



The Total Cost (TC) curve is the curve following the combined cost of all fixed and variable costs. At every point, the height of the TC curve is equal to the height of the Total Variable Cost (TVC) curve *plus* the height of the Total Fixed Cost (TFC) curve. The TC curve and the TVC curve will be identical, separated by the height of the TFC curve.

The Total Variable Cost (TVC) curve is the curve that follows the total of all variable costs at each level of production. The TVC curve is the driving force behind the TC curve. Therefore, at every point, the height of the TVC curve is equal to the height of the TC curve *minus* the height of the TFC curve. Because the TFC curve is a flat curve, the TC and TVC curves will be separated by the same distance (or amount) at every point.

The Total Revenue (TR) curve follows the total amount of cash received for products at every level of production. In economic theory, a company would only produce at a level of production where they would be able to sell all of their product. Therefore, $TR = P \times Q$ (Total revenue equals price *times* quantity produced). In perfect competition, this forms a straight line.

The Total Fixed Cost (TFC) curve follows the cost of all fixed expenses at every level of production. Some examples of fixed costs are building maintenance and rent or mortgage payments. In economic theory, the definition of a fixed cost is a cost that *cannot* change in the short-run. In other words, the cost is equal at every level of production. This results in a straight, horizontal line for all types of industry and every level of competition (Perfect, Imperfect, non-competitive Monopoly, etc...).

The Total Profit (TP) curve follows the profit earned at every level of production. The height of this curve is equal to the height of the TR curve *minus* the height of the TC curve. For perfect competition, this will usually result in a curve that rises slowly from a negative profit, then levels and drops off steeply at the point where marginal cost rapidly increases.