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 at an output level that represents the quantity of goods and services a nation can produce over a sustained period using 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. LRAS doesn't change as the price level changes. Developing more and better resources or improving technology will shift the LRAS curve outward, but it will still be vertical.

The LRAS curve represents a point on an economy's production possibilities curve. Remember that the production possibilities curve (PPC) represents the maximum output of two goods that can be produced given scarce resources. The economy could grow if the PPC shifts 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.

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.

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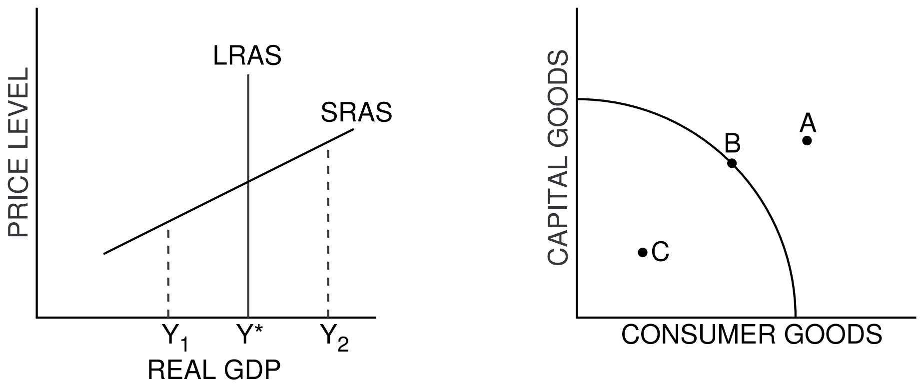
Now answer the questions that follow to be sure you understand these concepts. Use the graphs in Figure 29.1 in your answers.

Figure 29.1
Aggregate Supply and Production Possibilities Curves

LRAS and SRAS Curves **PPC Graph**



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

2. What assumptions do you make about the use of available resources when drawing a PPC?

3. What would cause a nation's PPC to shift?

4. What do you know about a nation's economy that is operating on the LRAS curve?

5. Under what conditions would an economy be on the LRAS curve?

6. If the price level rises, will LRAS shift? ______ Will the LRAS curve shift if AD changes? _______

7. If an economy finds that it faces a short-run equilibrium where real GDP is Y_1, how would you describe the condition of the economy? Given this equilibrium level of output, at what point would the economy lie on the PPC? Explain your answer.

8. If an economy finds that it faces a short-run equilibrium where real GDP is Y, how would you describe the condition of the economy? Given this equilibrium level of output, at what point would the economy lie on the PPC? Explain your answer.

9. If an economy finds that it faces a short-run equilibrium where real GDP is Y_2, how would you describe the condition of the economy? Given this equilibrium level of output, at what point would the economy lie on the PPC? Explain your answer.

10. If the economy were producing at Y_2, what would happen in the long run? Why?

11. What could cause a nation's LRAS to shift?

12. How would a rightward shift in LRAS be shown on the PPC?