Government Intervention

Section 1.3

Continued...

Price controls

Price ceilings (maximum prices): rationale, consequences and examples

- Explain why governments impose price ceilings, and describe examples of price ceilings, including food price controls and rent controls.
- Draw a diagram to show a price ceiling, and analyse the impacts of a price ceiling on market outcomes.
- Examine the possible consequences of a price ceiling, including shortages, inefficient resource allocation, welfare impacts, underground parallel markets and non-price rationing mechanisms.
- Discuss the consequences of imposing a price ceilin on the stakeholders in a market, including consumers, producers and the government.
- Calculate possible effects from the price ceiling diagram, including the resulting shortage and the change in consumer expenditure (which is equal to the change in firm revenue). (HL ONLY)

Continued...

Price floors (minimum prices): rationale, consequences and examples

- Explain why governments impose price floors, and describe examples of price floors, including price support for agricultural products and minimum wages.
- Draw a diagram of a price floor, and analyse the impacts of a price floor on market outcomes.
- Examine the possible consequences of a price floor, including surpluses and government measure to dispose of the surpluses, inefficient resource allocation and welfare impacts.
- Discuss the consequences of imposing a price floor on the stakeholders in a market, including consumers, producers and the government.
- Calculate possible effects from the price floor diagram, including the resulting surplus, the change in consumer expenditure, the change in producer revenue, and government expenditure to purchase the surplus.

Tok Links

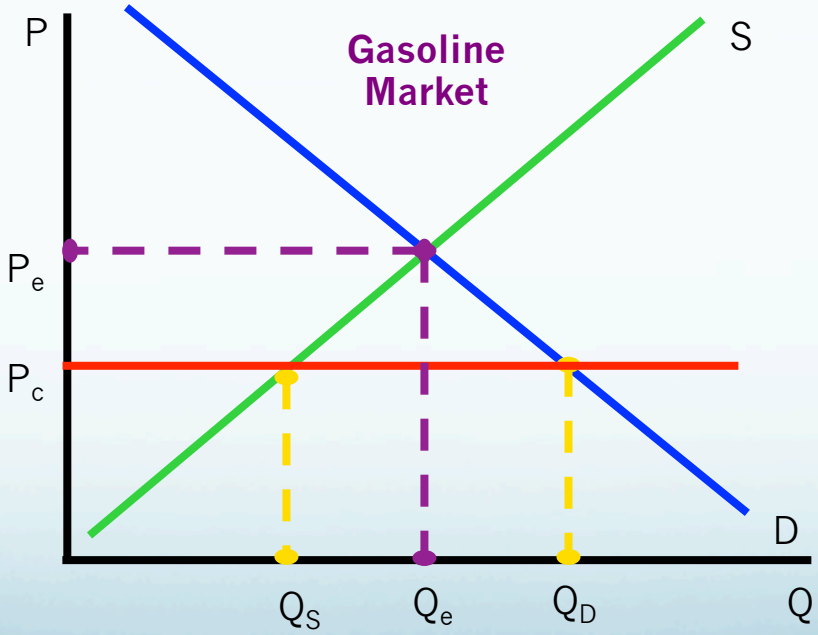
- In what sense are we morally obliged to pay taxes? Is this the result of a promise that we have made ourselves? When was this promise made? (Make a distinction here between moral and legal obligations.)
- To what extent is government morally obliged to provide healthcare and welfare benefits to the unemployed?

Price Control

- Another form government intervention might take in a market is price controls.

