

o Market Shocks – What is the Long-run Market Supply?

Now consider what happens in the long-run with a shock in the market, such as an increase or a decrease in market demand. Figure 7 shows the long-run equilibrium for a perfectly competitive market and firm. Profit is zero because price equals ATC.

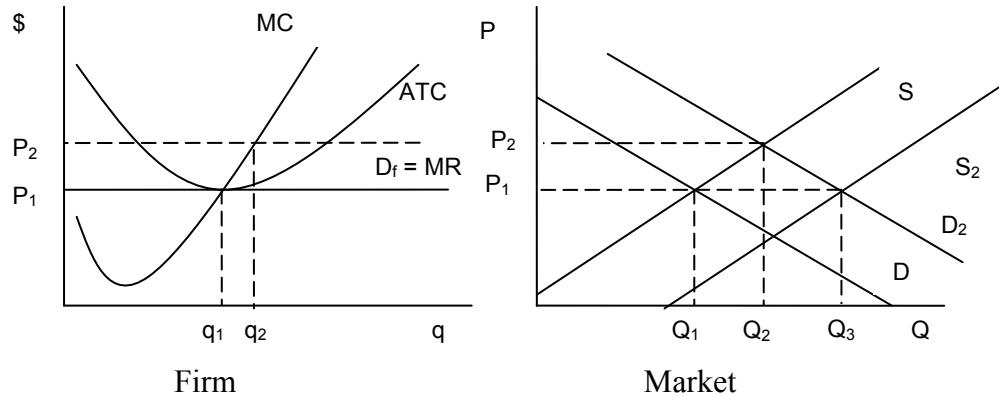


Figure 7

However, consider what happens in both the short-run and the long-run as market D increases or decreases. Initially market price equals P_1 while firm output is q_1 and market output is Q_1 . Now suppose that market D increases to D_2 . What happens in both the short and the long run as a result?

Short-run impact	Long-run Impact
$P \uparrow$ (to P_2)	With $\pi > 0 \Rightarrow$ entry occurs and the short run S shifts right (to S_2)
$q \uparrow$ (to q_2)	$P \downarrow$ (back to P_1)
$Q \uparrow$ (to Q_2)	$q \downarrow$ (back to q_1) while $Q \uparrow$ (to Q_3). How does total Q increase while firm q decreases?
$\pi \uparrow$ (was 0 now is > 0)	$\pi \downarrow$ (back to zero)

Just the opposite in both the short-run and long-run would happen if D were to decrease rather than increase. Thus, in the long-run profit is always equal to zero which is caused by either entry (if D increases) or exit (if D decreases). Notice that, in the long-run price remains constant at P_1 , which must happen in order to keep profit equal to zero. The only change in the long-run with an increase or decrease in market D is that total output rises or falls, respectively.

This implies that the long-run market supply curve is perfectly elastic at the market price that yields a zero profit (P_1 in figure 7).

- Long Run Market Supply Curve