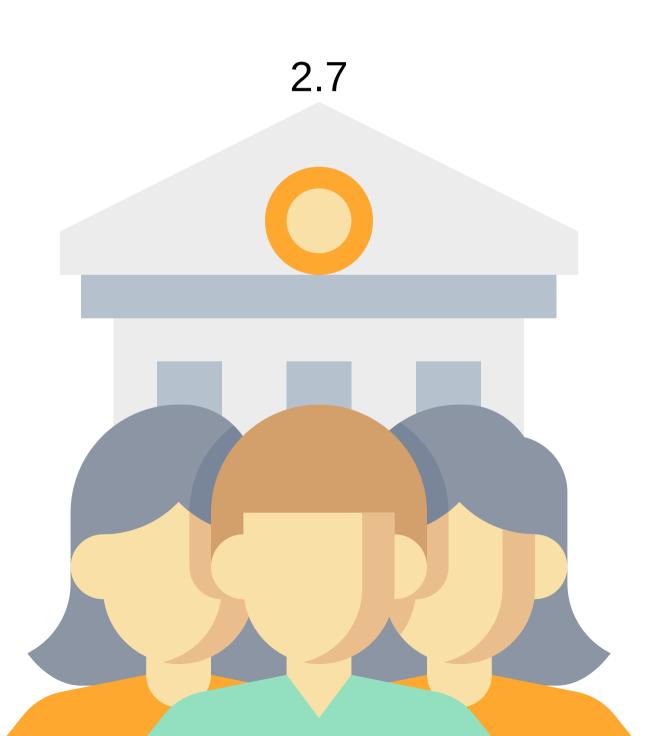
# The Role of Government

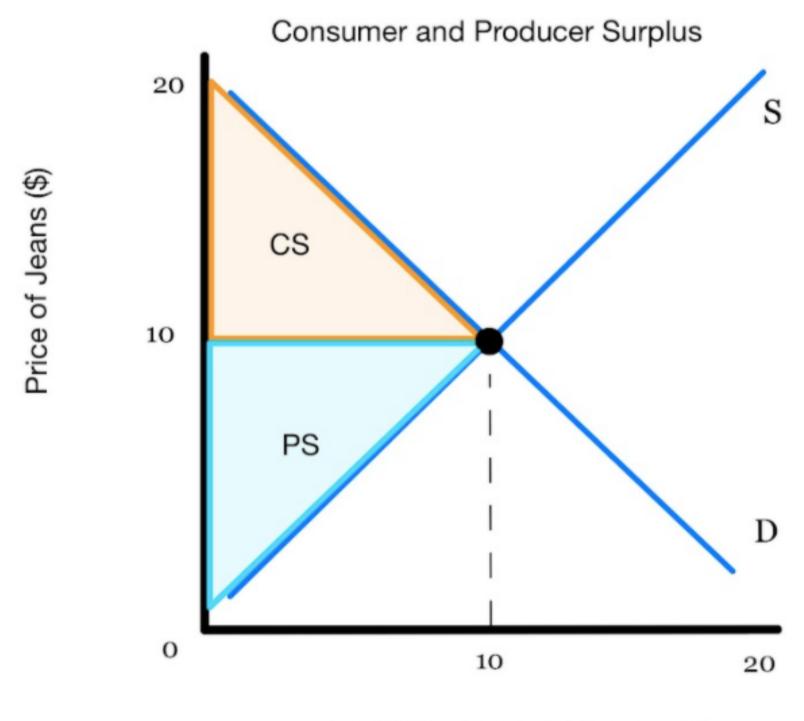


### Review



### Total Surplus

#### **Consumer Surplus + Producer Surplus = Total Surplus**



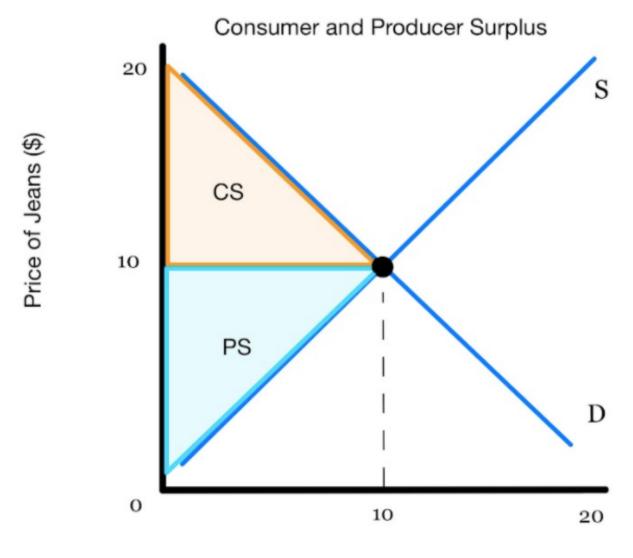
Quantity of Jeans (thousands)

## Allocative Efficiency

The ideal combination of goods and services in a society

Allocative = Distribution

Results in the MAXIMUM possible surplus - at equilibrium (Qs=Qd)

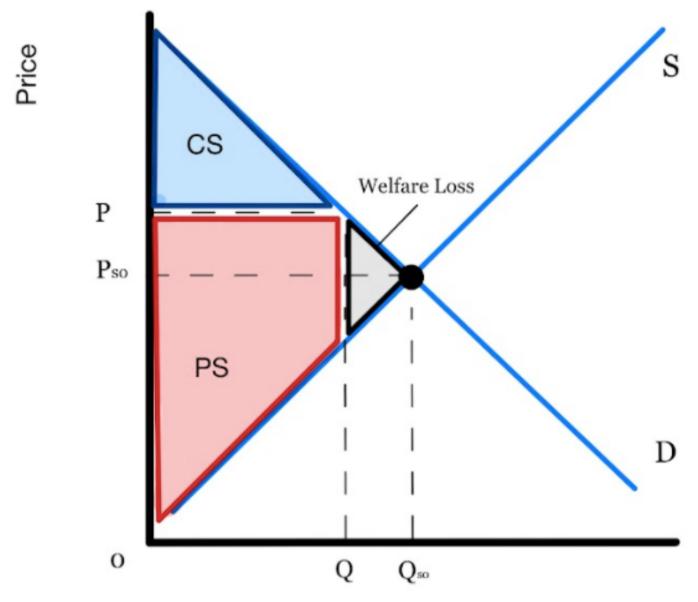


Quantity of Jeans (thousands)

### Failure of Allocative Efficiency

Failure to reach allocative efficiency results in a welfare loss.

Not producing where Qs=Qd, meaning there is a surplus lost



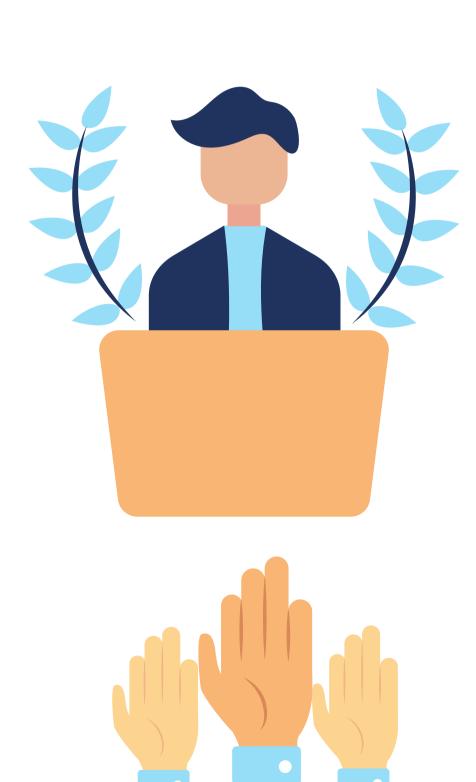
Copyright Bananaomics Quantity

# Why would governments ever need to intervene in markets?



### Possible Reasons for Intervention

- 1. To earn government revenue
- 2. To support firms
- 3. To support households on low incomes
- 4. To influence the level of production
- 5. To influence the level of consumption
- 6. To correct market failure
- 7. To promote equity



## 1. Government Revenue

#### **Taxes**

The government taxes many things DIRECTLY and INDIRECTLY such as income, VAT, etc.