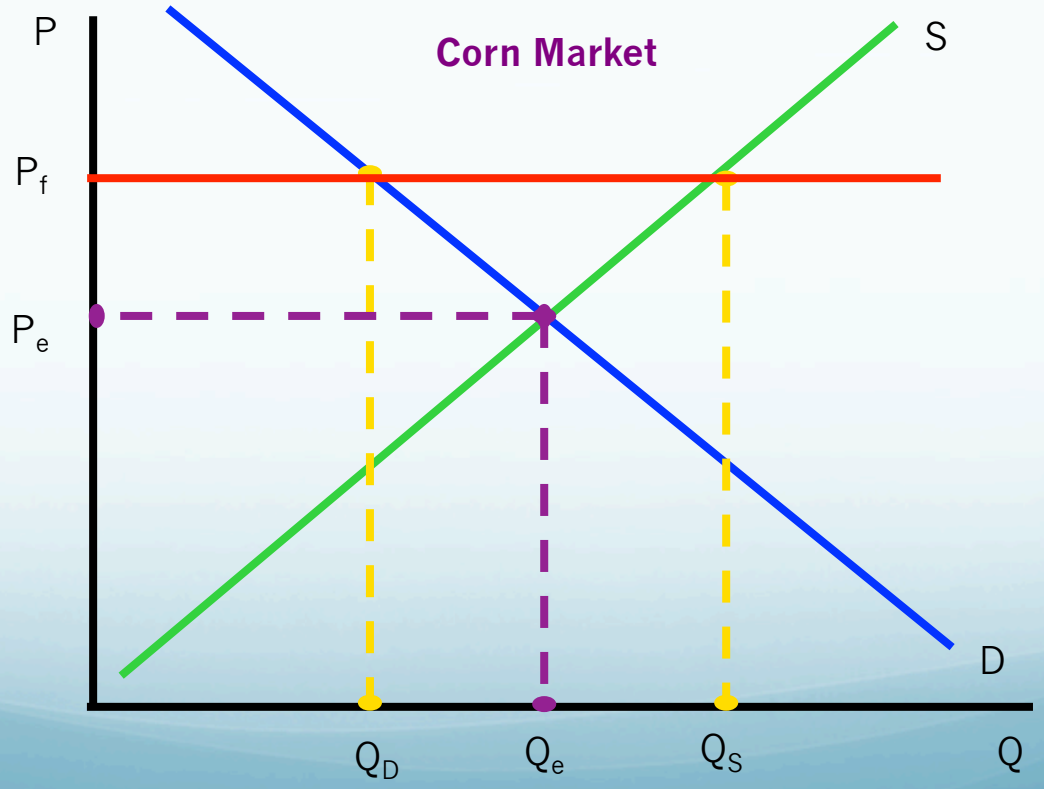
Price Ceiling:

- This is a maximum price, set below the equilibrium price, meant to help consumers of a product by keeping the price low.



Price Floor:

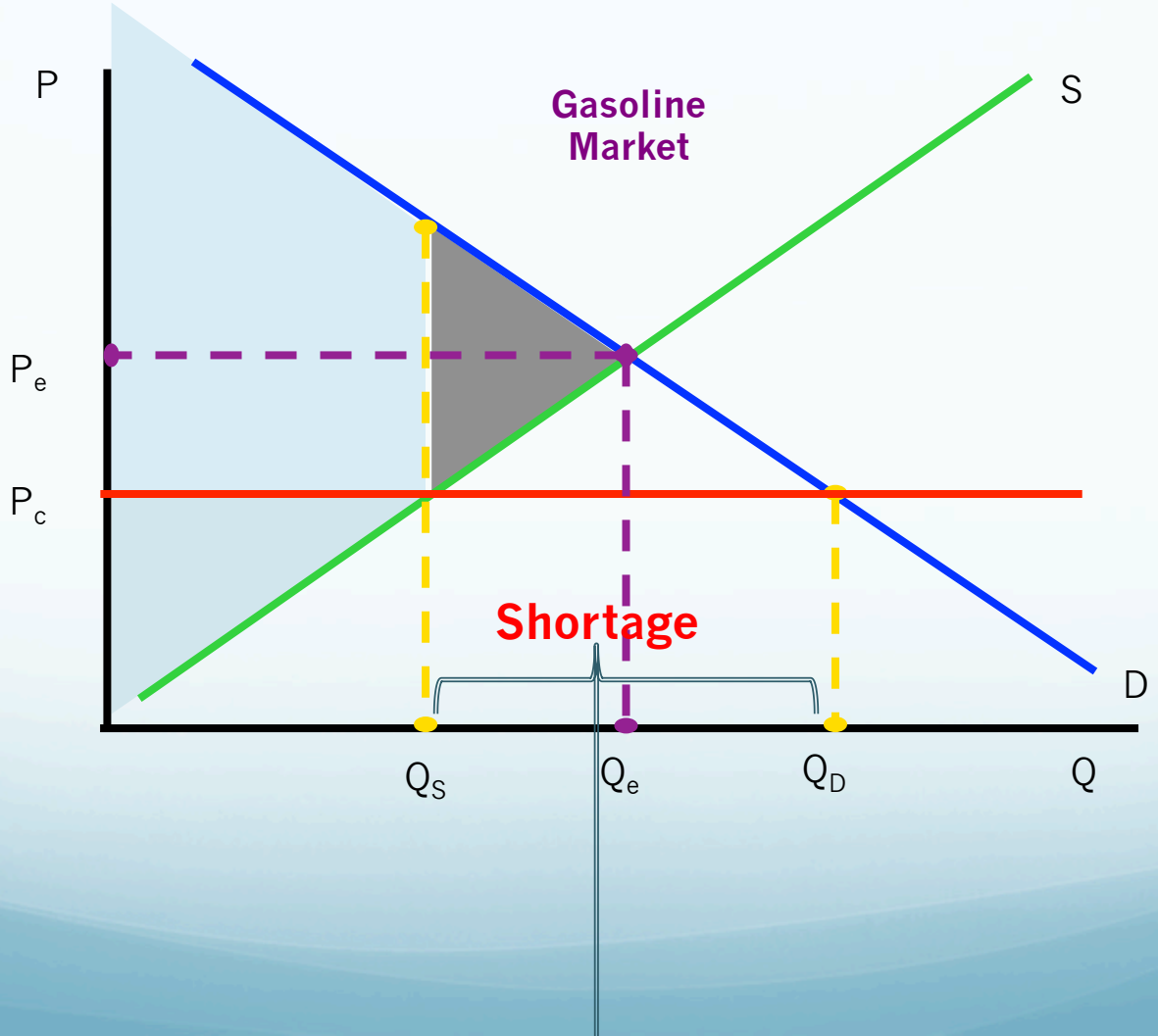
- This is a minimum price, set below the equilibrium price, meant to help producers of a product by keeping the price high.



