



3. Suppose global supply chain disruptions lead to a decrease in labor demand, and eventually a decrease in the real wage.

(a) Describe and illustrate the impact on consumers' optimal choices for consumption, leisure, and labor supply. What is the impact on consumer welfare?

(b) Describe intuitively the income and substitution effects on consumption and leisure.

(c) Describe and illustrate the income and substitution effects on consumption and leisure.

4. Suppose there is an improvement in technology that makes labor and capital more productive.

(a) Describe and illustrate the impact on the production function

(b) Describe and illustrate the impact on producers' profit maximizing choice for labor.

(c) Describe and illustrate the impact on *equilibrium* real wage and real GDP.