Indirect Tax – a tax not aimed directly at an individual. (VAT, Sales Tax) Direct Tax – a tax aimed directly at an individual. (Income)

Why Tax? To fund government projects and budgets.



## 2. Supporting Firms

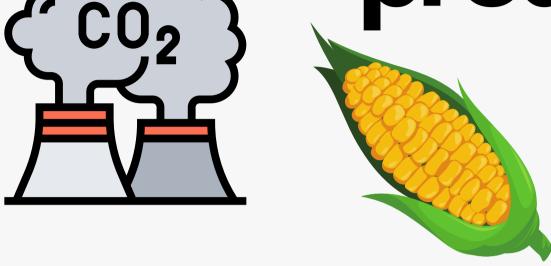
Governments like to use methods of intervention to support firms in particular industries. This can be for economic reasons, but also for political and strategic reasons.

## 3. Support Low-Income Households

Supporting struggling households in order to improve the quality of life for its citizens.



# 4 & 5. Influence levels of production/consumption



If a government desires more of a certain product or good in the economy, the may offer a subsidy to increase supply/production.

Alternatively, a government may tax certain industries or products they wish to diminish such as fossil fuel companies.





The government may also diminish consumption by adding indirect taxes on certain goods that have negative effects on society such as cigarettes.

These goods are called Demerit Goods.

### 6. Market Failure

Market Failure - when markets fail to allocate resources efficiently

Example

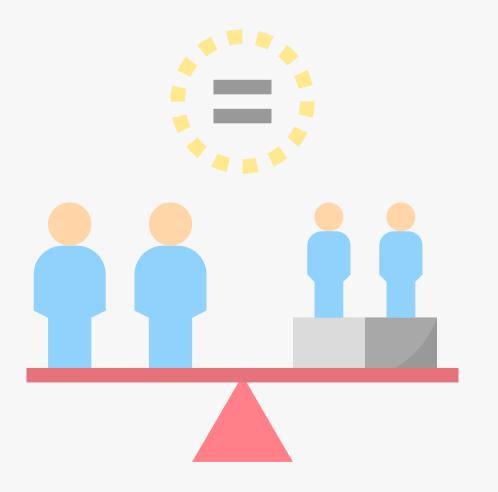
Climate Change

There is no profit to be had to combat climate change. Therefore, businesses and producers don't prioritize it. Governments may be required to step in to limit carbon emissions for the betterment of society.

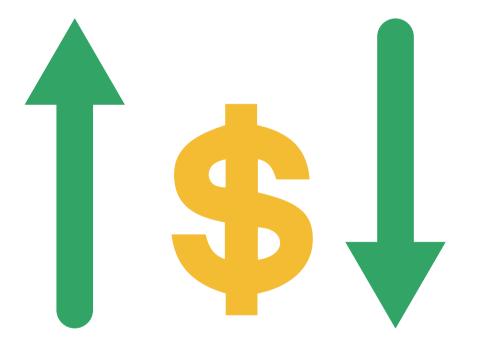
## 7. Equity

The Government often chooses to intervene to improve the equity of income distribution.

For example, taxing the rich and spending those tax dollars in some way to benefit low-income families an attempt to improve equity.



## Price Controls





When the government sets a maximum price of a good or service.

Typically used with common essential goods as services such as

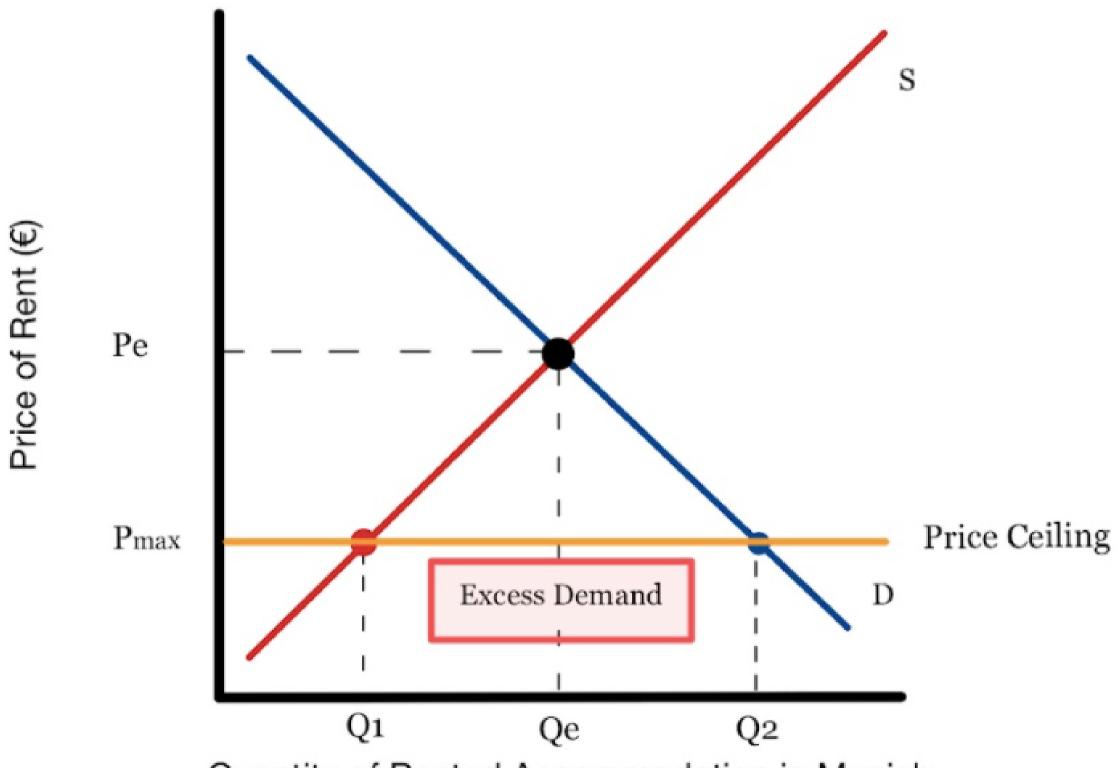
- 1. affordable housing (rent)
- 2.low-cost food for all

Must be placed BELOW the equilibrium price in order to be effective/binding.

Can you brainstorm as to why that is the case?





