

# What is taxation ? Why do governments impose taxes ?

Governments at all levels (municipal, provincial, national) impose a huge array of different taxes for a range of reasons.

## Why ?

- To finance public expenditures
- Redistribute income in society
- Influence the behaviours of consumers and producers in different markets to achieve a range of microeconomic objectives.

## Examples:

- « excise » taxes on cigarettes, alcohol and cigarettes - often called “sin taxes”
- « tariffs » on imported goods etc.



# Different types of taxes

## DIRECT TAX = Income Tax

Imposed on personal income (employment income, interest on savings) or wealth.

- Imposed on firms' profits.
- Some of the income is taxed directly by employers, while some is charged based on the annual « tax return » form (declaration of revenues) that people are obliged to fill out.
- Direct taxes are « theoretically » unavoidable, because households and firms are obliged to declare their full income to governments and pay taxes accordingly.
- Progressive: proportion of income taken in tax rises as income increases.
- Regressive: proportion of income paid in tax falls as income rises.
- Proportional: Same proportion of income taken whatever the level of income (flat tax)

## INDIRECT TAX = Consumption based taxes

Have different names in different countries.

- European countries: Value-added tax
- Canada/Australia: Goods and services tax
- Japan: 消費税 (Shouhizei or tax on consumption)

Indirect taxes can be passed on but direct taxes cannot

# Indirect taxes



An indirect tax is a tax levied on goods and services rather than on income or profits.

- Customs duties levied on imports,
- excise duties on production,
- sales tax or value added tax (VAT),

are examples of indirect taxes because they are not levied directly on the income of the consumer or earner.

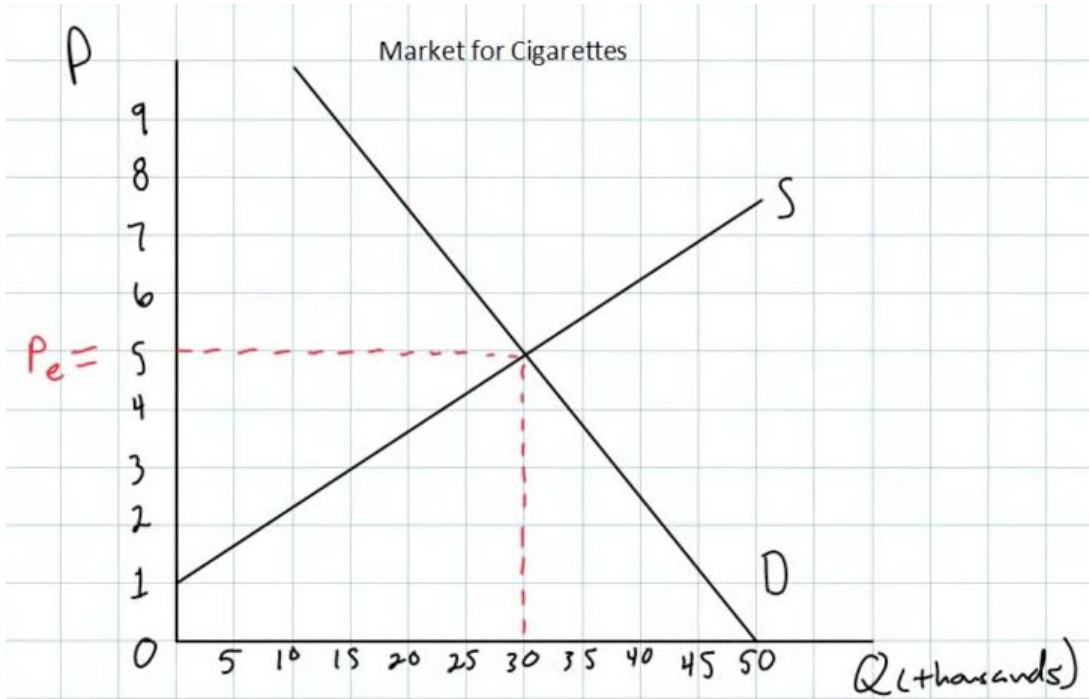
An excise tax is an indirect tax charged on the sale of a particular good or service such as alcohol and cigarettes, petrol and sugar.



