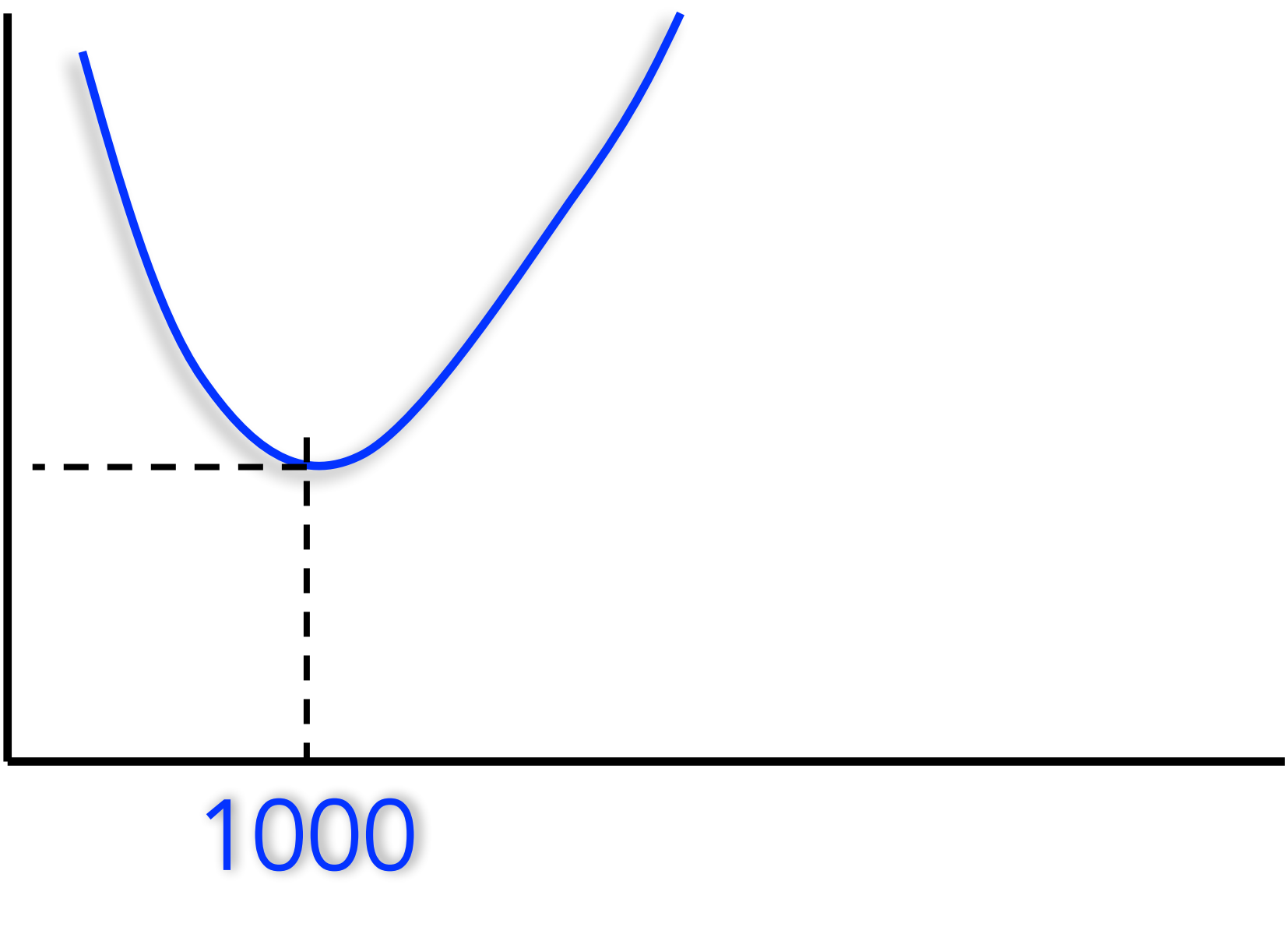
