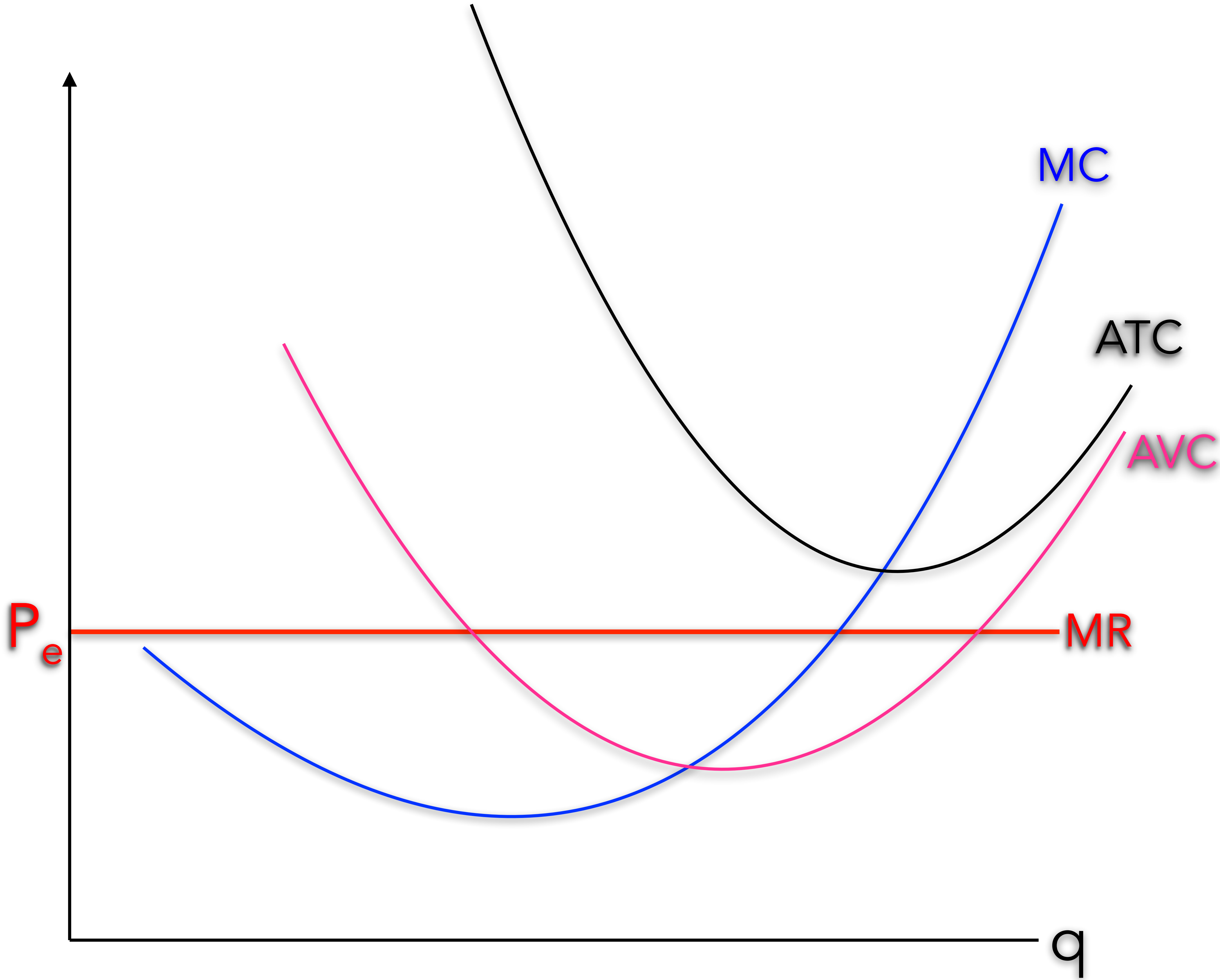


MC
ATC
AVC
P_e
MR
q

q_0

$$ATC \times q_0 = TC$$

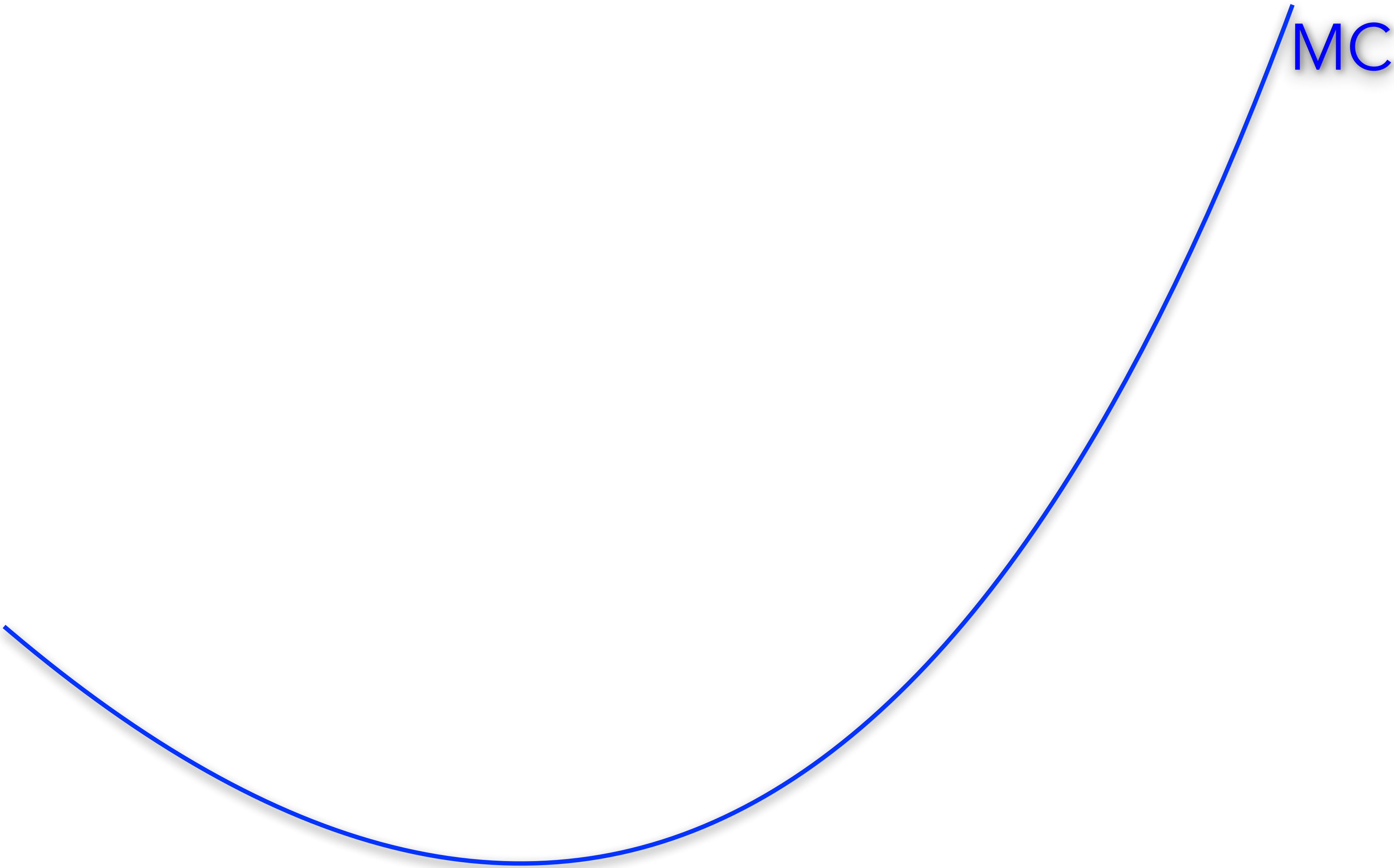
ATC

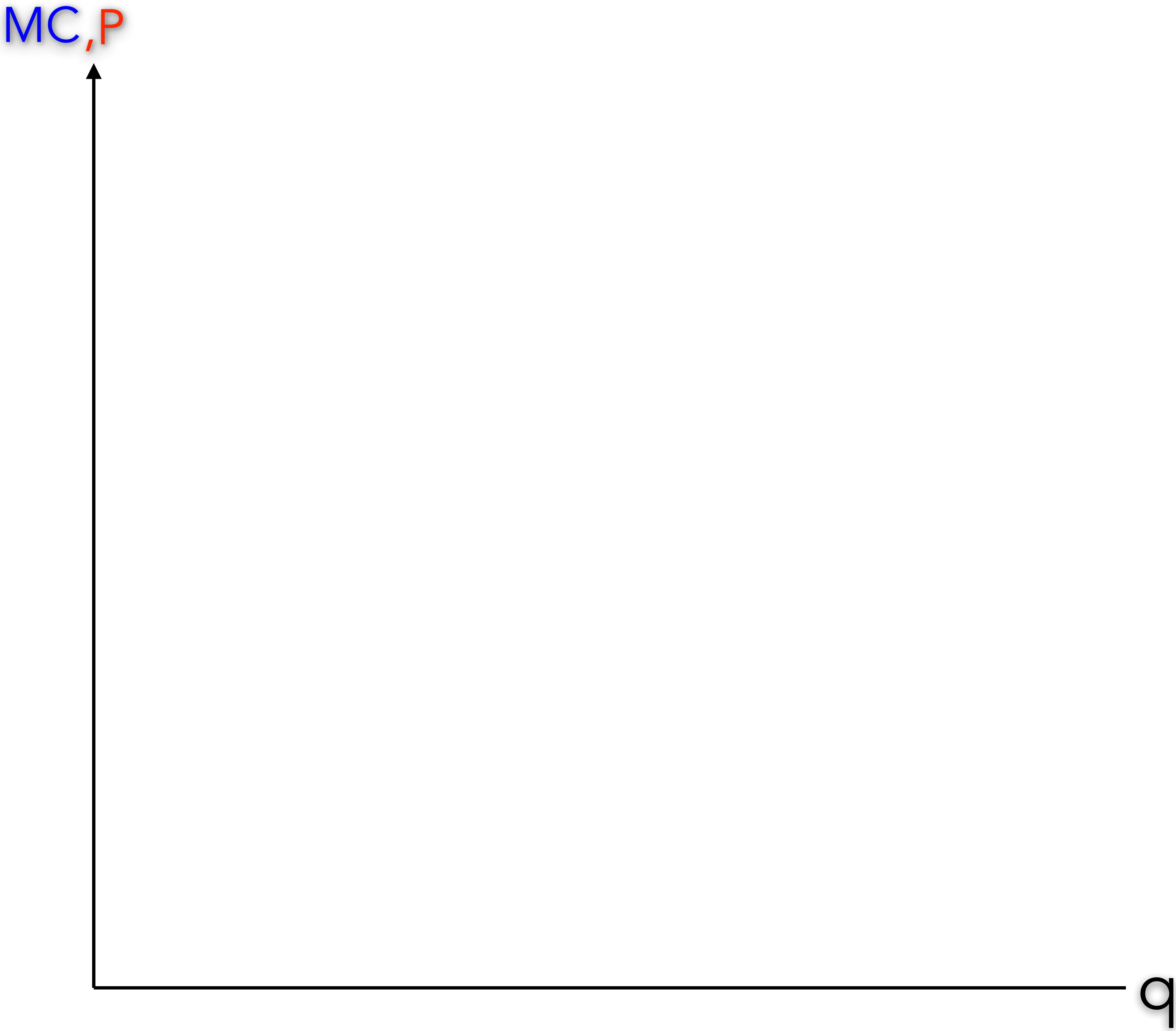
q_0

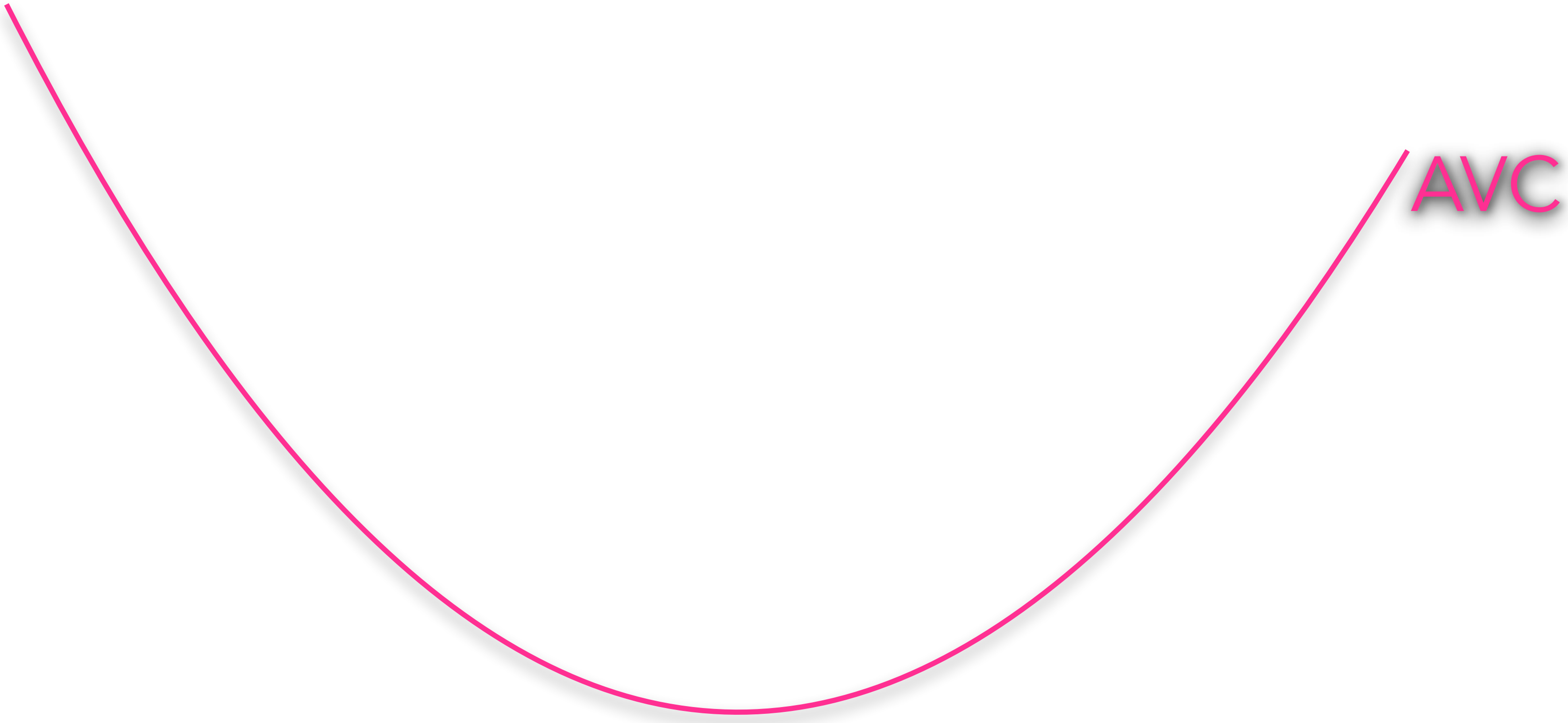
$$AFC \times q_0 = FC$$

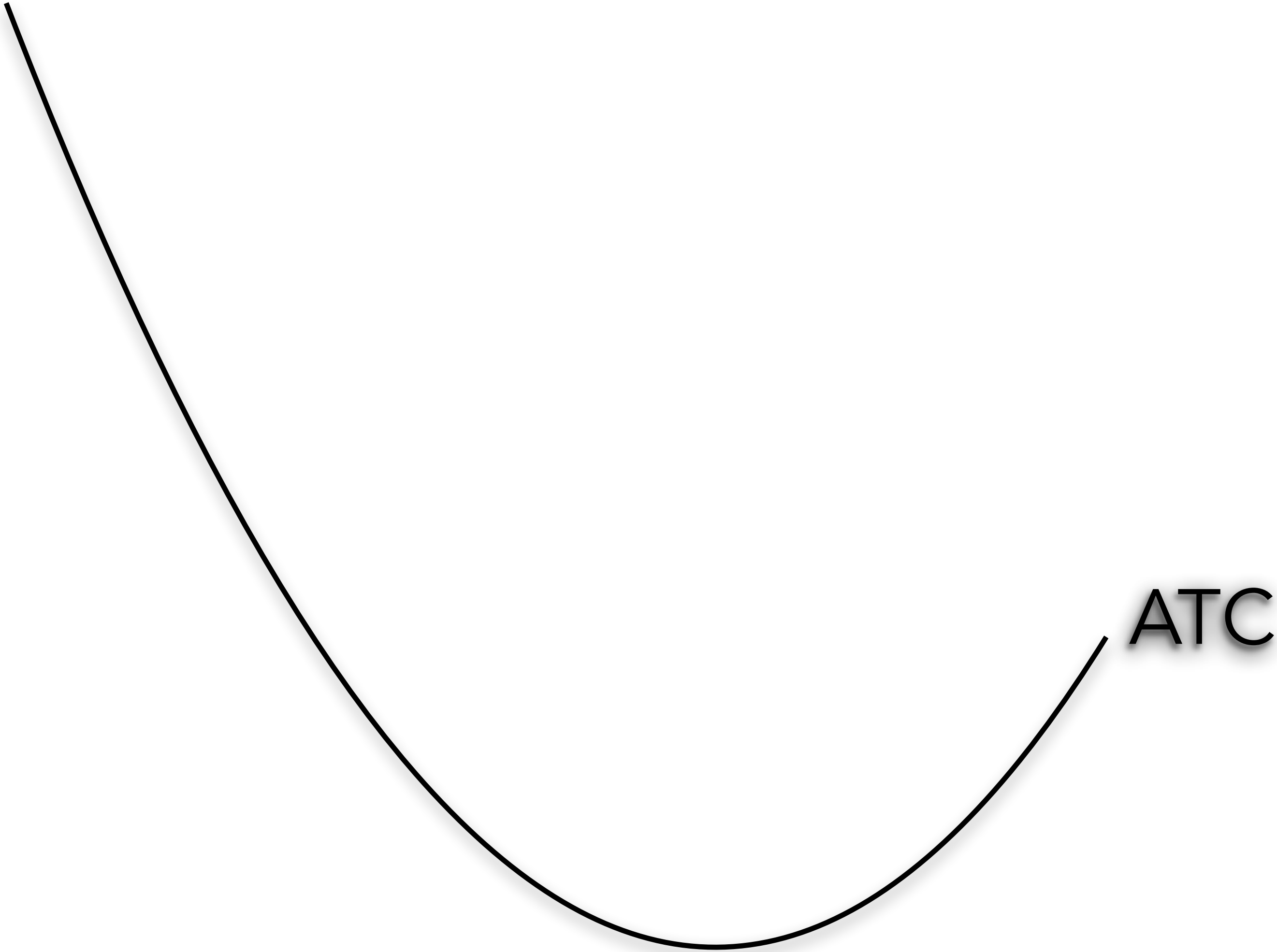
AFC

$$\text{Loss} = \text{TR} - \text{TC}$$


MC


MC,P
q


AVC


ATC

ATC

$\text{Price} \times q_0 = TR$

If the firm produces q_0 units

If the firm produces q_0 it pays this Fixed Cost

If the firm “shuts down”, the firm produces zero units

$$q=0$$

If the firm wants to keep the plant, it must continue to pay the Fixed Cost which is the same even though q=0

Total Revenue is zero

$$\text{Loss} = \text{TR} - \text{TC}$$

Total Cost is just the FC

$$\text{Loss} = 0 - \text{FC}$$

Loss if the firm shuts down = FC

Loss if the firm produce q_0

Loss if the firm produce q_0

Smaller than

Loss if the firm shuts down = FC

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Variable Cost is zero

In this case, the firm should produce q_0 at a loss instead of shutting down

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If the firm produces zero units it pays this same Fixed Cost

Producing at a loss is a “short run” decision: The firm would not want to close the plant and get out of the industry as soon as the price becomes too low to make a profit

The firm waits and if in the "long run" the price is still too low to make a profit, the firms then closes the plant and leaves the industry