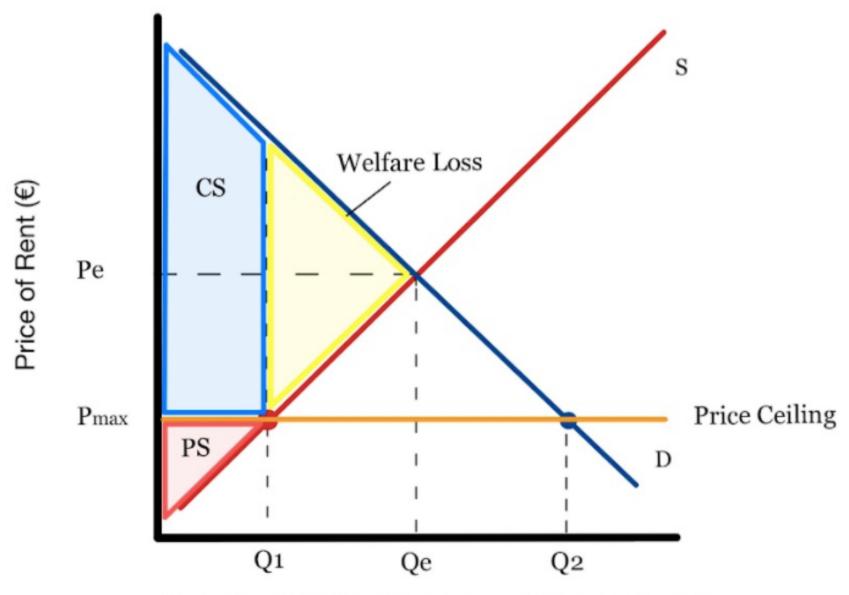


Quantity of Rented Accommodation in Munich

#### **Consequences of Price Ceiling**

- Shortages
- It generates a rationing problem
- It promotes the creation of parallel (illegal black) markets
- It eliminates allocative efficiency and generates a welfare loss





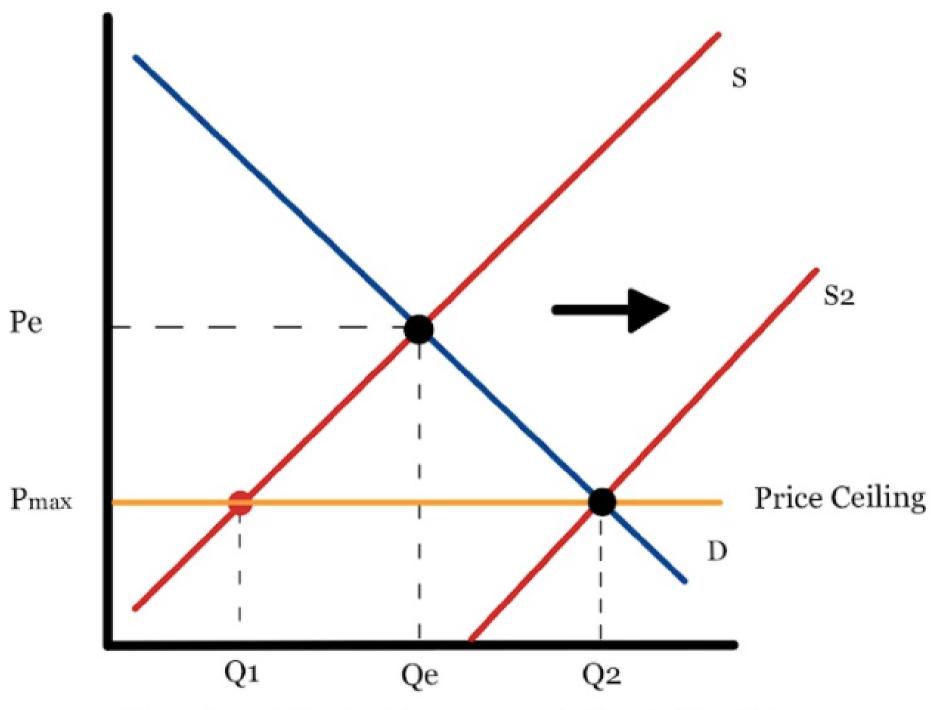
Quantity of Rented Accommodation in Munich

Solutions to price ceiling problems

Increase supply

How can a government increase supply?





Quantity of Rented Accommodation in Munich



When the government sets a minimum price of a good or service.

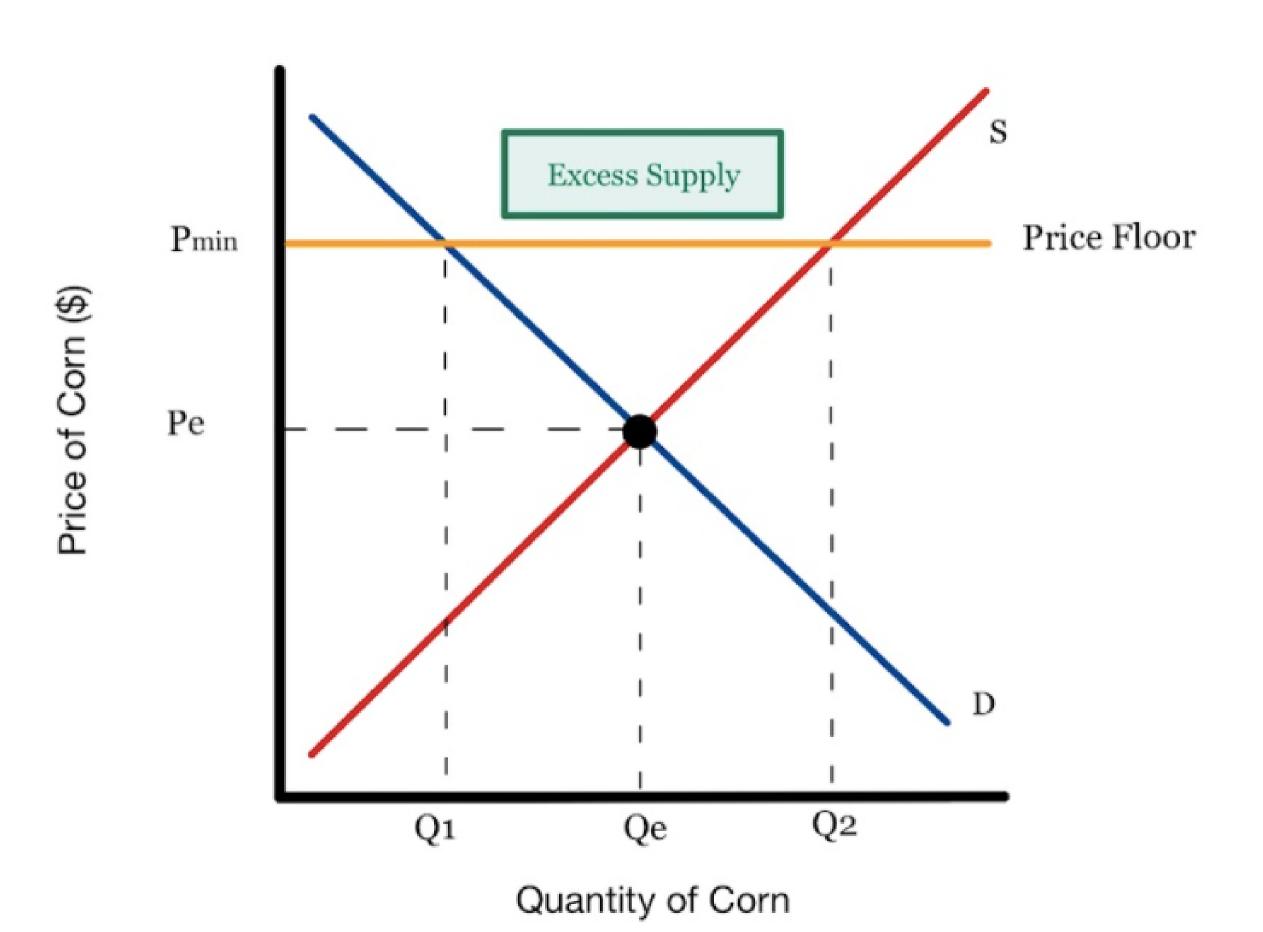
Typically used to

- 1. Protect producers that could be in danger (farmers)
- 2. Protect workers (minimum wage)

Must be placed ABOVE the equilibrium price in order to be effective/binding.