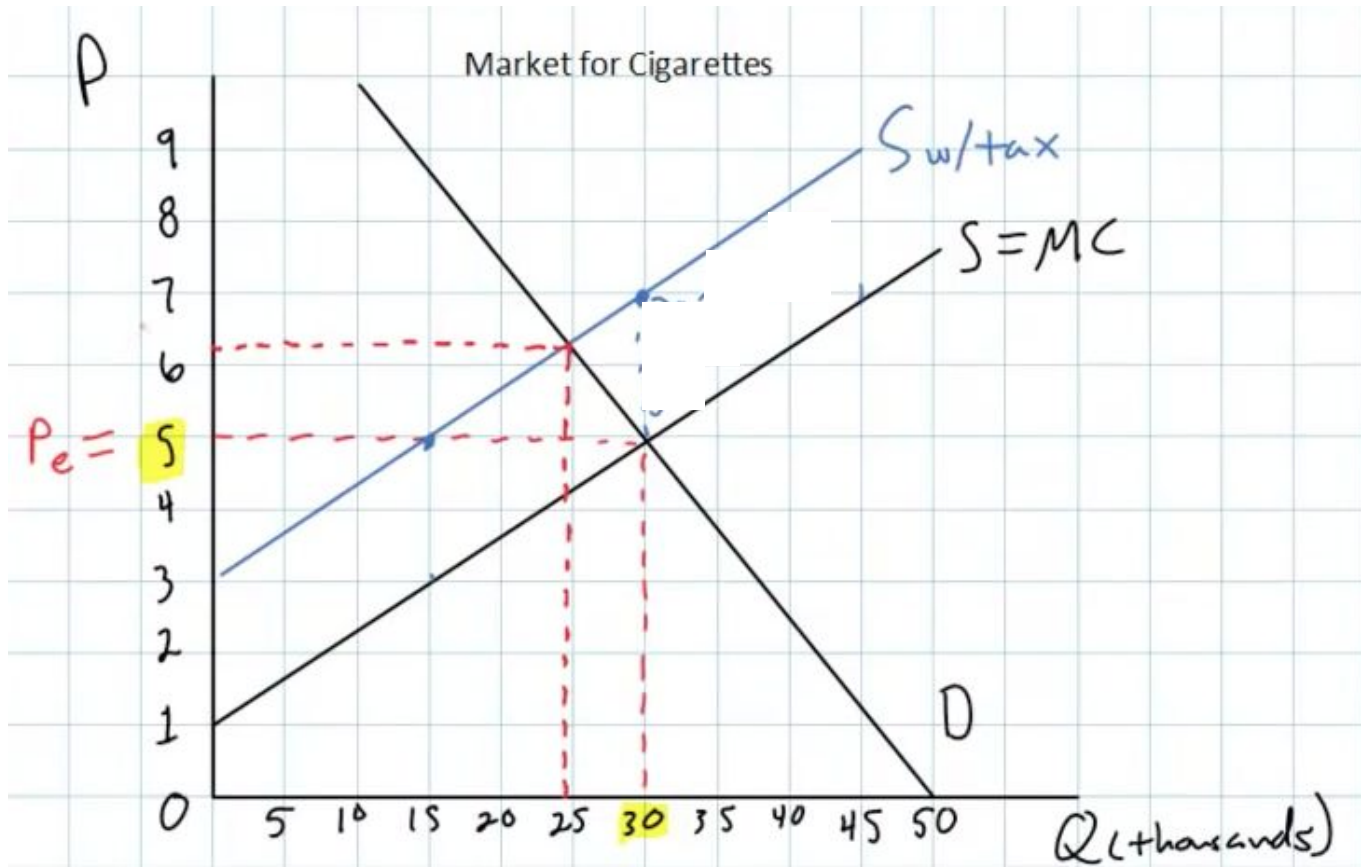
*But why do governments want to increase the prices and restrict the supply of some products?*

- *to discourage their consumption because it can be harmful, e.g. cigarettes*
- *to reduce their production because it can be harmful, e.g. the burning of oil and gas releases harmful emissions*
- *to conserve limited natural resources, e.g. taxes on energy and water use*

# The effect of an indirect tax



# Why doesn't the price increase by \$2?



The supply curve shifts UP not LEFT as the result of an indirect tax. Don't say it shifts left!

