

1

2

3

4

5

6

7

8

9

10

11

12

13

14

94

95

9%



$\text{MR} \equiv \text{P}_6$

$$MR = P_5$$

$MR \equiv P_4$

MC

If $\text{Price} = \text{ATC}$ the firm is Indifferent between exiting the industry and producing q^* because it makes zero economic profit either way

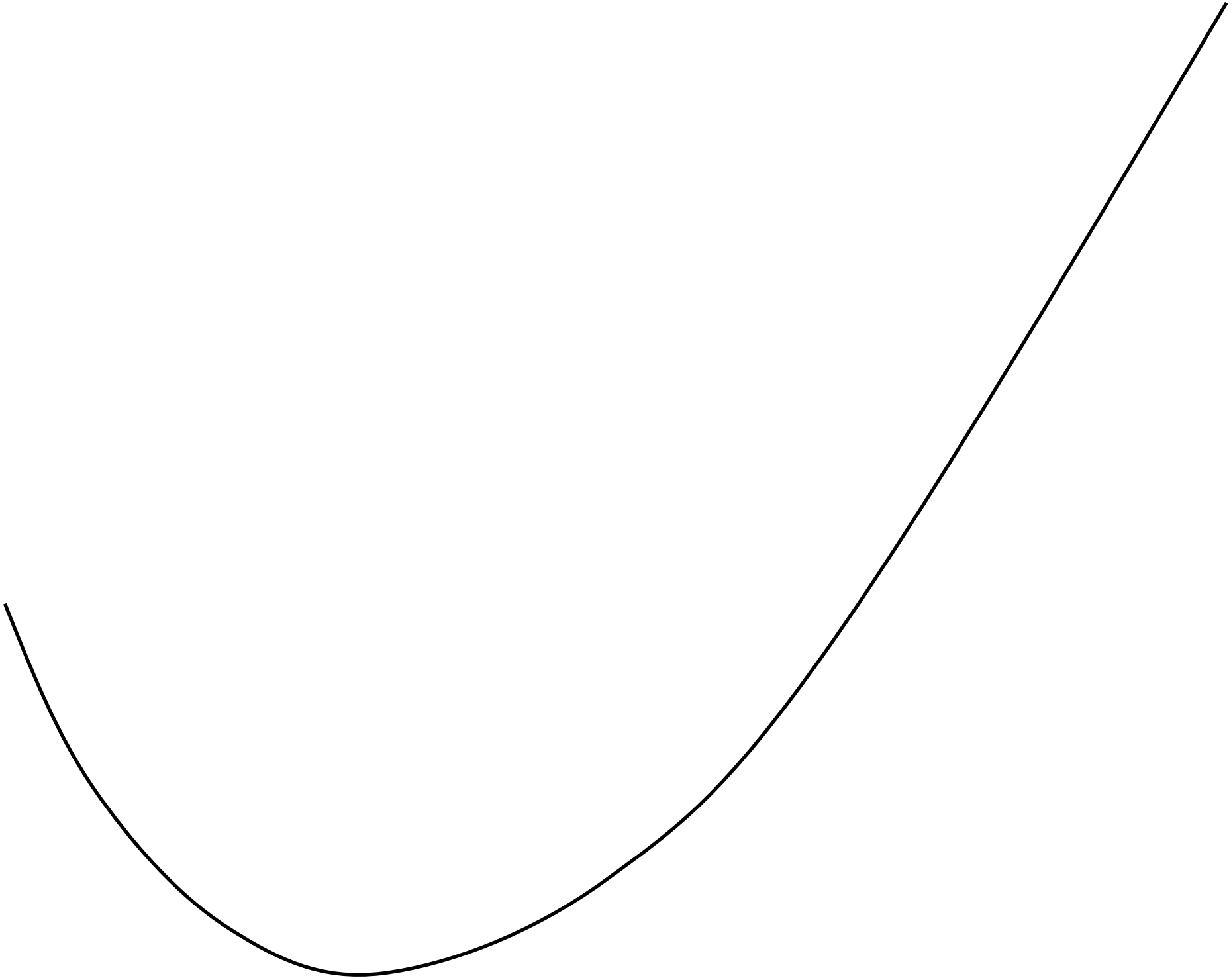
$$P_1 \text{-----} MR=P_1$$

If **Price** $<$ **ATC** the firm incurs a loss and
should exit the industry

The Firm's Long Run Decision







$$P_3 \text{-----} MR=P_3$$

$$P_2 \text{ ----- } MR = P_2$$

P_0



$MR=P_0$

Quantity Supplied in the Long Run

[illegible]