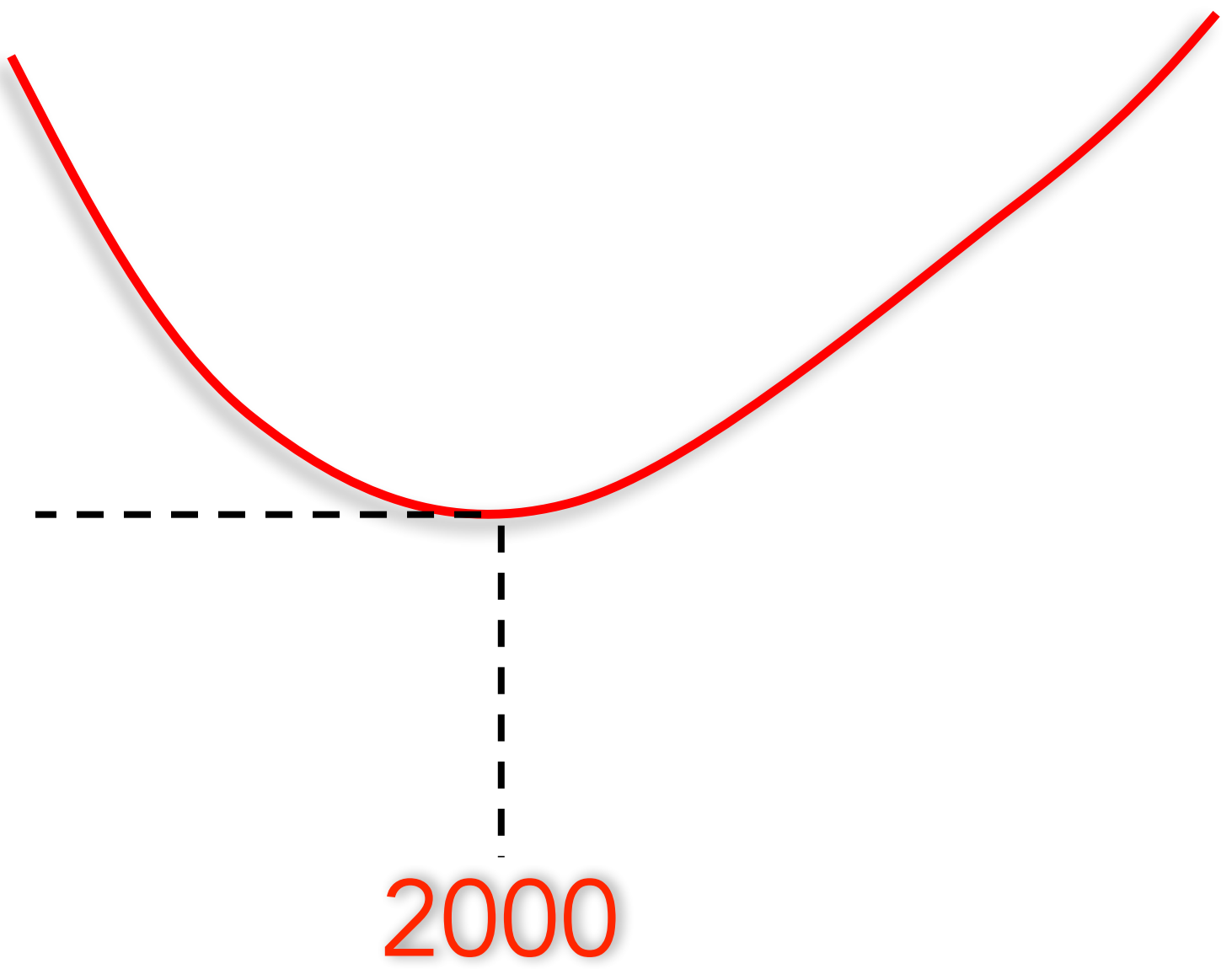