# Why doesn't the price increase by \$2?

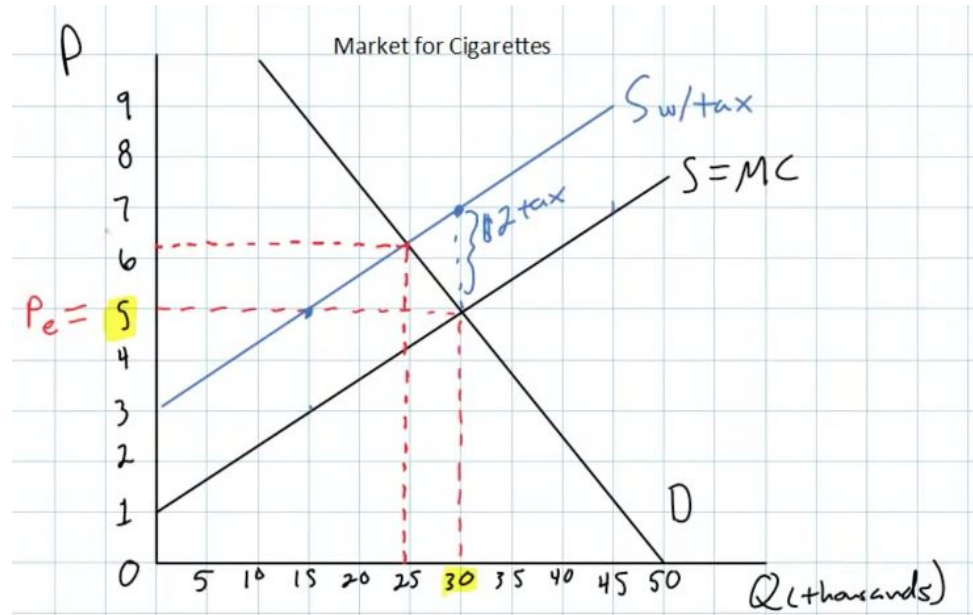
Demand for this product is not perfectly inelastic so a change in price will result in some change in demand.

So our new price  $P_{e1}$  is approximately \$6.20 meaning that the consumer has taken on the tax burden (CB) of \$1.20. Shade this on your diagram. But the remaining 80 cents must come from the producer.

Draw line from approximately \$4.20 on on your graph to the supply curve.

Shade this in a different colour and label it PB for producer tax burden.

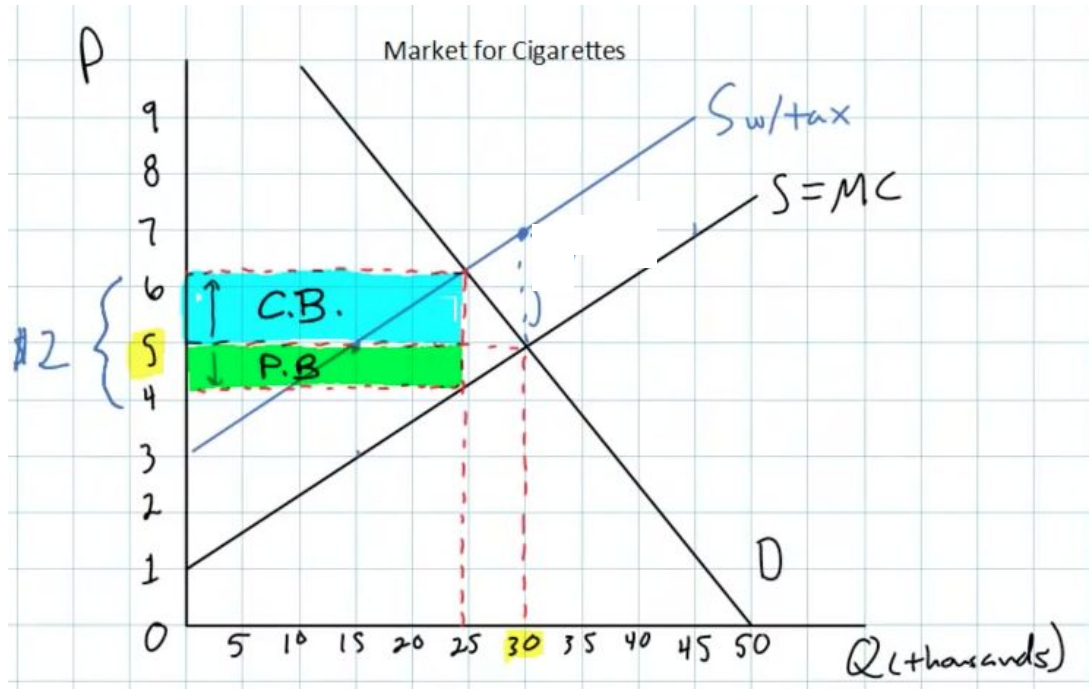
We can see that difference between  $P_{e1}$  and the total tax burden is the money the producer will actually get to keep.