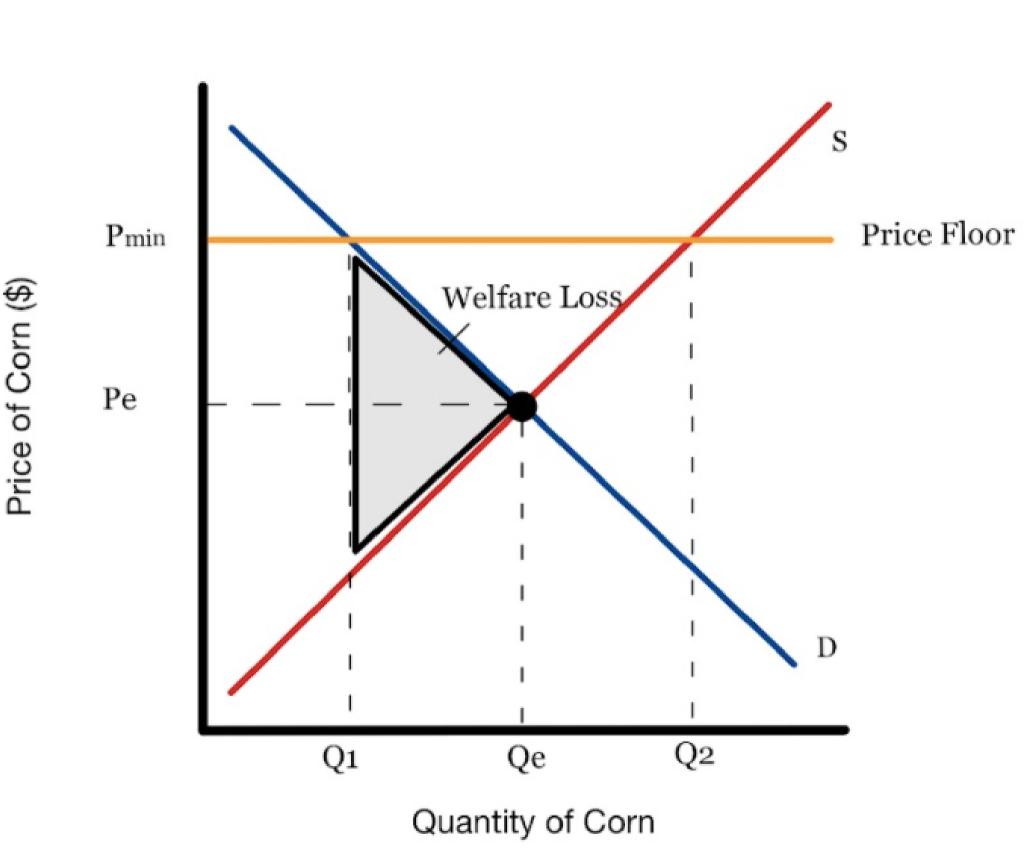
Can you brainstorm as to why that is the case?





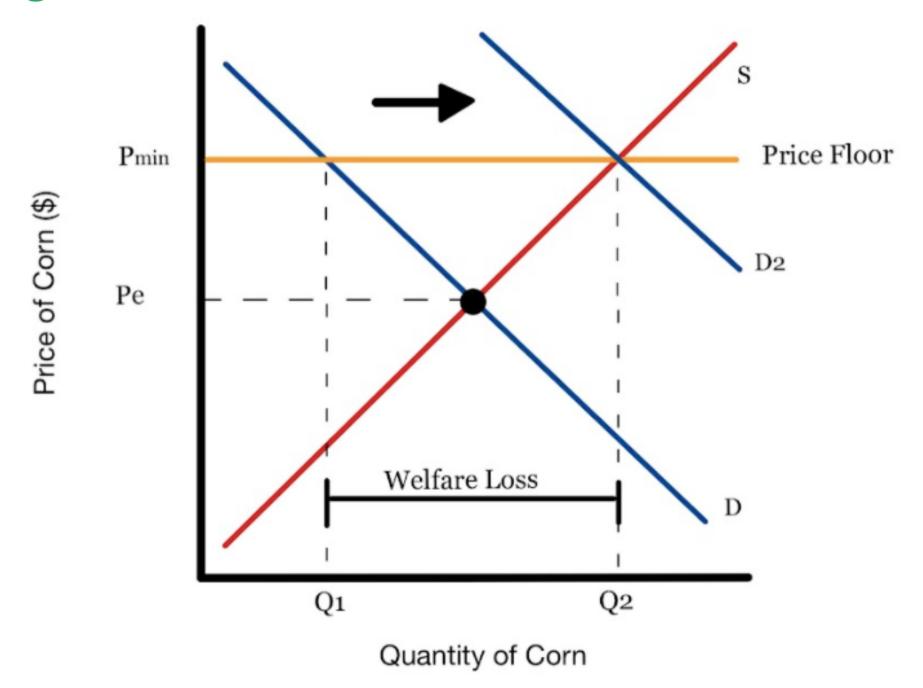
#### **Consequences of Price Floor**

- Surpluses
- Promotion of parallel black markets
- The government needs to dispose of surplus
- Allocative inefficient and generates welfare loss

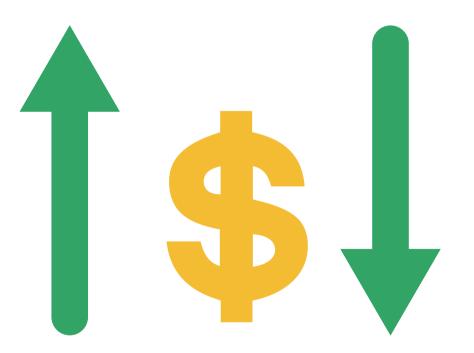


#### Solutions to price floor problems

- · Government purchase of surplus (to store, to sell, donate, etc.)
  - Results in large welfare loss

