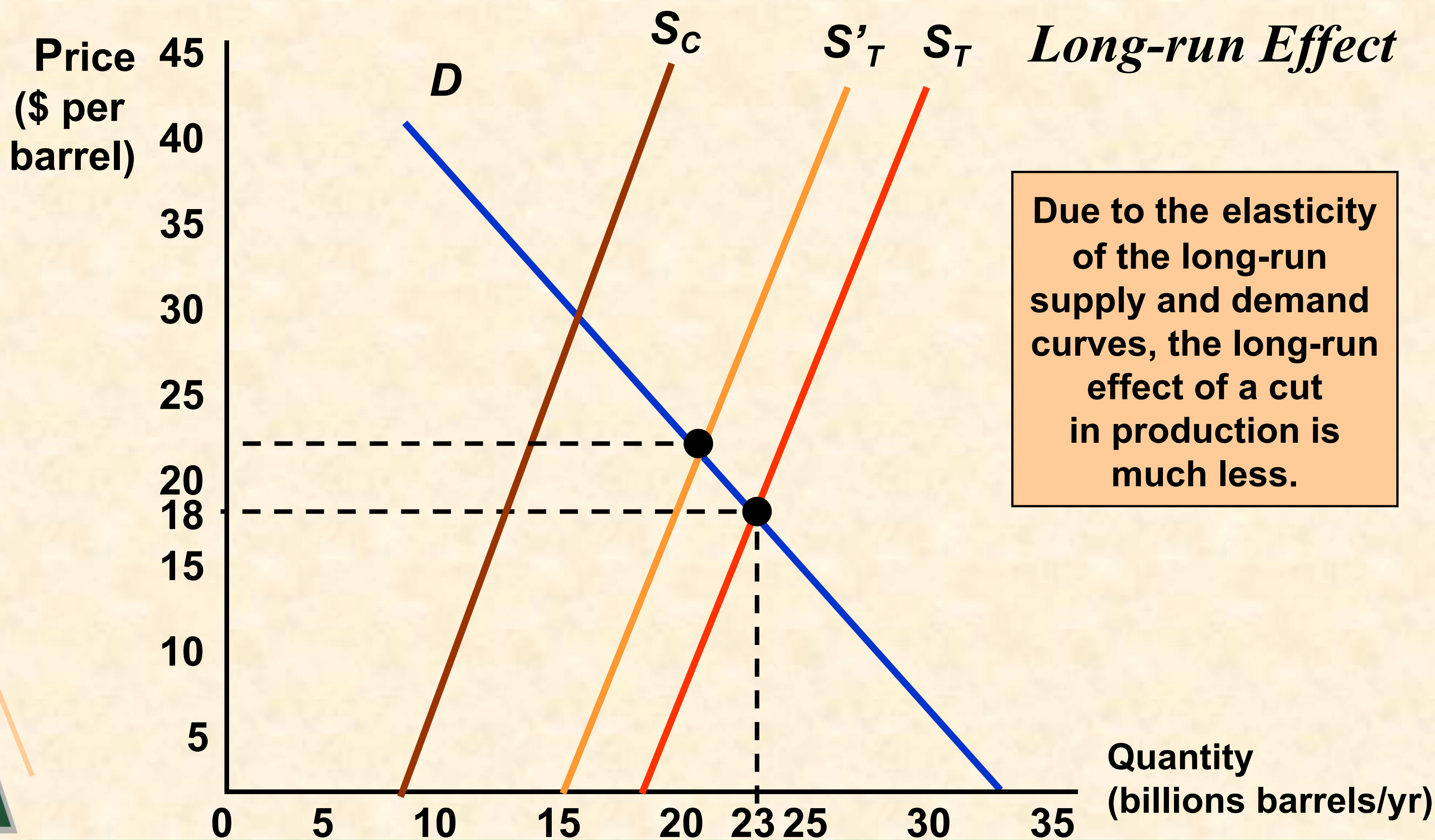
# Impact of Saudi Production Cut




***Long-run Effect***

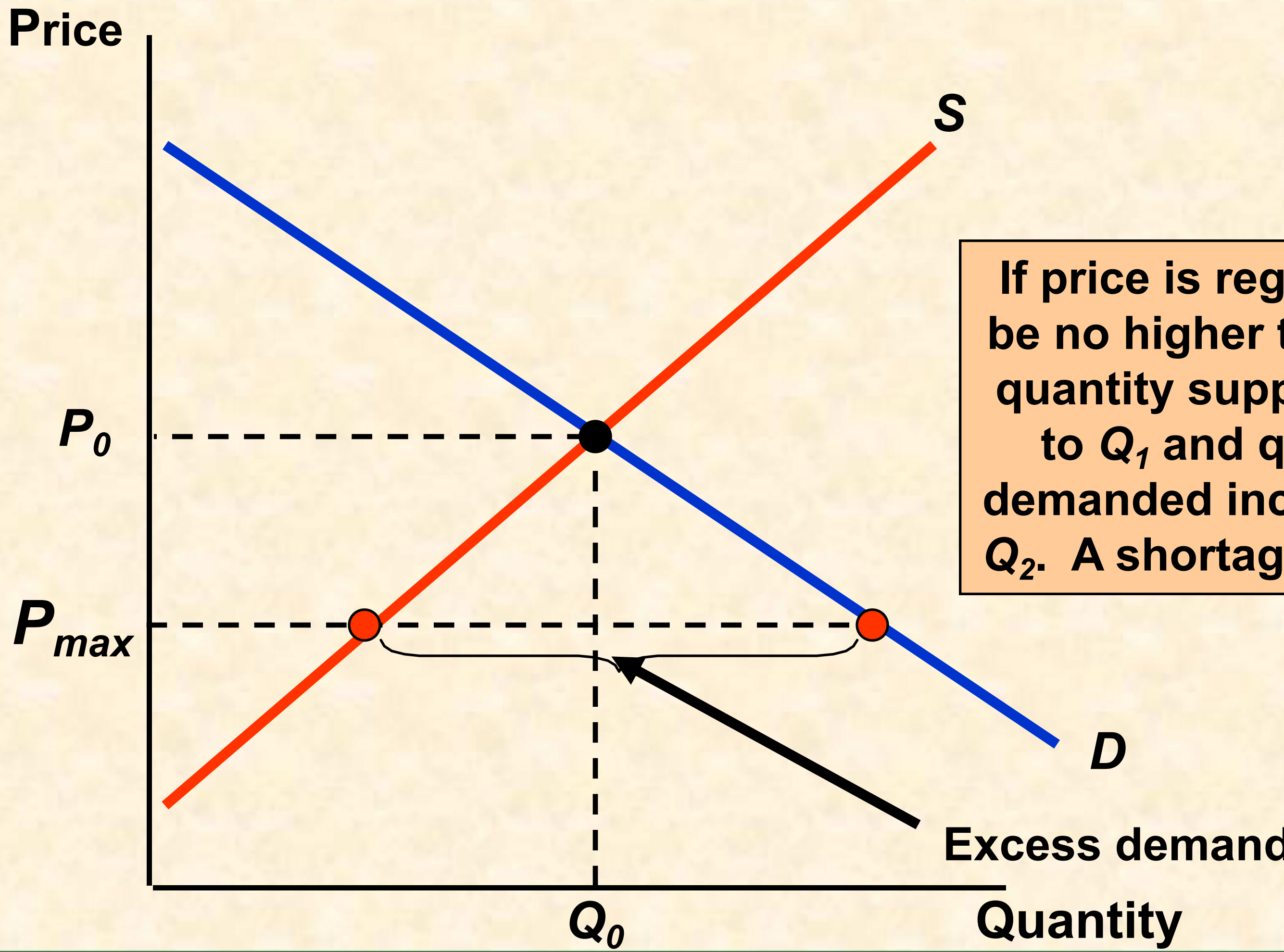
Due to the elasticity of the long-run supply and demand curves, the long-run effect of a cut in production is much less.

# Effects of Government Intervention -- Price Controls



- If the government decides that the equilibrium price is too high, they may establish a maximum allowable *ceiling price.*

# Effects of Price Controls




If price is regulated to be no higher than $P_{max}$, quantity supplied falls to $Q_1$ and quantity demanded increases to $Q_2$. A shortage results

# Price Controls and Natural Gas Shortages



- In 1954, the federal government began regulating the wellhead price of natural gas.
- In 1962, the ceiling prices that were imposed became binding and shortages resulted.

# Price Controls and Natural Gas Shortages



- Price controls created an excess demand of 7 trillion cubic feet.

- Price regulation was a major component of U.S. energy policy in the 1960s and 1970s, and it continued to influence the natural gas markets in the 1980s.

# Price Controls and Natural Gas Shortages



## The Data: Natural Gas

$$P_E^S = 0.2$$

Cross elasticity of supply for oil $= 0.1$

$$P_E^D = -0.5$$

Cross elasticity of demand for oil $= 1.5$

$$Supply: Q = 14 + 2P_G + .25P_O$$

$$Demand: Q = -5P_G + 3.75P_O$$

$Supply = Demand$ @ \$2/TcF

# Price Controls and Natural Gas Shortages



## The Data: Natural Gas

1975 regulated price $= \$1.00$

At $1.00/TcF

$Q_S = 18$ TcF and $Q = 25$ TcF

Shortage $= 7$ TcF/yr

# Summary

- Supply-demand analysis is a basic tool of microeconomics.

- The market mechanism is the tendency for supply and demand to equilibrate, so that there is neither excess demand nor excess supply

# Summary

- Elasticities describe the responsiveness of supply and demand to changes in price, income, and other variables.
- Elasticities pertain to a time frame.
- If we can estimate the supply and demand curves for a particular market, we can calculate the market clearing price.

# Summary

- Simple numerical analysis can often be done by fitting linear supply and demand curves to data on price and quantity and to estimates of elasticities.

# End of Chapter 2

# The Basics of Supply and Demand