# The tax burden is shared by producers and consumers

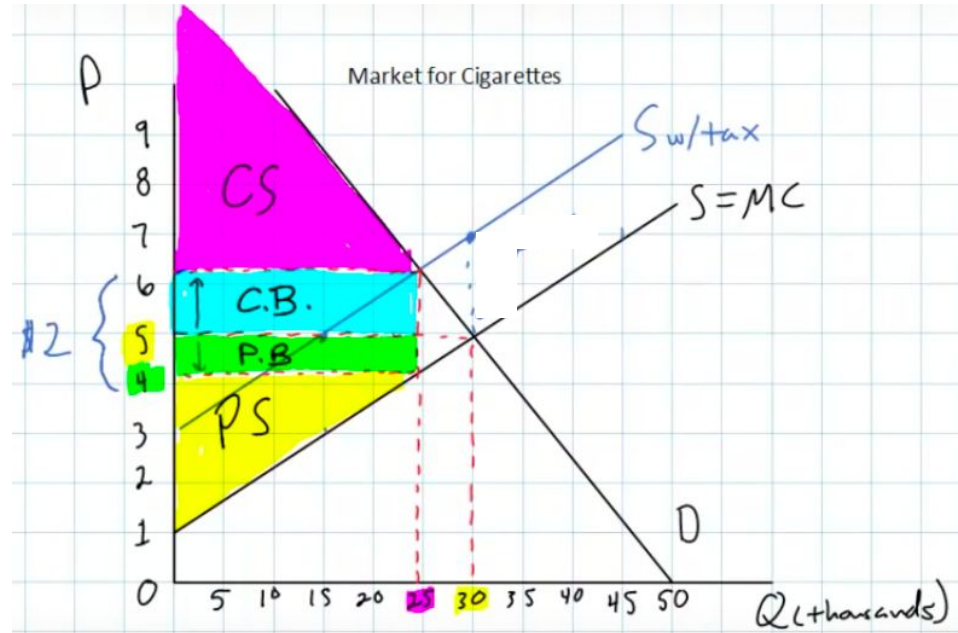
If the producers were to simply add \$2 to the price demand would decrease significantly. Hence the tax burden is shared. CB = \$1.20 and the PB is 80 cents.

In this case the consumer tax burden is greater than the producer tax burden.