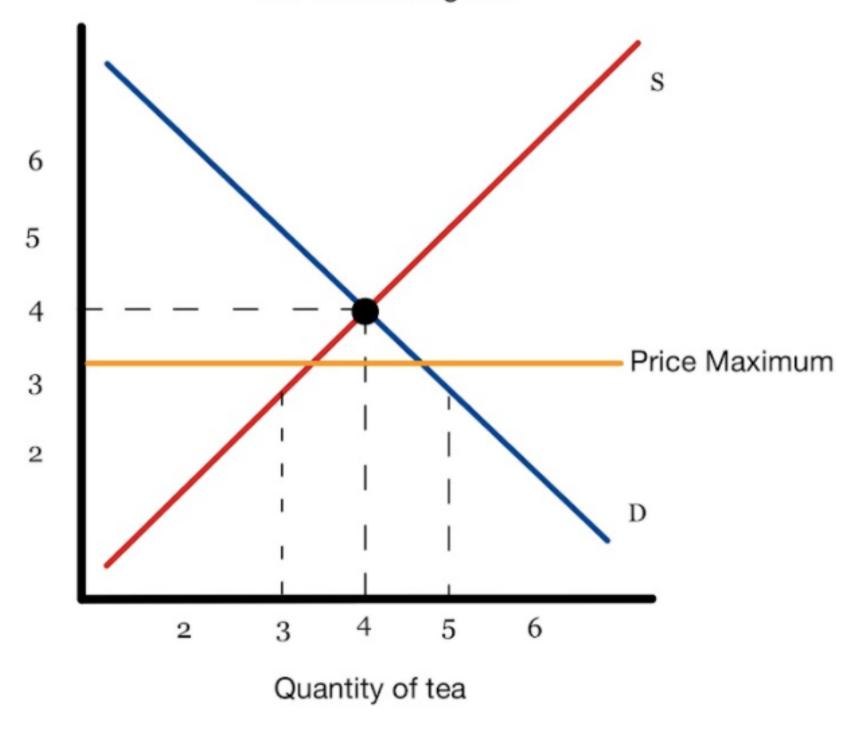


## Price Control Calculation



# Try It Out

Tea Market England

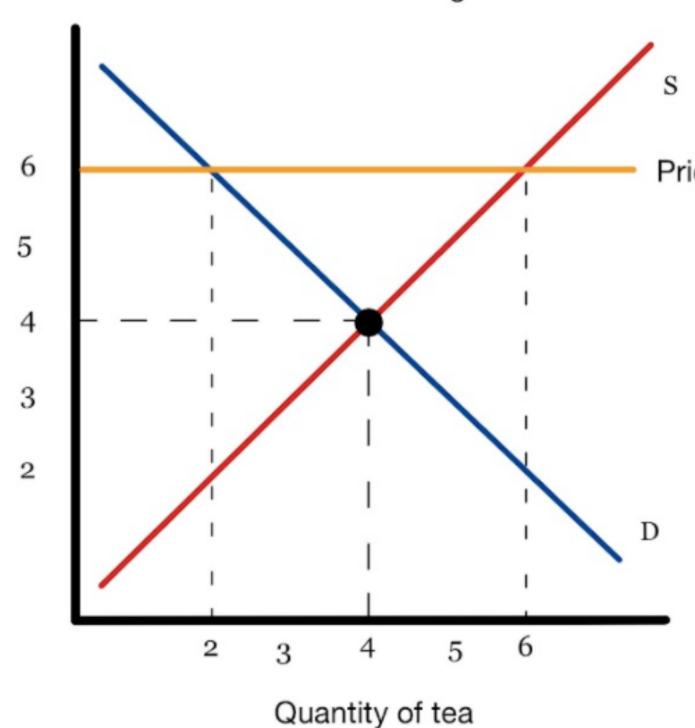


- 1. Calculate the change in producers'/suppliers' revenue after the maximum price is set.
- 2. Calculate the shortage generated by the price ceiling.



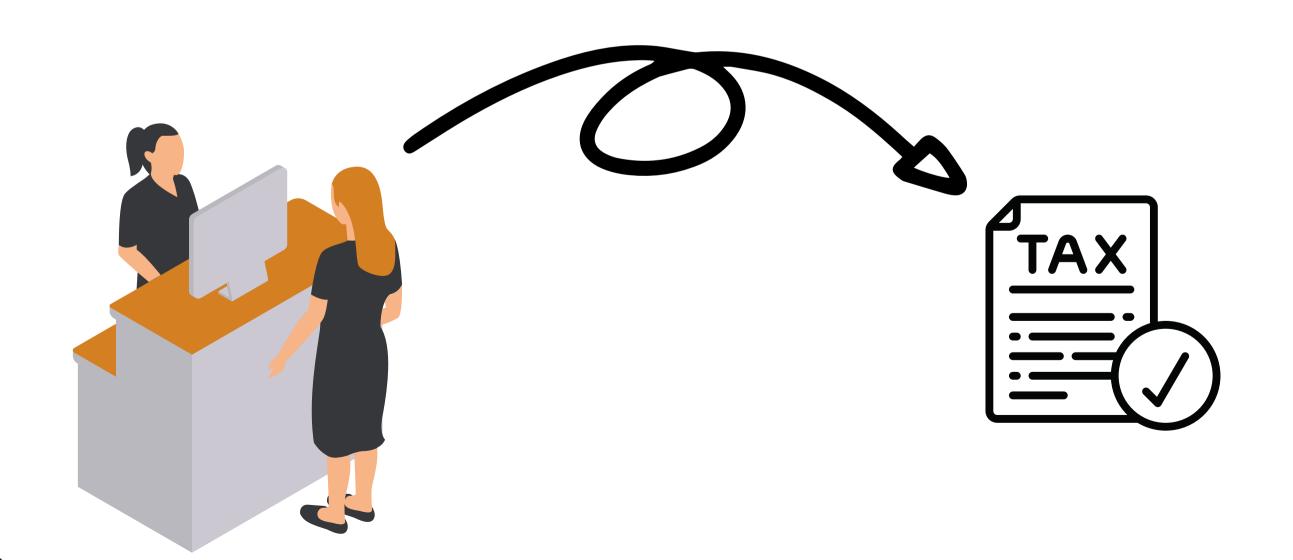
# Try It Out

Tea Market England



- 1. Calculate the change in firms' revenue after the price floor is set.
- 2. Calculate the change in consumers' expenditure after the minimum price is imposed.
  - 3. Calculate the excess supply.
  - 4. Calculate the government's expenditure to purchase the surplus.

## Indirect Taxes



## Why Tax?

#### The Aims of taxation is to

- Collect Revenue
- Discourage consumption of certain goods
- Redistribute Wealth
- Correct Allocative Inefficiencies



### Indirect Taxes

Indirect taxes are taxes not designed to target a specific individual

These taxes are also referred to as **Excise Taxes** 

#### **Two Types of Excise Taxes**

#### **Specific Tax**

A fixed amount of tax per unit sold.