The firm “exits” the industry in the long run

To minimize the loss, the firm must produce q_0

P, MC, MR, ATC, AVC

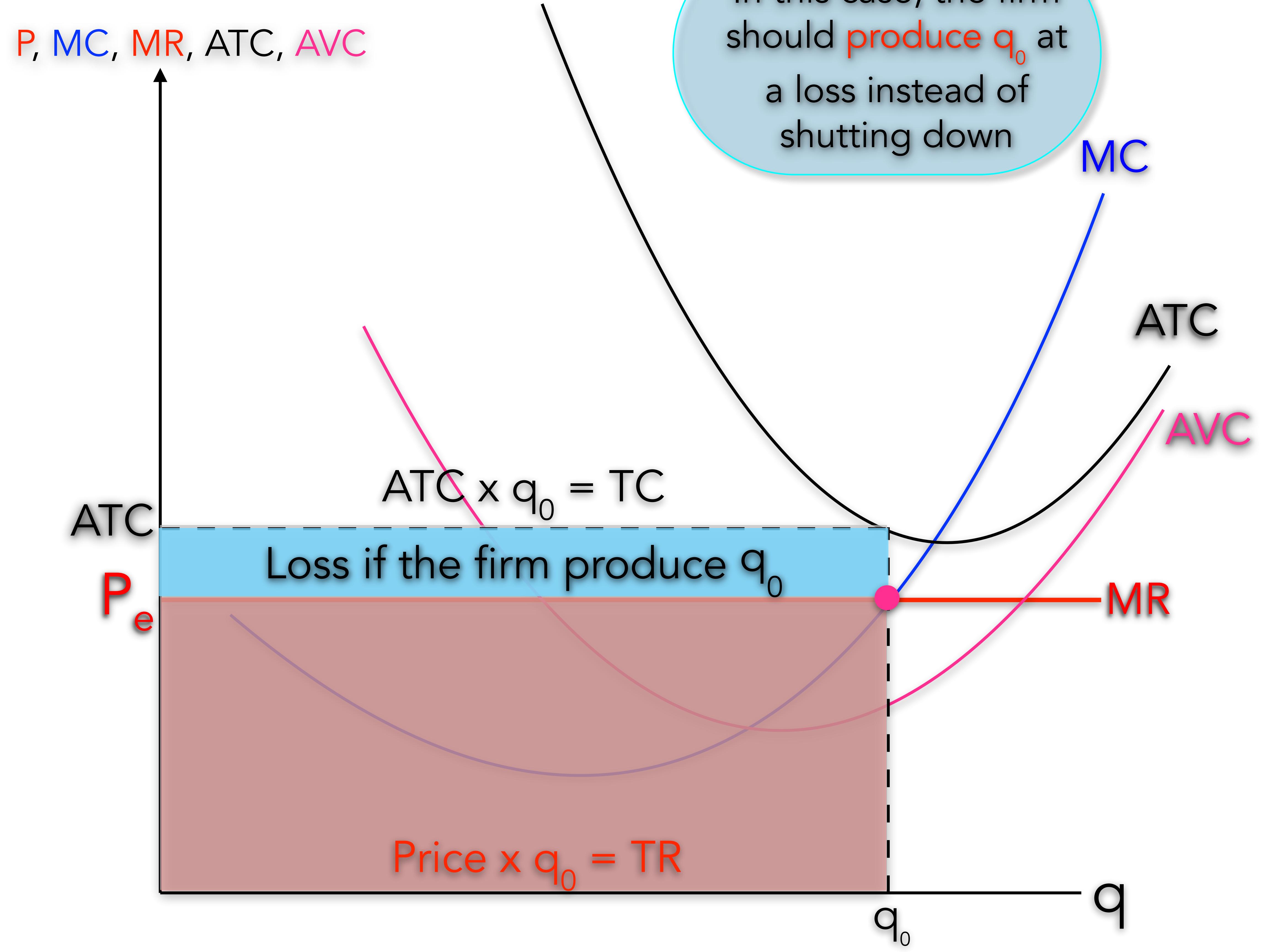
When the price is too low, the firm must decide whether it should produce at a loss or shut down

Rule: To choose the loss minimizing output level the firm chooses q where MC = MR

When the price is too low, the firm must decide whether it should produce at a loss or shut down