The Effects of a Price Ceiling

- When a government lowers the price of a good to help consumers, there are several effects that we can observe in the market.
- Assume the government has intervened in the market for gasoline to make transportation more affordable for the nation's households

Graph- Effects on Stakeholders



On consumers:

- Quantity demanded increases (Qd)
- The lower price leads to an increase in consumer surplus, which is now the blue area
- The lower quantity means some consumers who want to will not be able to buy the good

On Producers:

- The lower price means less producer surplus (red triangle)
- The lower quantity means some producers will have to leave the market and output will decline (Qs)

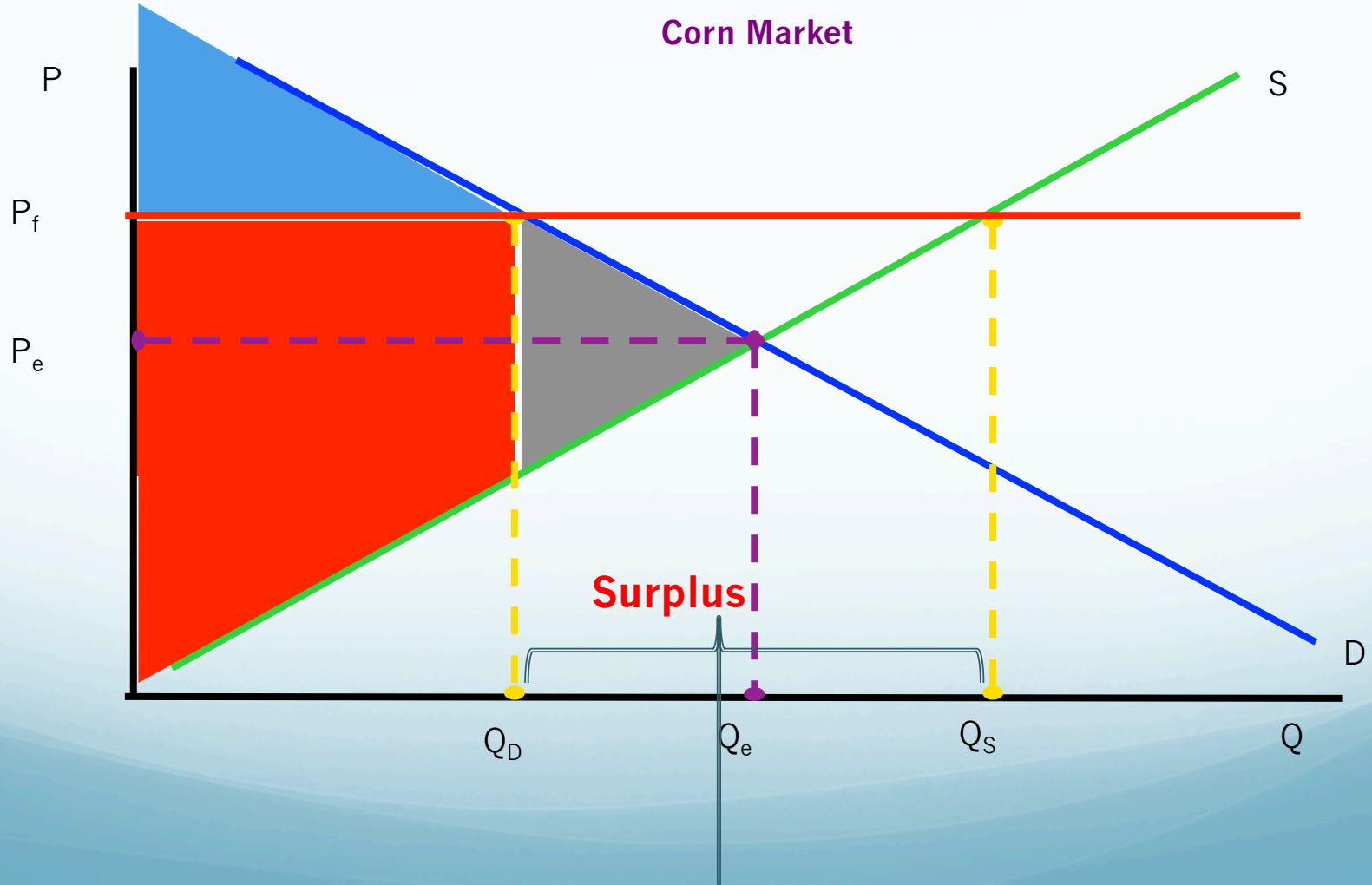
On the market:

- Overall, not enough gasoline is produced, and is the market is allocatively inefficient.
- The gray triangle represents the loss of total welfare resulting from the price ceiling.

The Effects of a Price Floor

- When a government raises the price of a good to help producers, there are several effects that we can observe in the market.
- Assume the government has intervened in the market for corn to help farmers sell their crop at a price that allows them to earn a small profit.

Graph- The effect on stakeholders



On consumers:

- Quantity demanded decreases (Qd)
- The higher price means there is less consumer surplus (blue area)

On Producers:

- Quantity supplied increases (Qs)
- The higher price means there is more producer surplus, but since consumers only demand Qd,
- there is an excess supply of unsold corn (Qd-Qs)

On the market:

- Overall, the market produces too much corn and is thus allocatively inefficient.
- The increase in producer surplus is smaller than the decrease in consumer surplus.
- The total loss of welfare is represented by the gray triangle.

Test your Knowledge

- Watch the following video and answer one of the given questions
- http://www.econclassroom.com/?p=2831
- Post anser on Blogger under 1.3 Gov intervention

1. Examine the possible consequences of a price ceiling, including shortages, inefficient resource allocation, welfare impacts, underground parallel markets and non-price rationing mechanisms.
2. Discuss the consequences of imposing a price ceilin on the stakeholders in a market, including consumers, producers and the government.

Calculating the Effects of Price Control

HL ONLY

Example

Calculating the Effects of Price Controls using Linear Equations

As with taxes and subsidies, we can use linear supply and demand equations to calculate the effects of price ceilings and price floors. Once again, assume demand and supply for bread is:

$$Qd = 600 - 50P \text{ and } Qs = -200 + 150P$$

As we have already shown, the current equilibrium price is $4 and the quantity is 400 loaves.

Assume the government wishes to help households afford bread, so imposes a price ceiling of $3 on bread. To determine the impact on the market, we must simply put $3 into both equations.

$$Qd = 600 - 50(3) = 450 \text{ loaves}$$
$$Qs = -200 + 150(3) = 250 \text{ loaves}$$

The $3.00 price ceiling will create a shortage of 200 loaves of bread.

- Producers will reduce their output of bread and more consumers will wish to buy bread.
- The price ceiling took a market that was *efficient* and made it *inefficient*. *Not enough resources are allocated towards bread production as a result of the price ceiling.*

Example

Calculating the Effects of Price Controls using Linear Equations

Next, assume that the government determines that $4 is too cheap for bread, and producers need the price to be higher. The government imposes a price floor of $5 in the market. To determine the impact on the market, we must simply put $3 into both equations.

$$Qd = 600 - 50(5) = 350 \text{ loaves}$$
$$Qs = -200 + 150(5) = 550 \text{ loaves}$$

The $5.00 price floor will create a surplus of 200 loaves of bread.