**Example**: For each beer sold, there is a 2 Euro Tax

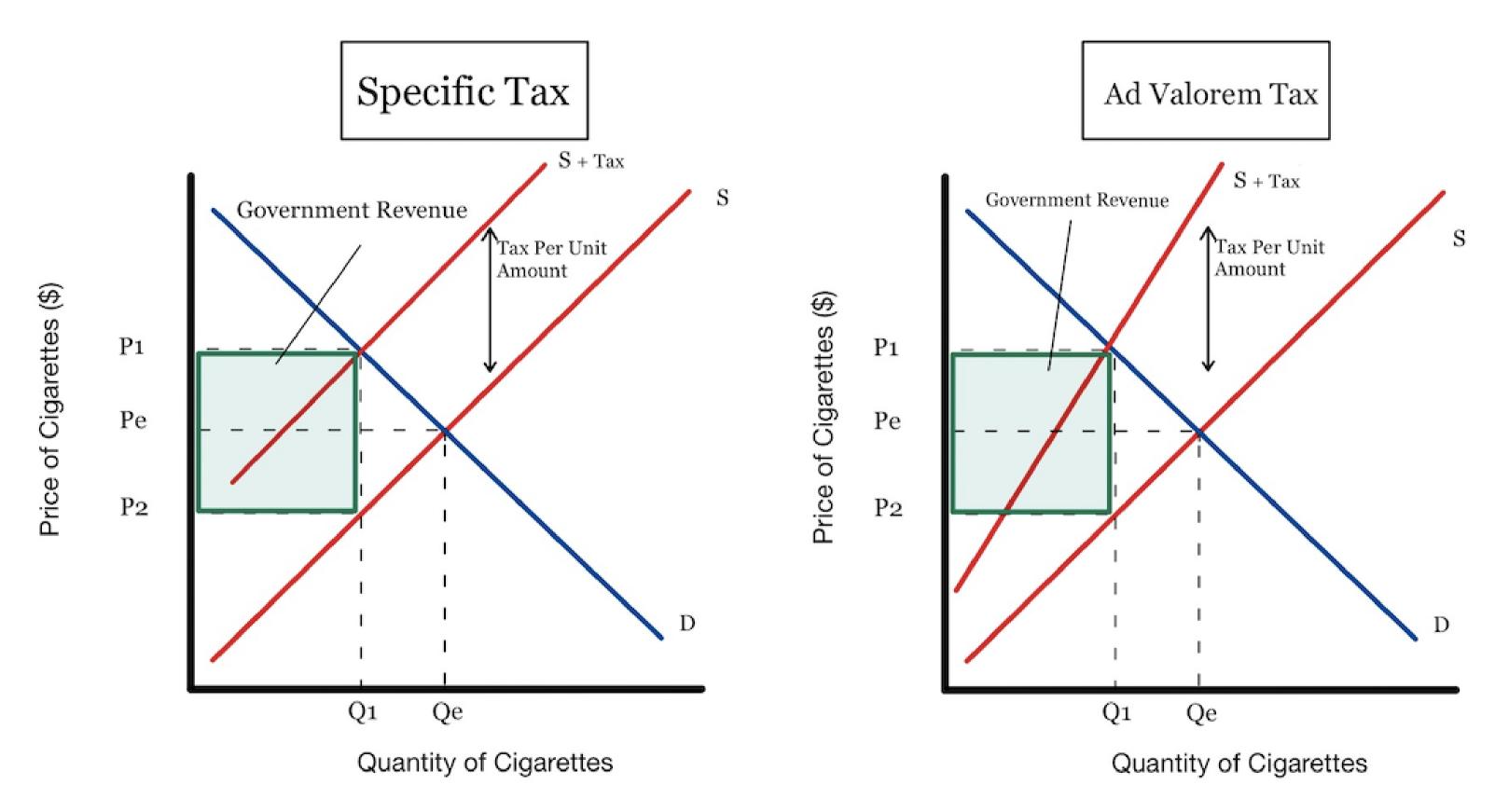


#### Percentage Tax / Ad Valoreum Tax

A fixed percentage charged on the selling of the good.

Example: 20% on the price of cigarettes. Notice that the amount of the tax increases as purchases increase.

### Indirect Taxes Graph



### Stakeholders

When an excise tax is introduced, what is the impact on stakeholders such as

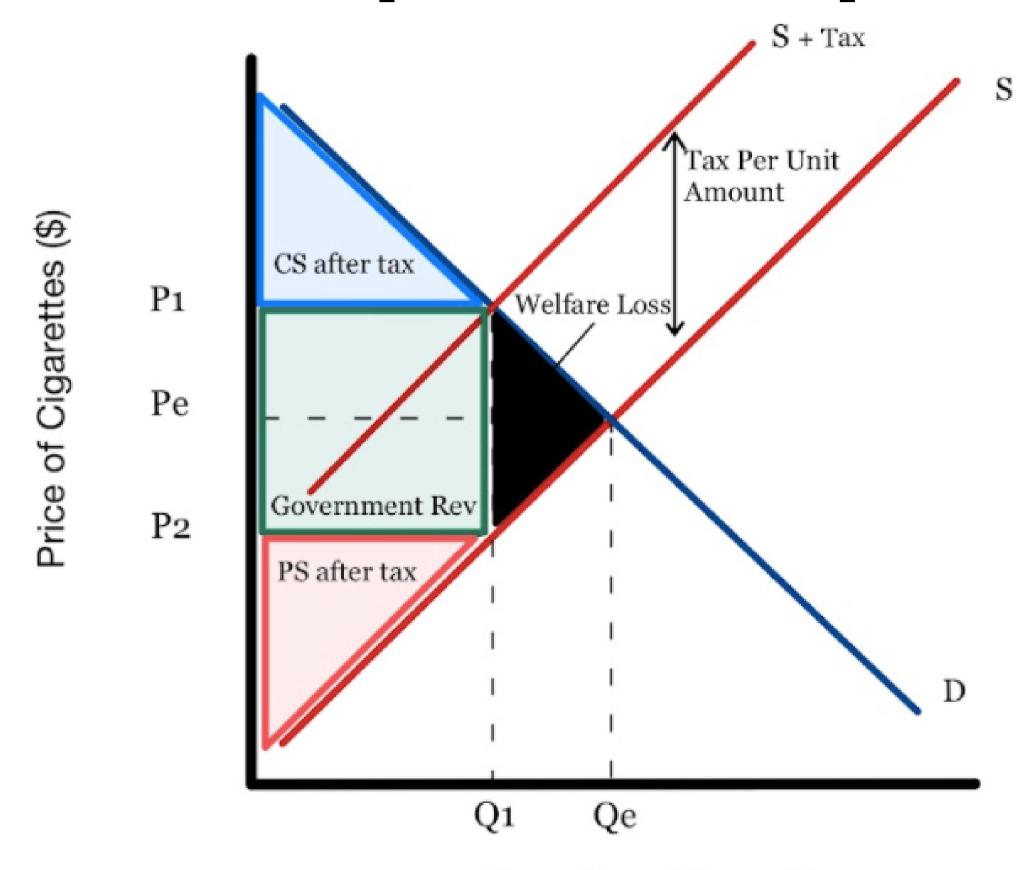
consumers, producers, government?

#### Answer these questions in groups or with a partner!

- What will happen to the price paid by consumers before and after tax?
- What will happen to the revenue received by producers?
- What is the situation of the government before and after tax?
- What will happen to the size of the market and what will be the subsequent effect on the workers in that market?
- Is there an effect on society as a whole?