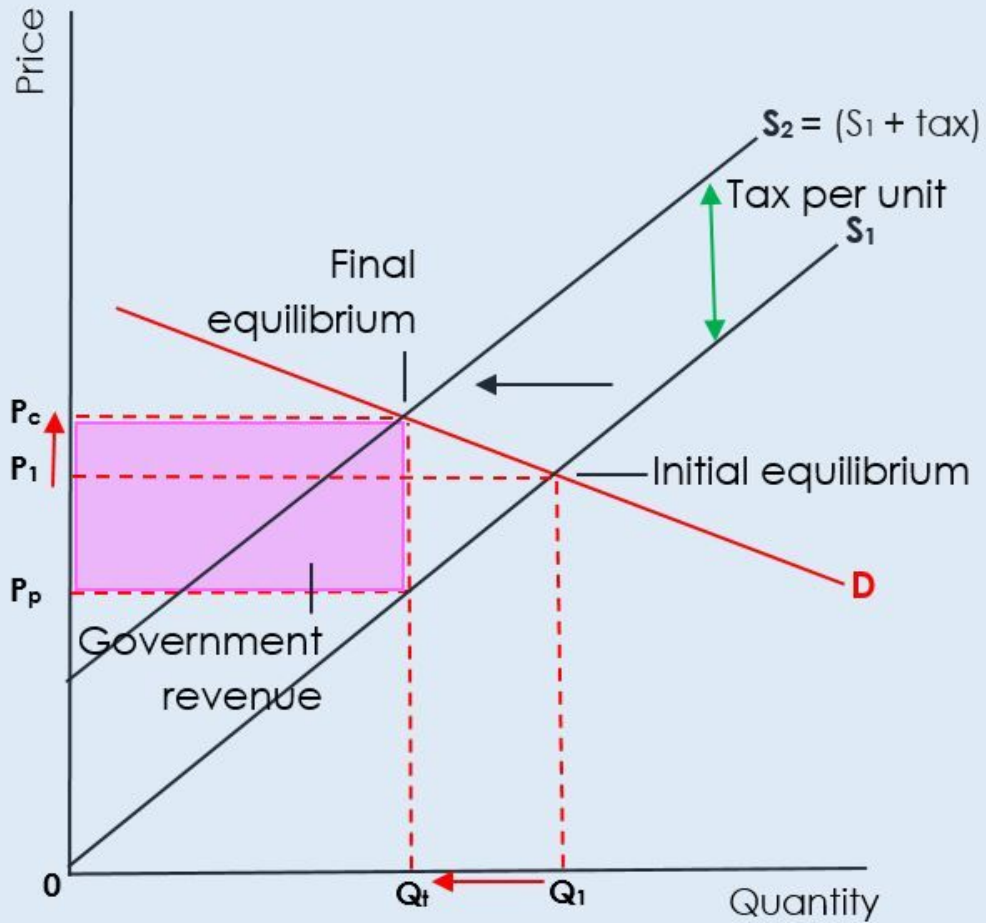


# Impact on of the tax on consumer and producer welfare

As a result of the tax the consumer and producer surplus has decreased. Remember that community surplus = producer surplus + consumer surplus. So does this mean that community surplus has decreased? Not necessarily as **C.B** and **P.B** = tax revenue for the government which may be spent on healthcare, education and infrastructure projects.





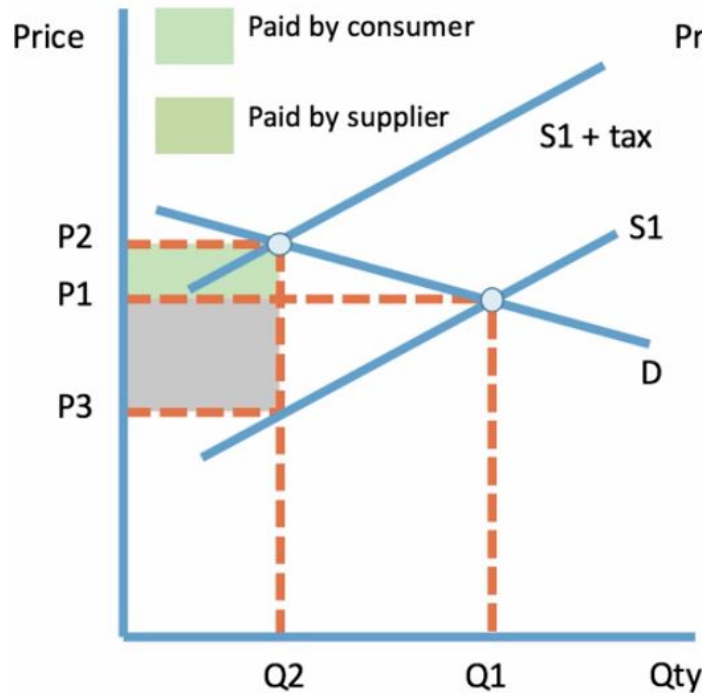


# Practice

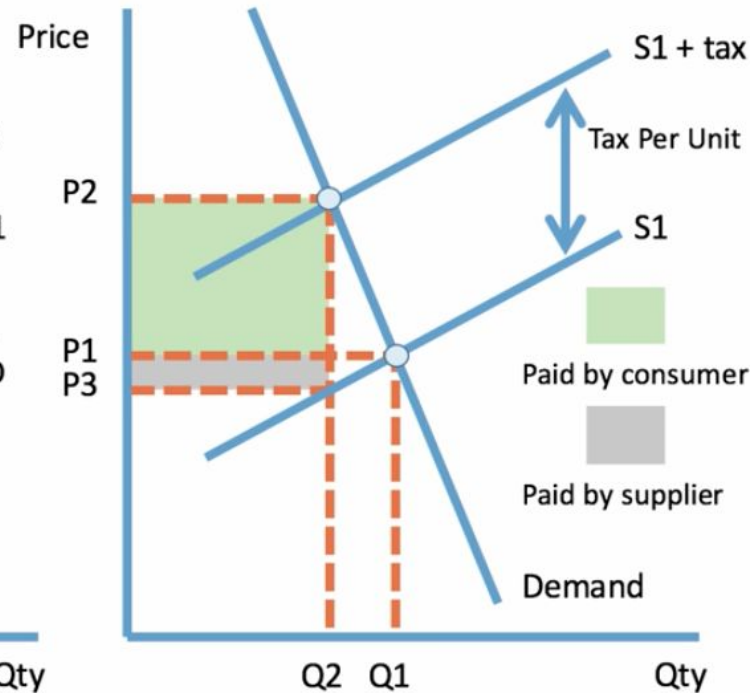
- Draw a 10x10 X/Y Axis on graph paper.
- Add a Demand and Supply curve. - But make the demand curve elastic.
- Add a \$2 indirect tax
  - Illustrate the effect on
  - Price and Quantity Demanded
  - The tax burden of consumers and producers