0.20





ATC





ATC

TC



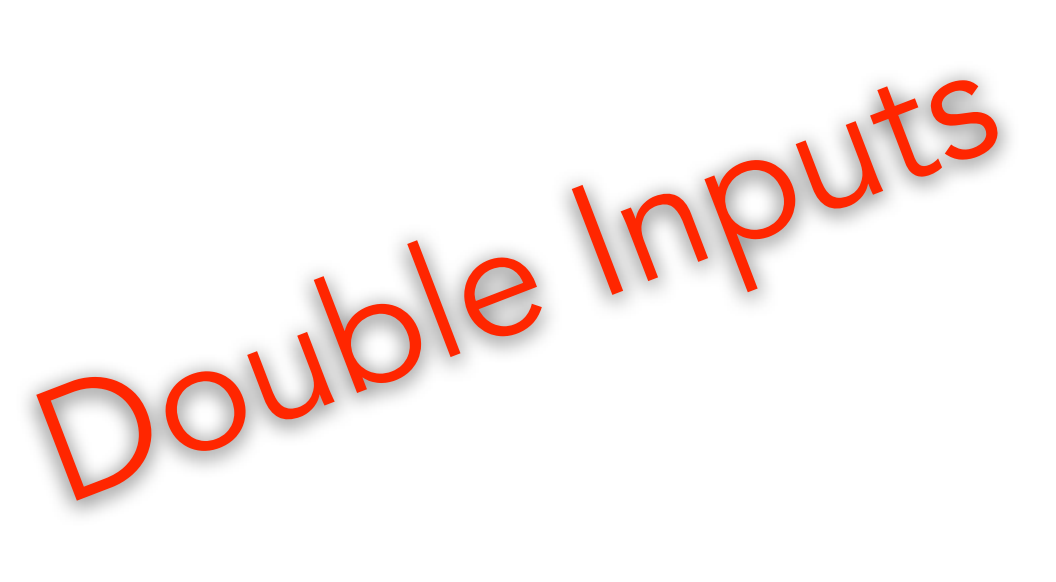
Q

ATC =



\$0.20

Double Costs

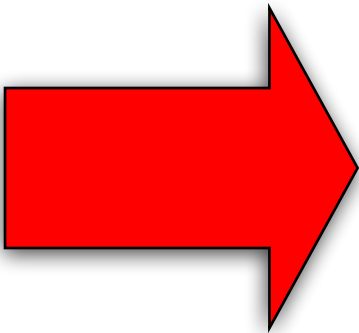


Double Inputs

2TC

2Q

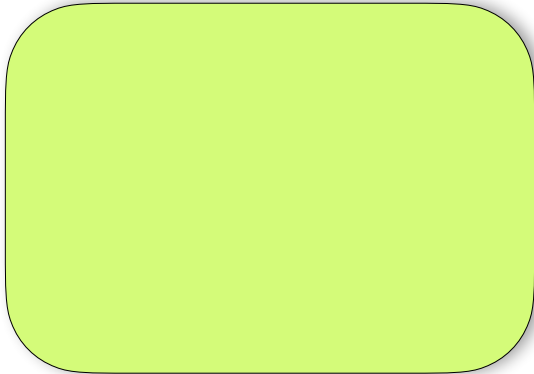
Double Output



= ATC

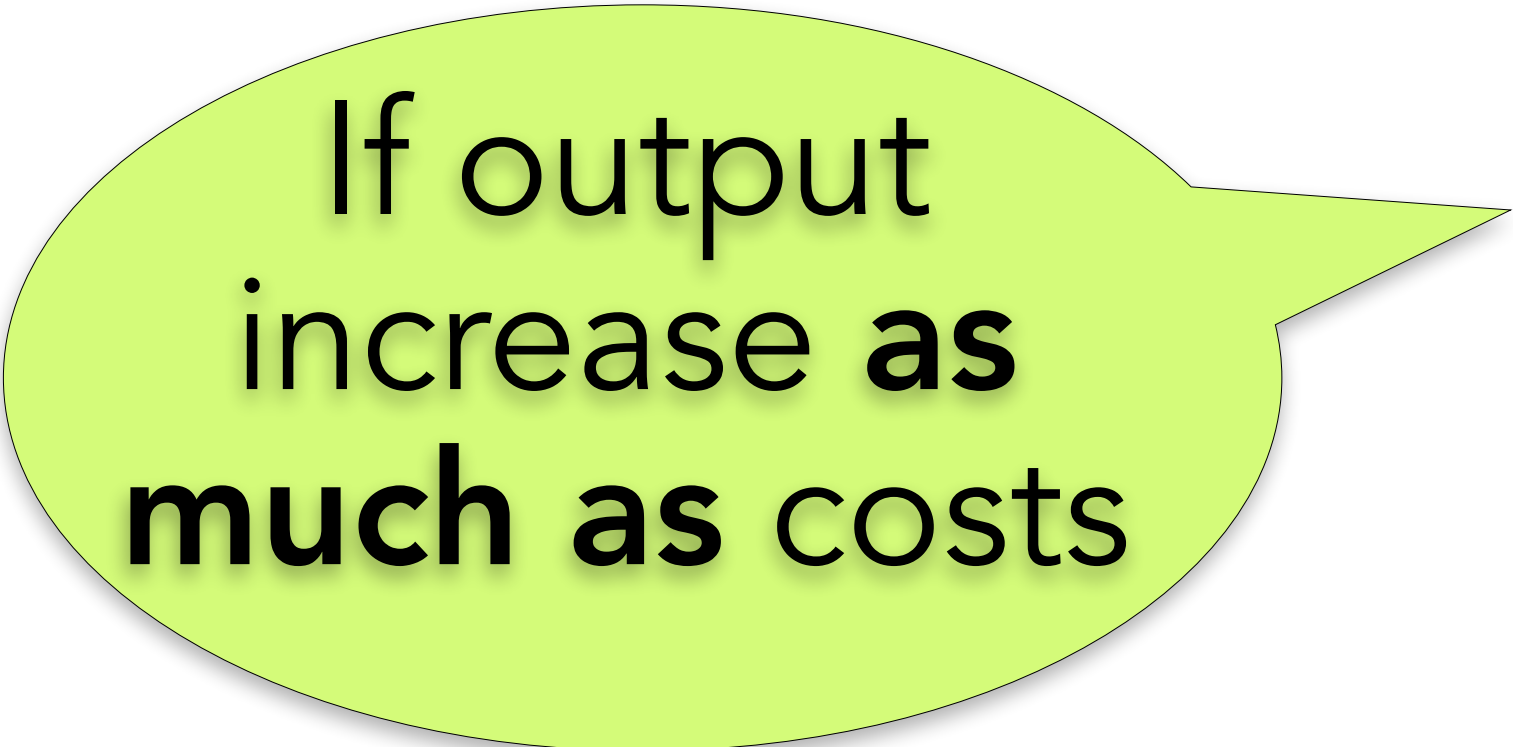
$$= \frac{200}{1000}$$

$$= \frac{2(200)}{2(1000)}$$



ATC
Same

Costs remain the
same with larger plant



If output
increase **as**
much as costs



\$0.20

