Examples of Price Controls

- Price controls and natural gas shortages
- Minimum wage
- Production quotas
- Price supports
Natural Gas

- In 1954, regulation of wellhead price of natural gas introduced.
- In the 1970s, price ceiling became binding.
- In the 1980s, price controls lifted.
The Natural Gas Market in 1975

\[ p_{\text{max}} = \$1 \]

\[ p \text{ (mcf)} \]

\[ q \text{ (Tcf)} \]

\[ \text{Shortage} \]

$2$
Welfare Effects of Price Controls

\[ p = \max \] 

\[ p_{\text{max}} = \$1 \] 

\[ q (Tcf) \] 

\[ \$2 \]
Deadweight Loss and Gains From Price Controls in 1975

- Consumers: gain A and lose B
  \[ A - B = 18 - 0.4 = $17.6 \text{ billion} \]

- Producers: lose A and C
  \[ -A - C = -18 - 1 = $19 \text{ billion} \]

- Total: lose B and C
  \[ -B - C = -$1.4 \text{ billion} \]
Minimum Wage

- 1938 FDR introduces minimum wage with Fair Labor Standards Act
- Covered about 10 million Americans in 1997
Minimum Wage

Unemployment

$W$

$W_{\text{min}}$

$w^*$

$W$

$L_D$

$L^*$

$L_S$

$L$
Minimum Wage

- Firms ("Consumers"): lose A and B

- Workers ("Producers"): gain A and lose C

- Total deadweight loss: B+C
Production Quotas

European Union keeps price of certain agricultural products (milk) relatively high by imposing production quotas to each member country.
Production Quotas
Production Quotas

- Farmers (“Producers”): gain A and lose C

- Consumers: lose A and B

- Total deadweight loss: B+C
Price Supports

- The government can keep the price of certain products relatively high by buying whatever amount is needed to keep the market price at that level.
- US: dairy products, corn, peanuts, tobacco
Price Supports

$p$

$p_{tar}$

$p^*$

$q^1$

$q^*$

$q^2$

$q$

$D_g$
Price Supports

- Farmers ("Producers"): gain A, B, and C
- Consumers: lose A and B
- Government spends: $D_g(p_{tar})$
- Total deadweight loss: $D_g(p_{tar}) - C$