## Impact on Surplus



Quantity of Cigarettes

## Summary of Indirect Tax

Stakeholder/Variable	Impact
Price	Increased
Quantity	Decreased
Government	Increase in Revenue
Producer	Decrease in Revenue
Consumer	Higher Expenditure
Community Welfare	Decrease
Allocative Efficiency	Inefficient

### Indirect Tax Calculations

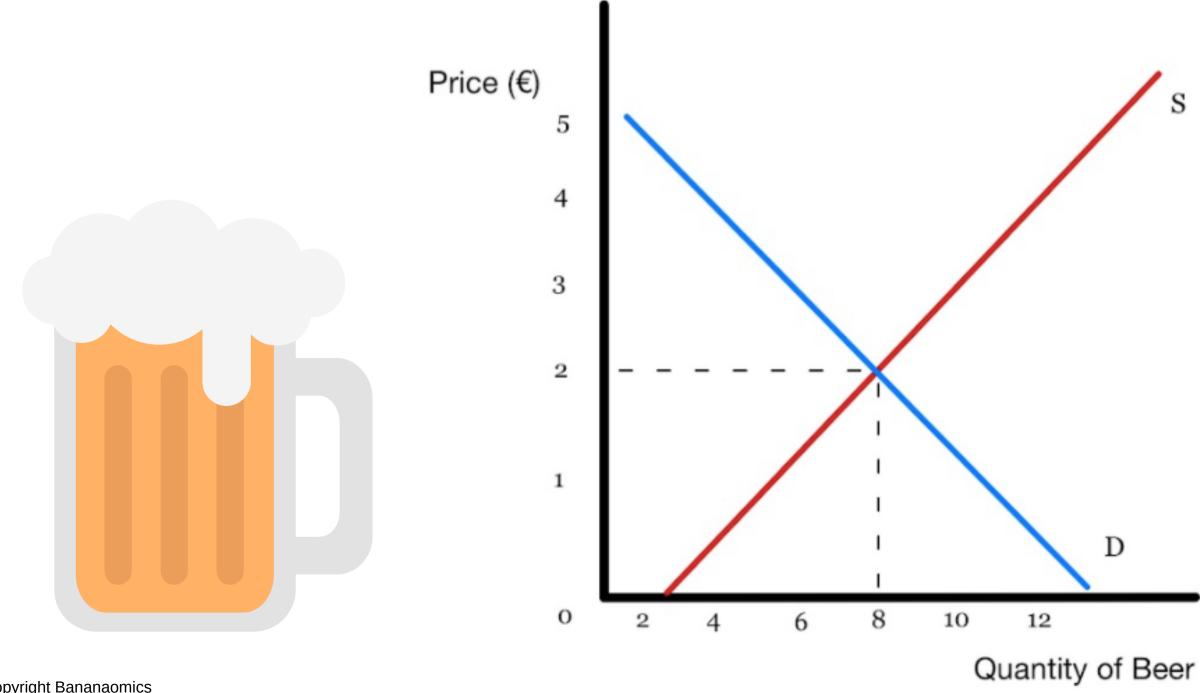
HL Only





### Indirect Tax Calculation

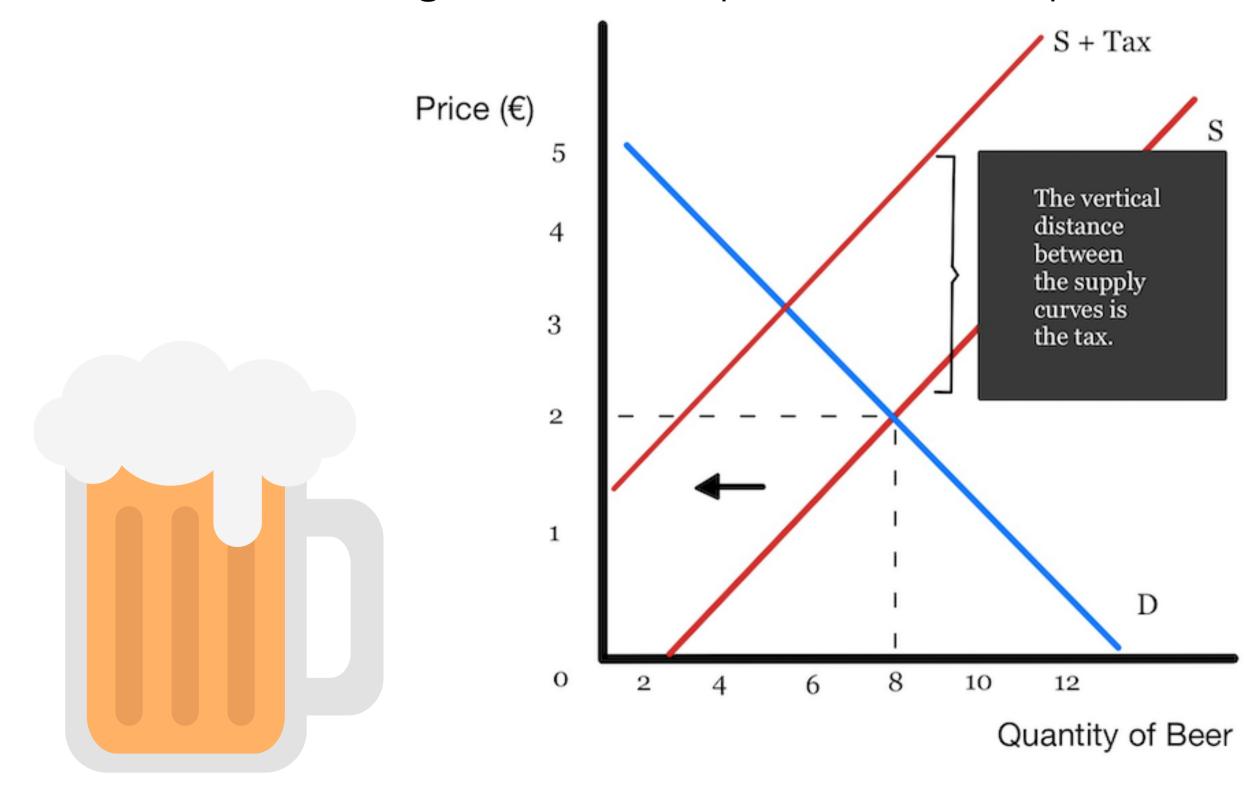
The government has set a 2 Euro tax on beer. Draw the original equilibrium, then the change due to the tax.





## Indirect Tax Calculation

Label the following: Consumer Surplus, Producer Surplus, Government Revenue, Welfare Loss