# The effect of elasticity on consumer and producer burden

If the **co-efficient of price elasticity of demand  $>1$** , then most of the burden of an indirect tax will be **absorbed by the supplier**



If the co-efficient of **price elasticity of demand  $<1$** , most of an indirect tax can be **passed on to the final consumer**



Source of **government revenue**



Improve **resource allocation** and correct for negative externalities



Why governments impose indirect (excise) taxes



**Discourage consumption** of harmful goods



**Redistribute** income

# What are stakeholders?

Stakeholders: a person or group with an interest or concern in something, especially a business.

On the exam you will be expected to evaluate the impact of decisions on differing stakeholders in order to achieve the highest marks.

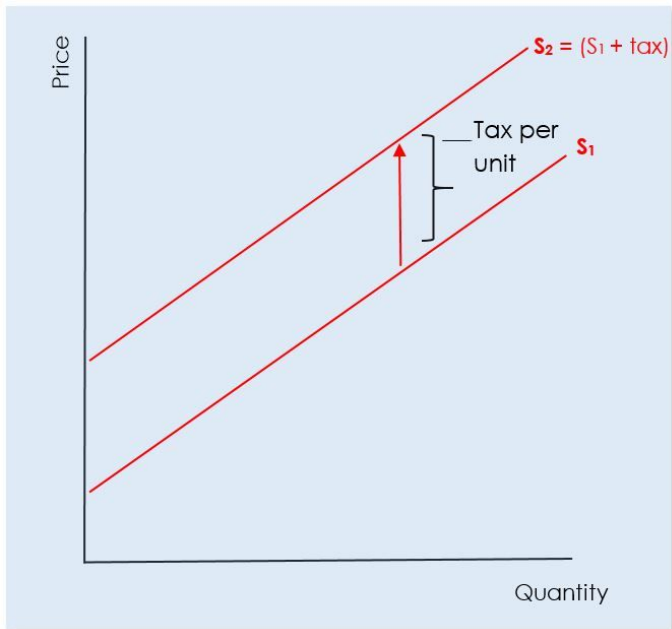
Stakeholders include:

- Consumers
- Employees
- Society as a whole
- The government
- Firms
- ..... plus other depending on the case study

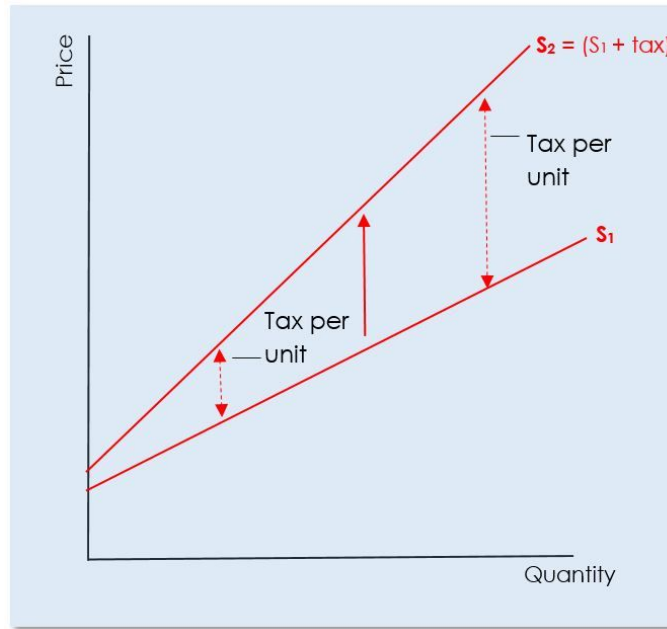


# Specific Taxes v Ad Valorem Taxes

**Specific taxes:** A per unit tax, or specific tax, is a tax that is defined as a fixed amount for each unit of a good or service sold, such as cents per kilogram. It is thus proportional to the particular quantity of a product sold, regardless of its price.



**Ad valorem taxes:** Charge levied as a percentage of value of the item it is imposed on, and not on the item's quantity, size, weight, or other such factor. Value added tax (VAT) and, generally, import duties are ad valorem



# Indirect taxes - review