P_6

q_6

P_5

q_5

P_4

0 or q_4

P_3

0

P_2

0

P_1

0

P₀

0

If $\text{Price} > \text{ATC}$ the firm should produce q^*
(where $\text{MC} = \text{MR}$) because it makes a profit







e



h



P







e

d





p

S

b

e





W



h



A

T





h

e







m

S

h



u















S





a

d





P





d

U





n

g







W

h







M



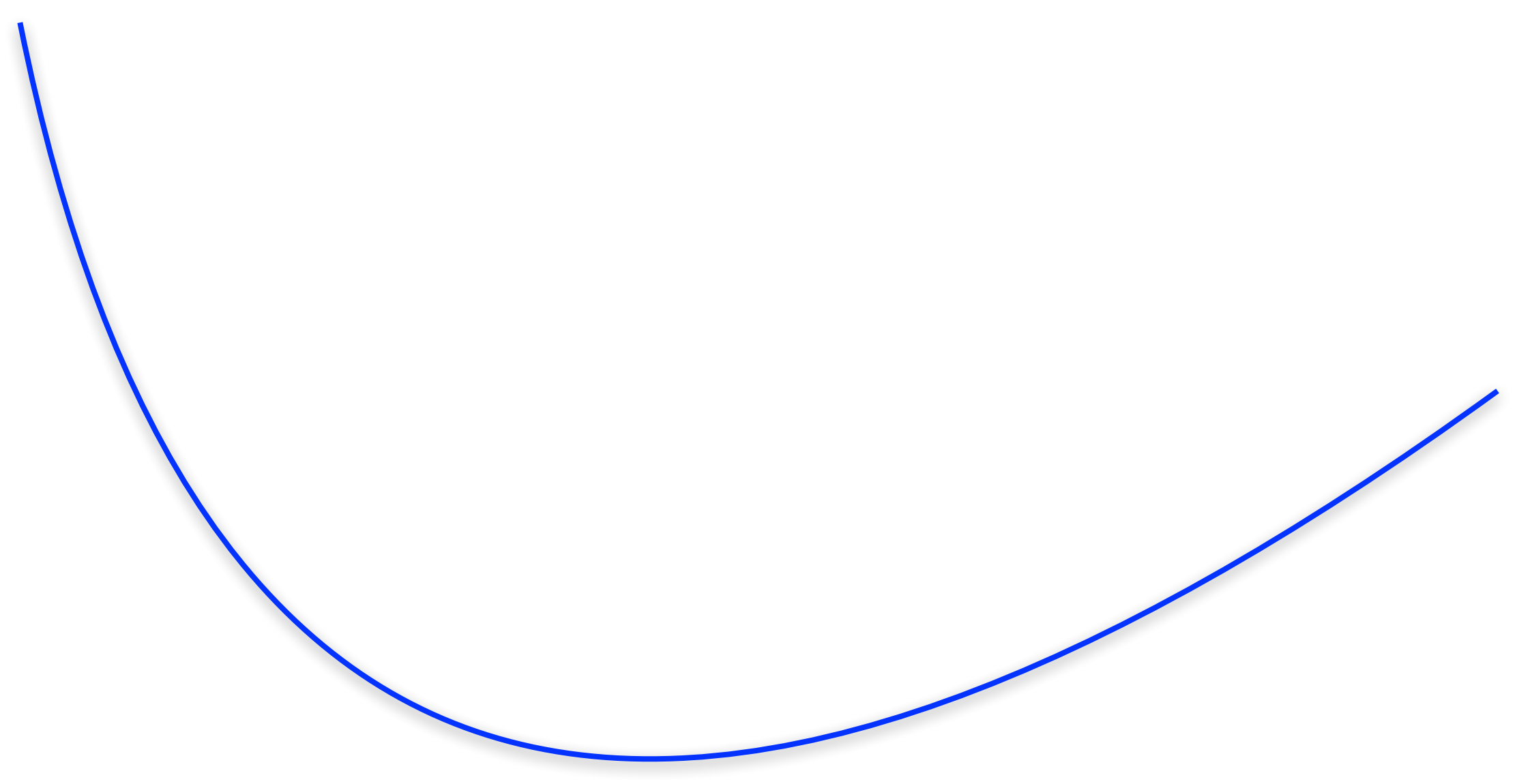
[REDACTED]