Loss if the firm produce q_0 | Smaller than | Loss if the firm shuts down = FC

In this case, the firm should produce q_0 at a loss instead of shutting down



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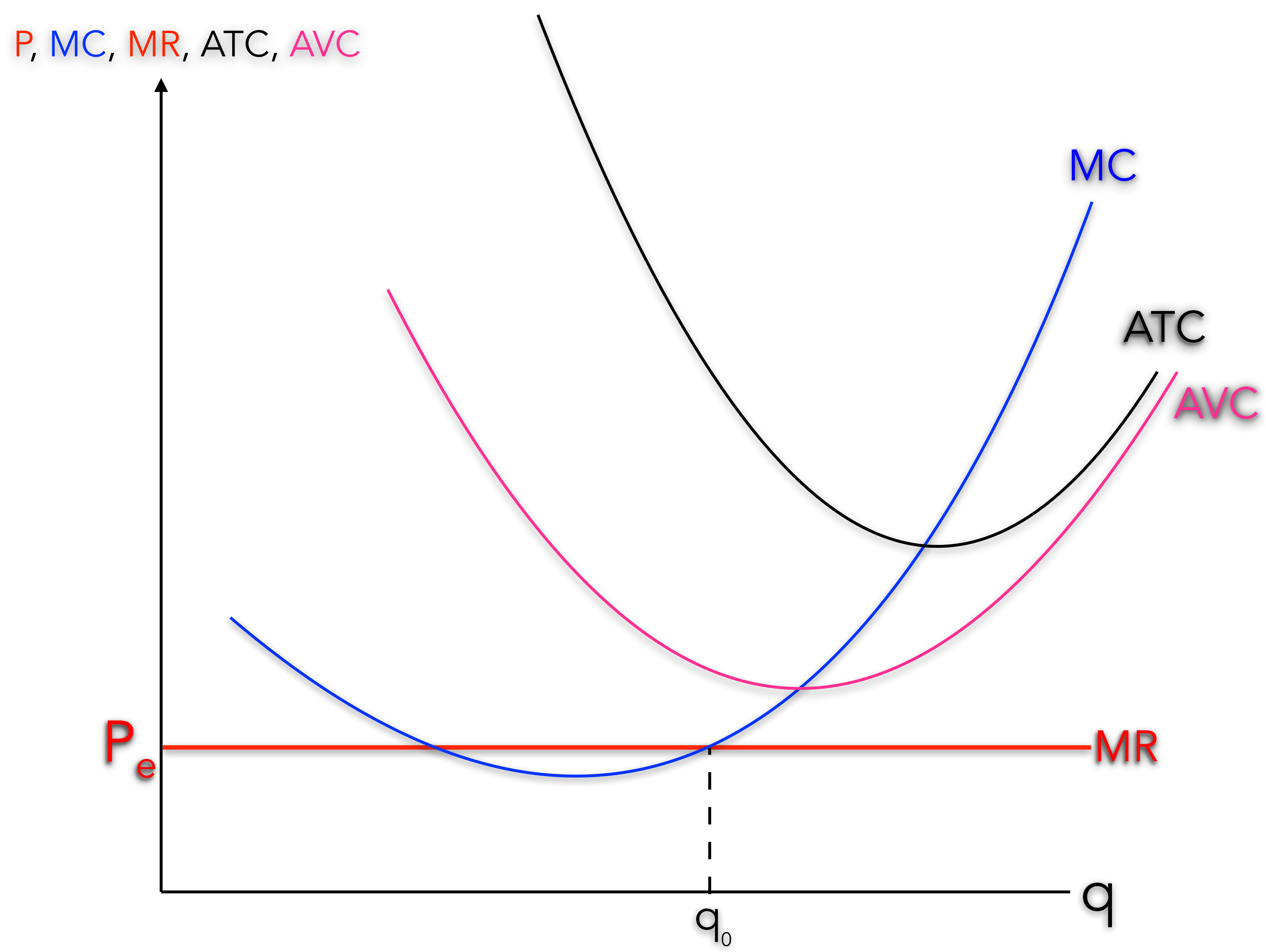
P, MC, MR, ATC, AVC
MC
ATC
AVC
P_e
MR
q
q_0