# Subsidies

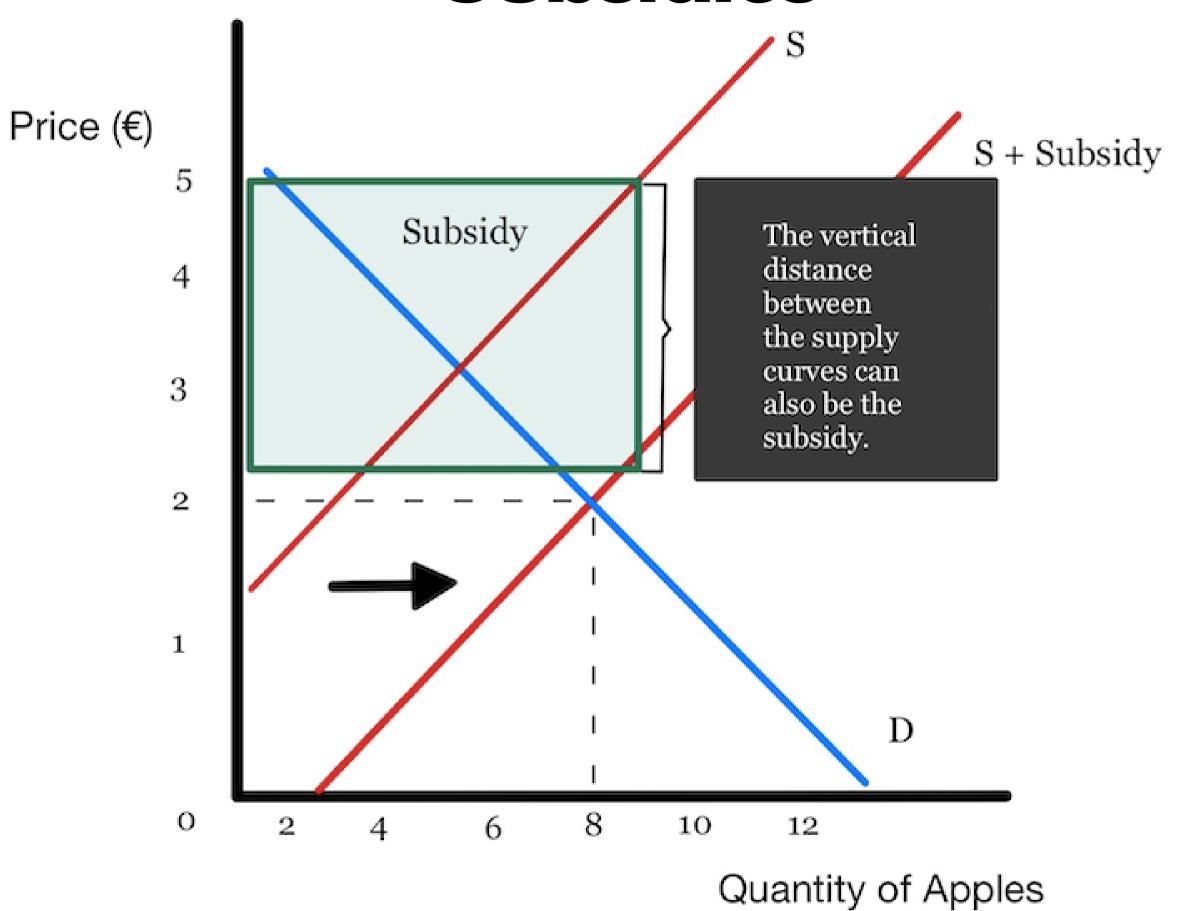


# Purpose of Subsidies

- Increase producer revenues
- Make basic necessities more affordable
- To support the growth of a particular industry
- Encourage the consumption of a particular good or service



# Subsidies



### Subsidies

Price (€)

5

4

3

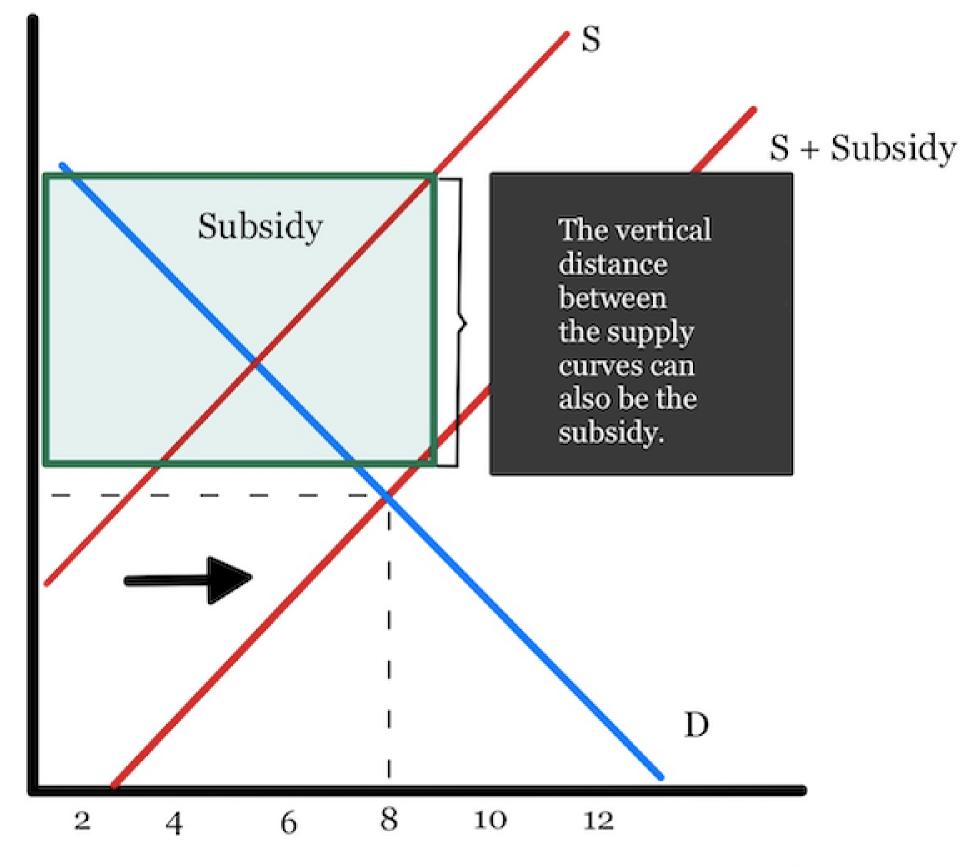
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 $\mathbf{O}$ 

What happens to

• The price paid by consumers

- Revenue received by producers
- Government Revenue
- Society as a whole



Quantity of Apples

### **Overall Impact of Subsidies**

Stakeholder/Variable	Impact
Price	Decreased
Quantity	Increased
Government	Increase in Spending
Producer	Increase in Revenue
Consumer	Lower Expenditure
Community Welfare	Decrease
Allocative Efficiency	Inefficient

### Society As A Whole - WORSE OFF. Over-allocation of resources

# Direct Provision of Services



### Direct Provision of Services

#### **Services Provided Directly By The Government**

- Healthcare
- Public Transport
- Education
- Rail/Airline Services
- Energy







# Command, control regulation, and legislation



### **Command And Control**

Legislation and Regulation involve government intervention

through the legal system.

**Legislation – Laws set out by legislative bodies** 

**Example:** All children are required by law to go to school.

Regulation - To monitor or Regulate an industry

**Examples include:** BfArM or FDA, Age Restrictions, Smoking Ban

in public



# Consumer Nudges



# Consumer Nudges

Governments may use consumer nudges to correct issues or problems in the market. These nudges tend to be rather inexpensive and impactful.

#### **Examples include:**

- Organ Donation on Drivers License (Opt-out scheme vs Opt-in scheme)
- Bottle Deposit Schemes
- Electric Car Charging Stations
- Car Emissions Fees



# Practice Question



# Paper 1

#### M19/3/ECONO/SP1/ENG/TZ2/XX

(a) Explain two factors which could shift a firm's supply curve to the left. [10]

(b) Discuss the view that the provision of subsidies by the government on goods such as agricultural products will always be beneficial to stakeholders. [15]



### Check Answers

(a) Explain two factors which could shift a firm's supply curve to the left.

Bookmark this tab

[10]

#### Answers may include:

- definition of supply, supply curve
- diagram to show a shift in supply to the left
- explanation of two of: increases in the costs of factors of production; increases in prices of related goods; increased indirect taxes; other factors such as: changes in regulations, objectives of the business, the weather, labour disputes, etc
- examples of factors reducing supply in practice.

### Check Answers

(b) Discuss the view that the provision of subsidies by the government on goods such as agricultural products will always be beneficial to stakeholders.

[15]

#### Answers may include:

- definition of subsidy, stakeholders
- diagram to illustrate subsidy showing impact on market price, government spending, producer revenue
- explanation that the provision of subsidies benefits producers and consumers
- examples of subsidies on agricultural products or other goods
- synthesis and evaluation (discuss).

Discussion may include: the disadvantages of subsidies such as: opportunity cost to the government, higher taxes to fund subsidies, difficulties in removing subsidies once established, distortion of the market, creation of inefficiency, equity issues (eg some consumers and producers will benefit more than others).

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