- Producers will increase their production of bread to take advantage of the now higher prices it is commanding in the market.
- Consumers will reduce the quantity of bread they demand due to the now higher price.
- The price floor took an efficient market and made it allocatively inefficient. *Too many resources are now being allocated towards bread production!*

Conclusion: Price controls rarely increase efficiency or total welfare in a market. They result in either shortages (price ceilings) or surpluses (price floors), and therefore lead to a net loss in total welfare for society. Some benefit, but many suffer.

Test your Knowledge

- Watch the following video and answer the question
- http://www.econclassroom.com/?p=2846

- Do the activity on page

Buffer Stock Schemes

Buffer Stock Schemes

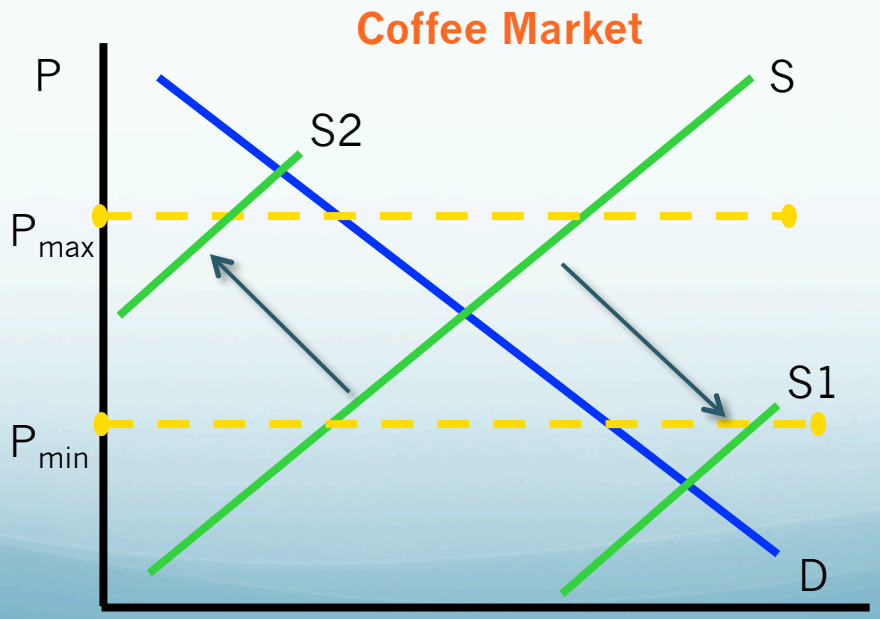
- One form of government intervention, often used in the markets for certain agricultural commodities,
- combines price controls and subsidies.

Definition

- **A buffer stock scheme:**
  - A policy that regulates the price of non-perishable agricultural commodities to keep it within a narrow range that is deemed desirable for both producers and consumers.

Example

- *market for coffee below:*
  - There is a price ceiling above the current equilibrium, and a price floor below the current equilibrium. At present, neither is binding.



In a good year:

- The supply of coffee increases to S1.
- The price floor now become binding.
- The government can *buy up the surplus* that is created and put it in storage.
- This keeps the price above Pmin.

In a bad year:

- The supply of coffee falls to S2.
- The price ceiling now becomes binding.
- The government can *release its buffer stock from the good years* on the market to increase supply and keep the price below Pmax

Obstacles:

- High storage costs, only works for non-perishable goods,
- may reduce innovation in agricultural markets

Blog Response Activity

- Read the blog posts below and respond to the discussion questions at the end of each post.
- The problem with price controls in Europe's agricultural markets
- Price controls in the Chinese Petrol market – or why you may have to wait in line to fill your gas tank!
- Letting markets work: the Malaysia fuel subsidy goes bye bye
- China's "visible hand" clamps down on rising prices
- Beijing caves in to the indisputable power of the MARKET!
- Will limiting exectutive pay send American business leaders packing for Europe? Probably not...
- Russia goes "Mugabe" on food prices as elections approach!
- So, how are those Zimbabweans doing under Mugabe's price controls?

HWK

- Exercise book page 43 Q 1-4