

Example 3.K Price control and Welfare

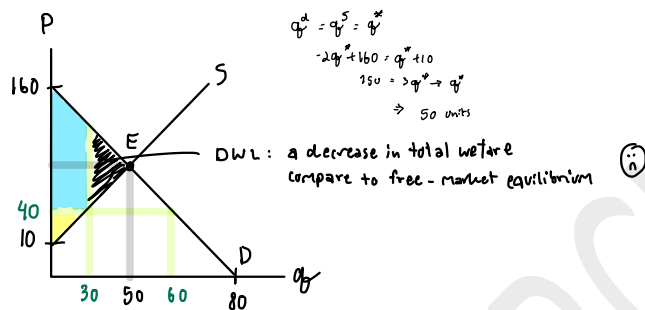
Consider the market for apartment rentals in Chicago. The price of rent is determined by the following system of equations.

Demand: $p = -2q_d + 160$

note: 160 : p-intercept

Supply: $p = q_s + 10$

- What is the equilibrium price and quantity in the market for apartment rentals?



- Suppose the government tries to control the rent prices through a price ceiling of \$40. Discuss the implication of this policy. Is there any deadweight loss?

Consumer : Price ceiling : price is too high $\rightarrow$ need to limit P

Producer : price floor : the minimum price to be purchased $\rightarrow$ set minimum P

ceiling Price (40 \$) with equation quantity in the mkt

$$Q = \min \{Q^s, Q^d\} \text{ when } P = 40$$

$$P = 40 \rightarrow Q^s = 30 \text{ units} ; Q^d = 60 \text{ units}$$

$\therefore$ There is an excess demand under the price ceiling policy in the free market equilibrium since $Q^s = 30 < Q^d = 60$.