[REDACTED]

M

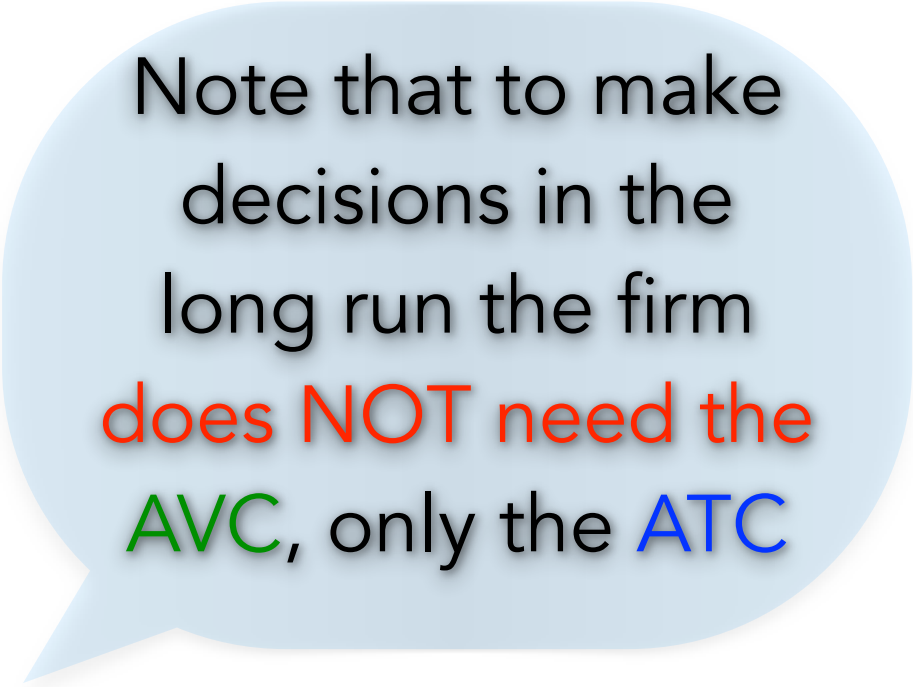
R





ATC

P₄-----



Note that to make
decisions in the
long run the firm
does NOT need the
AVC, only the ATC



Q





Q









$$q = 0$$

q

=

0

Q



the thermodynamic principles that govern the behavior of the system. The first law of thermodynamics, which states that energy is conserved, is a fundamental principle that underlies all of the thermodynamic relationships. The second law of thermodynamics, which states that the entropy of a system always increases, is another fundamental principle that governs the behavior of the system. The third law of thermodynamics, which states that the entropy of a system approaches zero as the temperature approaches absolute zero, is a third fundamental principle that governs the behavior of the system. The fourth law of thermodynamics, which states that the entropy of a system is a state function, is a fourth fundamental principle that governs the behavior of the system. The fifth law of thermodynamics, which states that the entropy of a system is a function of the temperature and the volume of the system, is a fifth fundamental principle that governs the behavior of the system. The sixth law of thermodynamics, which states that the entropy of a system is a function of the temperature and the pressure of the system, is a sixth fundamental principle that governs the behavior of the system. The seventh law of thermodynamics, which states that the entropy of a system is a function of the temperature and the chemical potential of the system, is a seventh fundamental principle that governs the behavior of the system. The eighth law of thermodynamics, which states that the entropy of a system is a function of the temperature and the chemical potential of the system, is an eighth fundamental principle that governs the behavior of the system. The ninth law of thermodynamics, which states that the entropy of a system is a function of the temperature and the chemical potential of the system, is a ninth fundamental principle that governs the behavior of the system. The tenth law of thermodynamics, which states that the entropy of a system is a function of the temperature and the chemical potential of the system, is a tenth fundamental principle that governs the behavior of the system.



