$$

Marginal cost is the cost of the last unit produced. And it can be thought of as the cost associated with producing an additional unit of output.

Furthermore, since fixed costs stay the same by definition, marginal cost is also the change in total variable cost.

Marginal cost equals average total cost when average total cost is at a minimum. And it equals average variable costs when average variable cost is at a minimum. Therefore, if an analyst or an investor can determine when average variable cost or average total cost are at their lowest, that investor can gain some insight on a firm's marginal costs.