

## ACTIVITY 19

# Long-Run Aggregate Supply (LRAS) and the Production Possibilities Curve (PPC)

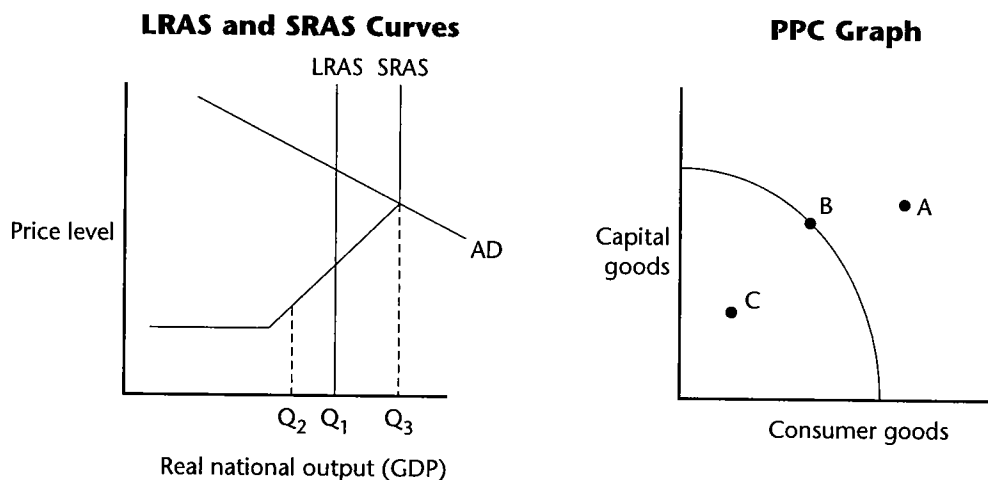
The long-run aggregate supply (LRAS) curve differs from the short-run aggregate supply (SRAS) curve. The LRAS curve is a vertical line. The level of output of this line indicates the quantity of goods and services a nation can produce if it uses all of its productive resources as efficiently as possible with all of the current technology available to it. Long-run aggregate supply is at full employment.

Developing more and better resources or improving technology will shift the LRAS curve outward, but it will still be vertical. The LRAS curve is similar to the production possibilities curve that you studied earlier. Remember that the production possibilities curve (PPC) represented the maximum output of two goods that could be produced given scarce resources. The economy could grow if the PPC shifted outward because of more resources or technological advances. For the same reason, the LRAS curve shifts outward if more resources are developed or if there are technological advances.

The SRAS curve also becomes vertical once the full-employment level is reached. This is because the quantity of goods and services produced cannot be increased regardless of how much aggregate demand or the price level increases.

SRAS can actually be greater than LRAS. Resources can be used more intensively in the short run. For example, workers can work more hours and machines can operate for more hours. However, this output level cannot be sustained in the long run. Eventually, the equilibrium level of output will fall unless LRAS is increased. As an analogy on a personal level, you may pull an all-nighter to prepare for several exams on the same day. You cannot, however, work 24 hours a day all the time.

Now answer the questions that follow to be sure you understand these concepts. Use the graphs *LRAS and SRAS Curves* and *PPC Graph* in your answers.



1. What information does a PPC provide for us about a nation's economy?

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2. What assumptions about the use of available resources are inherent in a PPC?
3. What forces or conditions will cause a nation's PPC to move?
4. What does the LRAS tell us about a nation's economy?
5. Why is the LRAS curve vertical?
6. If the price level rises, will LRAS shift? Will it shift if AD changes?
7. If an economy finds that it faces a short-run equilibrium where real national output is  $Q_2$ , how would you describe the condition of the economy? Given this equilibrium level of output, at what point would we lie on the PPC graph? Explain your answer.
8. If an economy finds that it faces a short-run equilibrium where real national output is  $Q_1$ , how would you describe the condition of the economy? Given this equilibrium level of output, at what point would we lie on the PPC graph? Explain your answer.
9. If an economy finds that it faces a short-run equilibrium where real national output is  $Q_3$ , how would you describe the condition of the economy? Given this equilibrium level of output, at what point would we lie on the PPC graph? Explain your answer.
10. If the economy were producing at  $Q_3$ , what would happen in the long run? Why?
11. What could cause LRAS to shift?
12. If the LRAS curve shifted to the right, what would happen on the PPC graph?