



Price Ceilings

Notes

WHAT ARE PRICE CONTROLS?

- Price controls: minimum or maximum prices set by the government so that prices don't reach equilibrium
- Results in market disequilibrium

WHAT ARE PRICE CEILINGS?

- Price ceilings (maximum price):
A maximum price set by the govt for a good.
- A higher price cannot be legally charged
- Examples:
rent control, food price control

WHY DO GOVERNMENTS IMPOSE PRICE CEILINGS?

1. Help consumers attain necessity goods at cheaper prices

- For example: governments set maximum prices in agricultural and food markets during time of food shortages to ensure affordable food

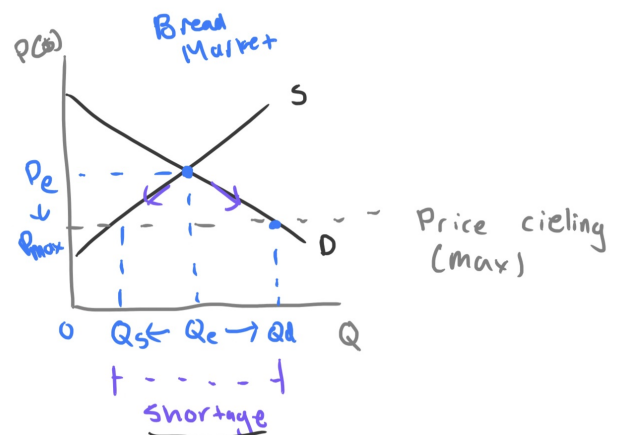
2. help consumers obtain merit goods at cheaper prices

Merit goods: goods and services that benefit consumer and who produce it. Such as vaccines

- Example: governments set maximum prices on rental accommodation (rent control) in attempt to ensure affordable accommodation for those on low incomes

HOW DO WE GRAPH PRICE CEILINGS?

- The price ceiling forces price down to P_{max} , increasing quantity demanded (Q_d) and decreasing quantity supplied (Q_s).
- Because Q_d is greater than Q_s , there is a shortage of bread.

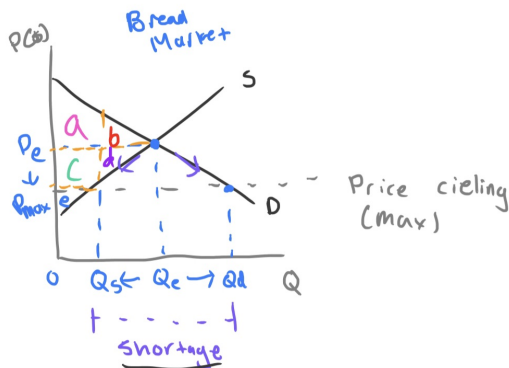


OTHER CONSEQUENCES OF PRICE CEILING

- Creation of an underground market.
- The underground market is an illegal market in which the product is sold at a higher price, somewhere between the maximum price and the equilibrium price.
- Queues develop in shops and producers may decide a "fair" way to distribute products: raffle, ration, etc

STAKEHOLDER IMPACTS

Bread Market:



Consumers:

- lost consumer surplus of area b which is deadweight loss
- Gain consumer surplus of area c from producers.
- Consumers who are able to buy the good at a lower cost are better off.
- Due to shortage, those who are no longer able to purchase it are worse off

Producers:

- Producers worse off since less quantity is sold.
- Revenue from $P_e \cdot Q_e$ to $P_{max} \cdot Q_s$

- Loss of producer surplus of C and D.

Society:

- Deadweight loss equal to a and b

Workers:

- The fall in output (from Q_e to Q_s) means that some workers are likely to be fired, resulting in unemployment; clearly these workers will be worse off.
- ↳ doesn't apply to industries like rent control

Government:

- No economic gain or loss
- gain popularity from short-term benefit to some consumers

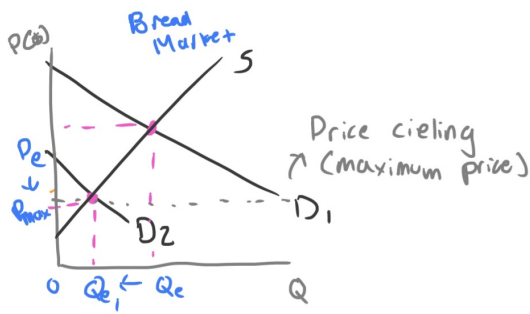
GOVERNMENT INTERVENTION TO ELIMINATE OR REDUCE SHORTAGES

1. Find ways to reduce demand for the product (e.g., promote alternatives through advertising).

- This will shift the D curve to the left until equilibrium is reached at the maximum price.

- Problem: limits consumption of product

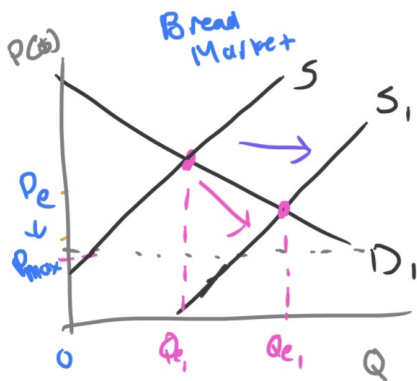
↳ So why impose the price control in the first place?



