

Achievement of maximum profit

[Business](#), [Marketing](#)



Maximum profits means that profits are as large as current market conditions allow. To achieve maximum profits firms have to sell its products at the maximum price customers are willing to pay. Profits equal total revenue minus total variable costs minus total fixed costs. Maximum profits implies finding the level of Q for which $(AR-AVC)$ is as large as possible. At zero output a firm's total cost equals its fixed costs. Variable costs are higher when companies increase its total output. Two common variables costs are materials and labor costs. With increasing output levels companies are able to make more effective use of its facilities and staff. When companies utilize their equipment more extensively maintenance and repairs costs increase. Companies that increase their labor shifts incur in higher labor costs. Average total costs equals total costs divided by quantity. The average total cost curve is U-shaped. Subtracting average fixed costs is the formula for average variable cost. The AVC curve lies vertically below the ATC curve by the amount of the AFC. The ATC and the AVC curve never touches because the AFC never falls to zero. The total variable cost is measured by the vertical distance between the horizontal TFC lines. The AVC curve bottoms out at a lower level for Q than does the ATC curve. The marginal costs measures the increase in total cost as output Q increases by one unit. Marginal cost is less than both average total cost and average variable cost. Due to the fact that marginal costs is less than both average total cost and average variable cost the ATC and AVC falls. The ATC and AVC falls because the MC. The marginal cost curve cuts through the AVC curve at the bottom of the AVC curve. The MC curve cuts through the ATC curve at the bottom of the ATC curve.

The ATC, AVC, and MC curves are all U-shaped. The vertical gap between AVC and ATC curves steadily diminishes as Q increases. These curves never touch. Businesses have options available with respect to how much output they want to be able to produce. Economies of scale help organizations reduce their costs. Larger scale operations have higher administrative expenses. Economies of scale help reduce administrative costs. When companies incur in diseconomies of scale their operating costs rise. The LRATC curve shows the lowest average total cost at which any given level of output can be produced. The LRATC curve is made up entirely of points on the firm's alternative ATC curves. A way to reduce the ATC curve is by changing the rate of output to one at which the existing facility can operate more efficiently. Another way to reduce ATC is by changing to a more cost efficient facility by changing its scale and technology mix. Profit maximization requires that all means to lower the average cost for producing the current output with the current facility must have been exhausted.