P₆



P₅



$$q = 0$$

Once the Price drops below the ATC the firm should exit instead of producing q^* (where $MC = MR$)

q

=

0

$$q = 0$$

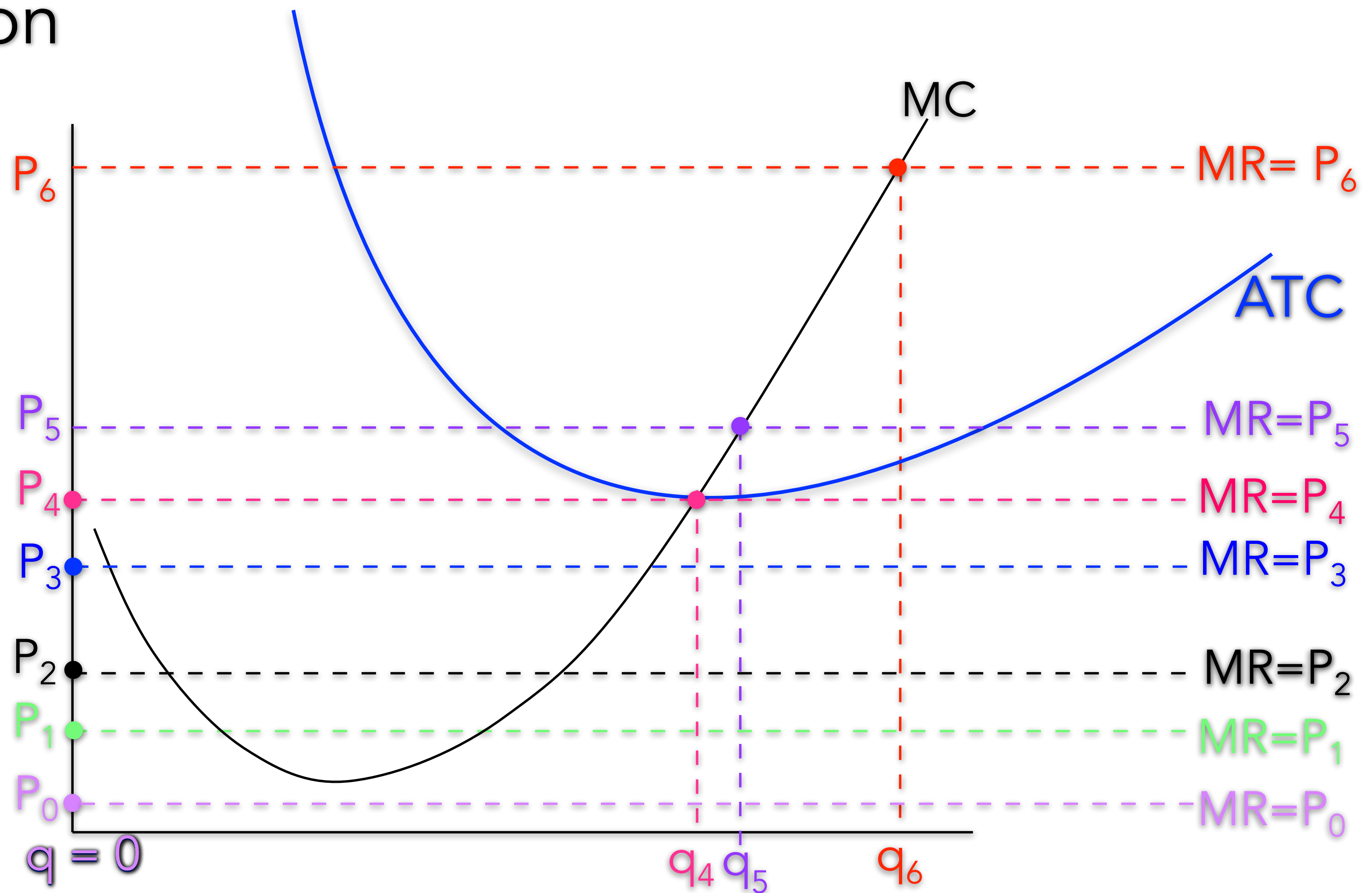
The Firm's Long Run Decision

If **Price** > **ATC** the firm should **produce** q^* (where $MC = MR$) because it makes a profit