2. Find ways to increase the supply of the product

- a. Subsidies
- b. Direct Provision
↳ govt produce good

This will shift the supply curve to the right, until equilibrium is reached at the maximum price, with more being supplied and demanded.



- Opportunity cost for govt shifting the supply curve
- If government spends on a subsidy or on direct provision, may have to reduce expenditure in another area, such as education or healthcare.

CASE STUDY: RENT CONTROL

- Rent controls consist of a maximum legal rent on rental housing, which is below the market-determined level of rent.
- It is undertaken by governments in some cities around the world to: make housing more affordable to low-income earners.
- Rent control can be found in: Ontario, British Columbia, New York City, Los Angeles, Washington DC

PROS:

- Housing becomes more affordable for some.
- Less homelessness
- More money to spend on other essentials (food, utilities)
- Greater consumer surplus for those who find an apartment

CONS:

- Less homes on market, creating a shortage
- High opportunity cost for government to use resources.
- deadweight loss
- may lead to deterioration of buildings.
- Landlords find loopholes to raise rents
- Landlords ignore regulations
- Underground markets

Price Ceilings Activity Set

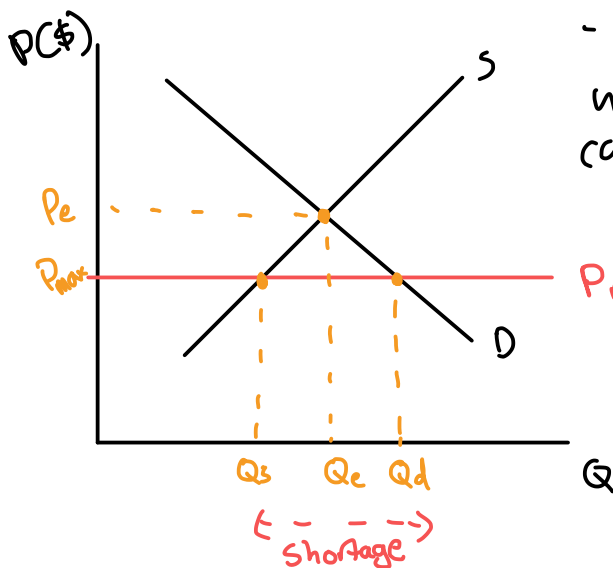
1. You have a friend who thinks a price ceiling doesn't make sense. They argue that a "ceiling" is a "maximum price" so it should be above equilibrium so that prices cannot go any higher than that set price. How do you respond?

- equilibrium price could be too high for some people

2. How does an underground market work? Give at least one example.

- Market is created that disobeys the price ceiling for people willing & able to pay equilibrium price. Like sell-to-rich rentals

3. You are speaking to a friend who complains that the price of gasoline is too high. They argue it would be much better if the government put a price ceiling on the market so that "ordinary consumers like them could save money." Use a diagram to explain why your friend may not actually like a price ceiling on gasoline.



- not everyone who wants can get oil.

Next level stuff! Take a look at what happened when the US put price ceilings on gas prices in the 1970s
<https://www.youtube.com/watch?v=sq1zlj8s8R0>

4. Assume the government decides to subsidize the gasoline to maintain the price ceiling referenced in question #3. Would this be a good idea? Illustrate your argument with a diagram.

MINIMUM PRICES OR "PRICE FLOORS"

Notes

WHAT ARE PRICE FLOORS?

- government regulation that makes it illegal to buy and sell at a price lower than a specified level

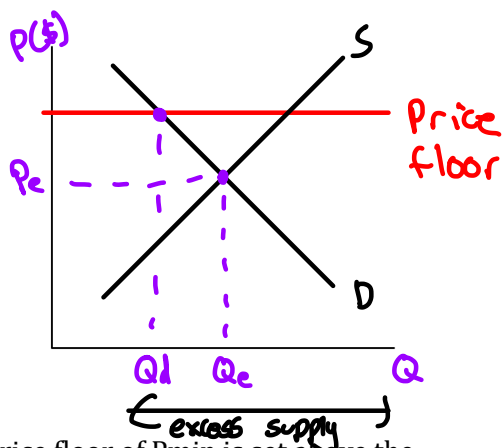
REASONS FOR PRICE FLOORS

1. Raise incomes for producers for goods & services the govt thinks is important
2. Protect workers by setting a minimum wage that ensures they can lead a reas

EXAMPLES OF PRICE FLOORS

- Minimum wage in labour market
- Minimum prices for agricultural products like dairy
- Minimum prices for alcohol eg. beer, wine, spirits

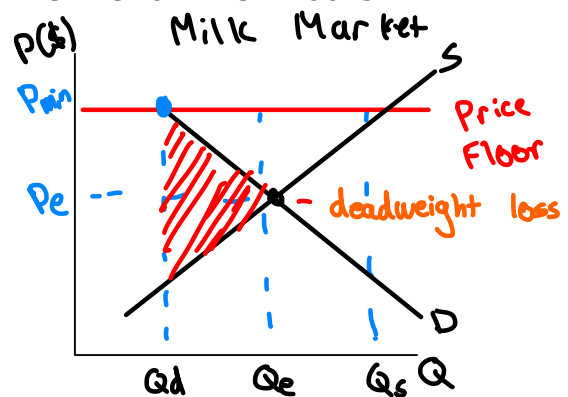
PRICE FLOORS IN DIAGRAMS



- Price floor of P_{min} is set above the equilibrium price of P_e .

