

1.2.9 Indirect taxes and subsidies

- a) Supply and demand analysis, elasticities, and:
 - the impact of indirect taxes on consumers, producers and government
 - the incidence of indirect taxes on consumers and producers
 - the impact of subsidies on consumers, producers and government
 - the area that represents the producer subsidy and consumer subsidy
- Indirect taxes: Taxes on expenditure such as VAT. They can be Ad valorem or specific. They cause an increase in cost of supply so the supply curve shifts left.
- Ad valorem taxes: Taxes of a percentage of the price of the product. Shifts curve left and make it steeper
- Specific taxes: A set amount of tax per unit of the product. Shifts curve left but lines are parallel
- Incidence of tax: How the burden of a tax is distributed between producers and consumers
- Consumer burden: The consumer pays more for a taxed good. The more inelastic the demand curve the greater the consumer burden.
- Producer burden: The producer pays more for a taxed good. The more elastic the demand curve the greater the producer burden.
- When demand is elastic the producer bears most of the burden because increases in price decrease revenue but when demand is inelastic the consumer bears most of the burden because increases in price increase revenue
- When supply is inelastic sellers can't easily switch between markets so bear most of the tax burden in order to keep demand high for their products which they must sell. Additionally, they can't decrease quantity easily so price needs to only increase by a small amount to avoid excess supply and disequilibrium.
- When supply is elastic suppliers can switch markets easily so have a low tax burden to make it more profitable than other industries it could change to. Additionally, quantity can be reduced easily so a firm can raise prices to transfer the tax to the consumer and avoid excess supply
- The two boxes represent in relation to taxes and subsidies add up to the government revenue from taxes or the cost of the subsidy
- An ad valorem tax causes a pivotal shift in the supply curve so the absolute amount of the tax increases with price
- Four tax evaluation questions:
 - Effectiveness and unintended consequences?
 - How much revenue is raised? How is it used?
 - What is the impact on businesses/ competitiveness?
 - Consequences for equity/ distribution of income?
- Problems with using taxes to correct market failure:
 - Setting the 'right' tax rate i.e. externality is difficult to measure
 - Cost of collection

- Inelastic demand
- Redistribution effects
- Increased costs: inflation and international competitiveness
- Subsidy: A grant from the government to encourage production which reduces costs of production so the supply curve shifts to the right and demand increases
- Producer gain: The difference between V and P_e so they gain from extra revenue from the government. The more elastic the demand curve is, the greater the producer gain
- Consumer gain: The difference between P_e and P_1 so they gain from paying less. The more inelastic the demand curve is, the greater the consumer gain.
- A government subsidy per unit of output paid to producers causes an outward shift of the market supply curve leading to a lower equilibrium price and an increase in the equilibrium quantity traded.
- Subsidy per unit is shown by the vertical distance
- Total spending on the subsidy is equal to the subsidy per unit multiplied by the level of output- shown by the shaded area
- If demand is inelastic a subsidy has a larger effect on the new equilibrium price because a large decrease in costs causes a smaller increase in quantity
- If demand is elastic a subsidy has a stronger effect on the new equilibrium quantity because a small decrease in costs causes a greater increase in quantity, **it allows a company to reduce their price which increases their revenue so they gain more.**
- Evaluation of a subsidy:
 - Effect on productivity/ efficiency
 - Cost of subsidy/ tax burden
 - Does it achieve the desired effect?
 - Who benefits?
 - Unintended consequences
- Subsidies aim to:
 - **Reduce the price: increase positive externalities (used when demand is inelastic)**
 - **Sustain an industry: (used when demand is elastic)**