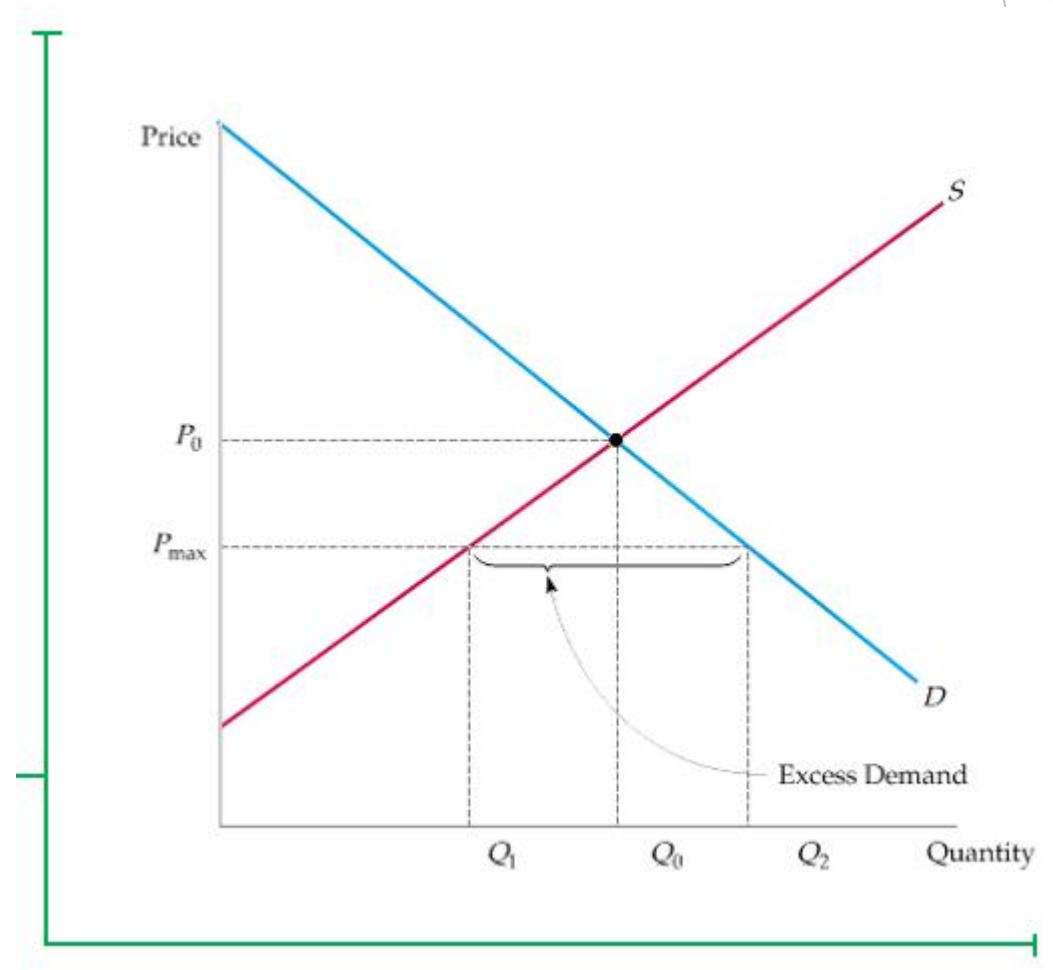


5. Effects of Government Intervention—Price Controls

- ▶ Without price controls, the market clears at the equilibrium price and quantity P_0 and Q_0 .
- ▶ If price is regulated to be no higher than P_{\max} , **price ceiling**, the quantity supplied falls to Q_1 , the quantity demanded increases to Q_2 , and a shortage develops.

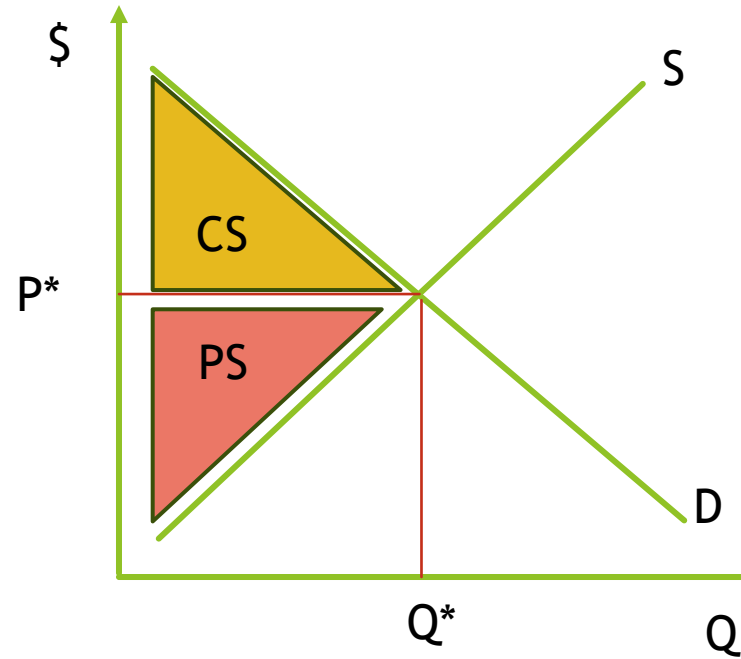


Problem (6): Government Intervention

- ▶ Assume the Government want to support the buyers of copper fixing a ceiling price at 10 (INITIAL market).
- ▶ Find if it creases a shortage or a surplus
 - ▶ Fixed price = $10 = 2 + Q_S$
 - ▶ $Q_S = 8$
 - ▶ Fixed price = $10 = 22 + Q_D$
 - ▶ $Q_D = 12$
 - ▶ Shortage of $(12 - 8) = 4$

6. Consumer and Producer Surplus.

- ▶ Consumer surplus:
 - ▶ Difference between what consumers or businesses are willing to pay for a good and what they actually pay
- ▶ Producer surplus:
 - ▶ The difference between what businesses are willing to receive for a good and what they actually receive



Problem (7): Consumer and Producer Surplus

- ▶ Estimate the Consumer and Producer Surplus when the INITIAL market reaches an equilibrium
- ▶ $CS = [(22 - 12) * 10] / 2 = 50$
- ▶ $PS = [(12 - 2) * 10] / 2 = 50$

Highlights

- ▶ **Market Equilibrium and Changes in Market Equilibrium:**
 - ▶ How does it work and what are the factors affecting the market equilibrium?
- ▶ **Elasticity of demand and of supply (price)**
 - ▶ What does it mean and why is it important for producers, government, consumers?
- ▶ **Effects of Government intervention on Market equilibrium**
 - ▶ How can the government affect the market equilibrium (price, quantity, quality control) and why?
- ▶ **You should be able to:**
 - ▶ Predict how the market equilibrium (P^* and Q^*) changes due to a shift of the D or of the S function ($\% \Delta$ of D or of S)
 - ▶ Estimate the price elasticity of D and S given the D and S equation (direct v. indirect)
 - ▶ Estimate Q and P due to a price control policy (ceiling or floor price), a quantity constrain or a tax increase.