- This decreases quantity demanded to Q_d and increases quantity supplied to Q_s , creating excess supply/surplus.

INEFFICIENCY OF PRICE FLOORS



- The quantity exchanged in the market will sit at Q_d .
- This will mean an underconsumption of milk, away from allocative efficiency.
- The shaded triangle represents loss of consumer and producer surplus (deadweight loss).

GOVERNMENT SOLUTIONS TO THE SURPLUS PROBLEM CREATED BY PRICE FLOORS

- The surplus can create problems for the producers in the market, → decreased revenue and higher costs
 - There are four ways a government can address the surplus:
1. Buying up the surplus
 2. Increase demand by advertising
 3. Restrict Imports
 4. Impose a "quota"

BUYING THE SURPLUS



- This will shift the demand curve to the right from D to D_1 .
- The new equilibrium will be P_{min} , Q_s .
- There will be no more excess supply.
- Buying up the surplus will create an opportunity cost that has to be evaluated.
- Once the surplus has been bought, the government must decide whether to:

1. Store it
2. Destroy it, or;
3. Sell it in other countries

- Storing can be expensive (with opportunity cost)
- Destroying products is wasteful
- Selling it in other countries often creates angry reactions from other countries because... "dumping" harms their domestic industries

INCREASE DEMAND BY ADVERTISING

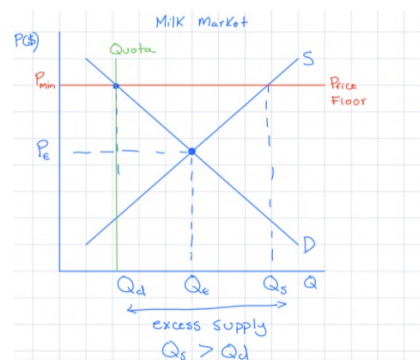
- The government could increase demand by spending money to advertise and convince consumers to buy more of the product.
- This would involve an opportunity cost too.

RESTRICT IMPORTS

- Government can restrict imports of the product from other countries, so that this increases demand for domestic product

IMPOSE QUOTAS

- A quota is: a quantity restriction on the amount of a good that can be produced in a market

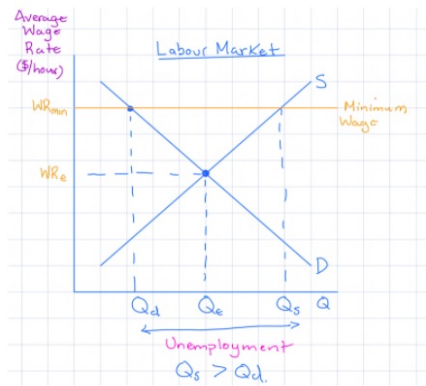


- The quota would restrict supply so that only Q_d could be created by producers.
- This means that the price would stay at P_{min} , but only a limited number of producers would receive it.

MINIMUM WAGE

- The minimum wage is a price floor applied to the "market for labour."
- The market for labour includes:
 - demand for labour (employees)
 - supply of labour (workers)
- Minimum wage: the minimum "price" or "wage" that employers can legally pay workers in the market.

MINIMUM WAGE IN DIAGRAM



- Minimum wage requires an adaptation of the price floor diagram.
- The result is the same though ($Q_s > Q_d$), meaning there is a surplus of workers or "unemployment."

PROS AND CONS OF MINIMUM WAGE (OR INCREASING MINIMUM WAGE)

Pros:

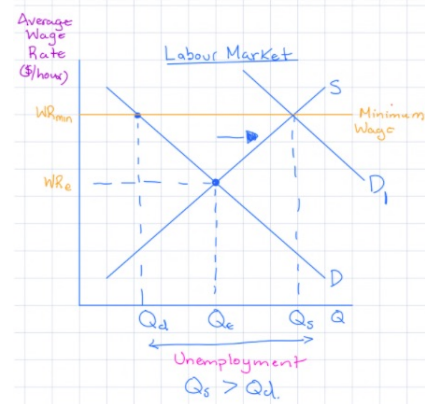
- increase income for low-paid workers
- Improve labour productivity
- Offset power imbalance between employers and workers
- Increase incentive for people to enter the labour market and accept a job.

Cons:

- Can cause unemployment in competitive markets
- encourages illegal labour markets
- Some firms may not afford to pay higher wages

CAVEAT ABOUT THE MINIMUM WAGE DIAGRAM

- Could lead to higher prices on firms passed to consumers



- The minimum wage diagram assumes "ceteris paribus."
- Unemployment is not "static."
- For instance, demand for labour may increase with growth, reducing or eliminating the unemployment caused by minimum wage.