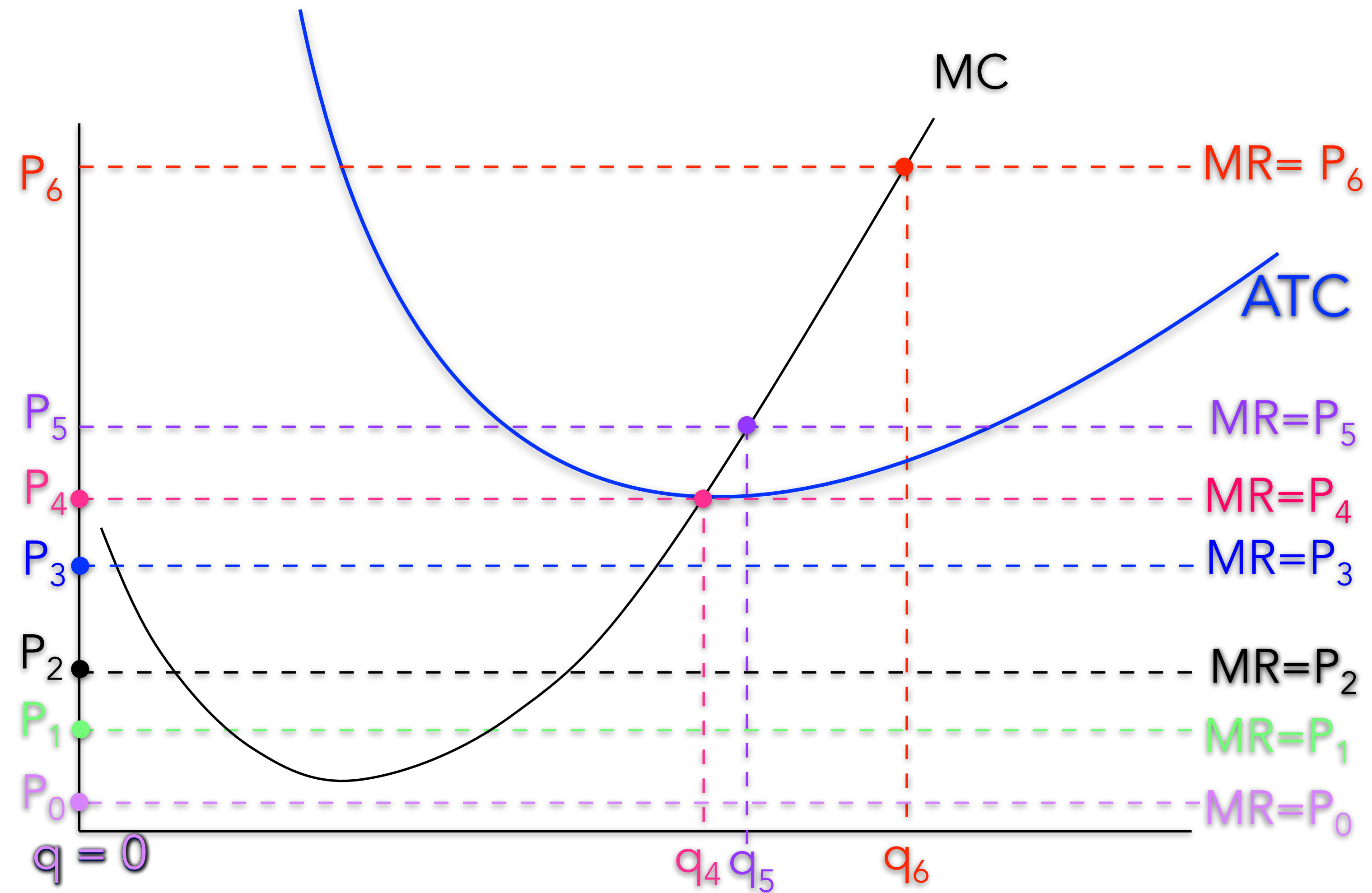
If **Price** = **ATC** the firm is **Indifferent** between exiting the industry and producing q^* because it makes zero economic profit either way

If **Price** < **ATC** the firm incurs a loss and should exit the industry

Price	Quantity Supplied in the Long Run Q^s
P_6	q_6
P_5	q_5
P_4	0 or q_4
P_3	0
P_2	0
P_1	0
P_0	0



Once the **Price drops below** the **ATC** the firm should exit instead of **producing** q^* (where $MC = MR$)



In the Long Run, the firm exits if it incurs a loss