In a larger plant, if the firm
use double the inputs,
then costs also double

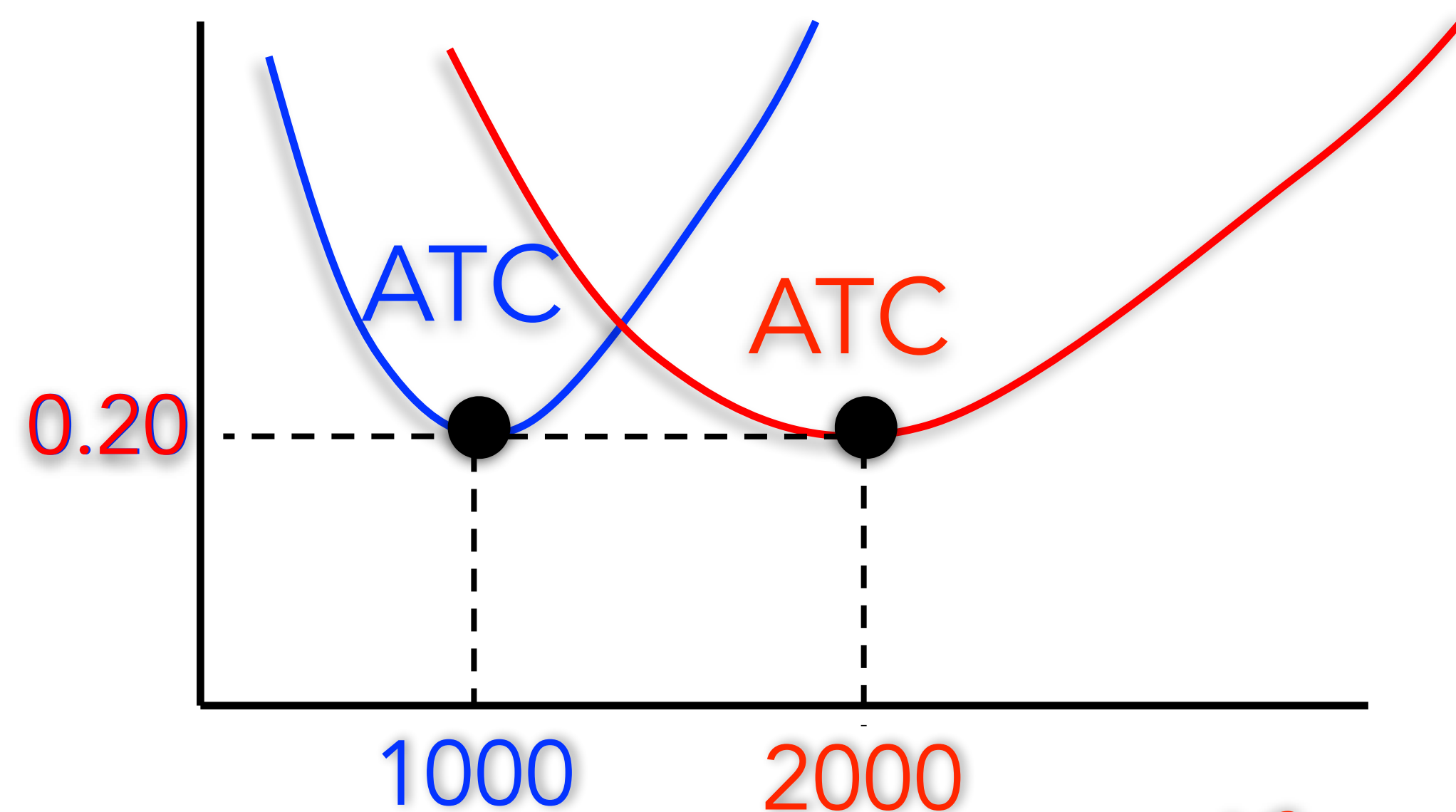
If the firm is already using the best technology, costs can not be reduced any further: **output only doubles**

Constant Returns to Scale

An example

0.20

Constant Returns to Scale



Costs remain the same with larger plant

$$ATC = \frac{TC}{Q} = \frac{200}{1000} = 0.20$$
 Double Inputs → Double Costs → Double Output

$$ATC = \frac{2TC}{2Q} = \frac{2(200)}{2(1000)} = 0.20$$
 ATC Same

If output increase as much as costs

Constant Returns to Scale

ATC

Q

A blank coordinate system for a graph. The vertical axis is labeled 'ATC' and the horizontal axis is labeled 'Q'. The axes are represented by black lines forming an L-shape. The label 'ATC' is positioned at the top of the vertical axis, and the label 'Q' is positioned at the end of the horizontal axis.