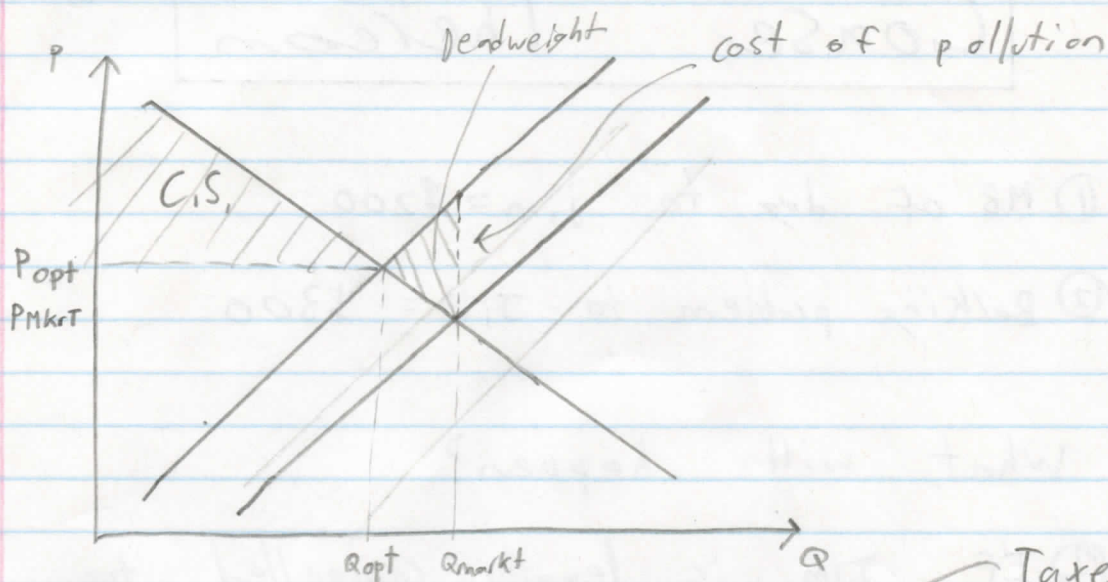


# Chapter 10 Externalities

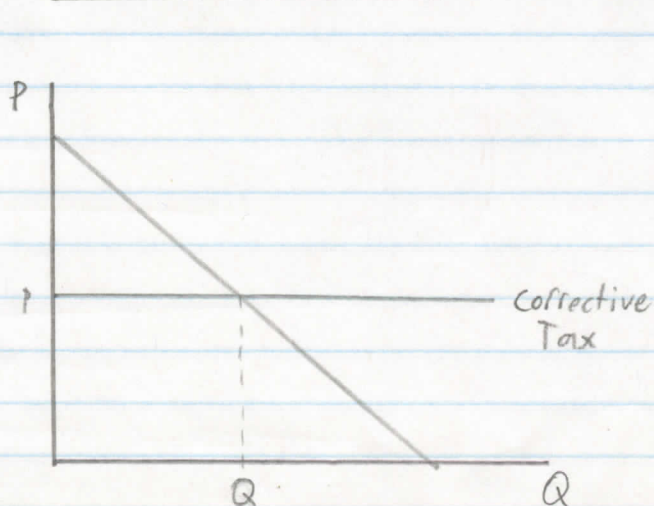


Taxes (Neg)  
Subsidies (Pos)

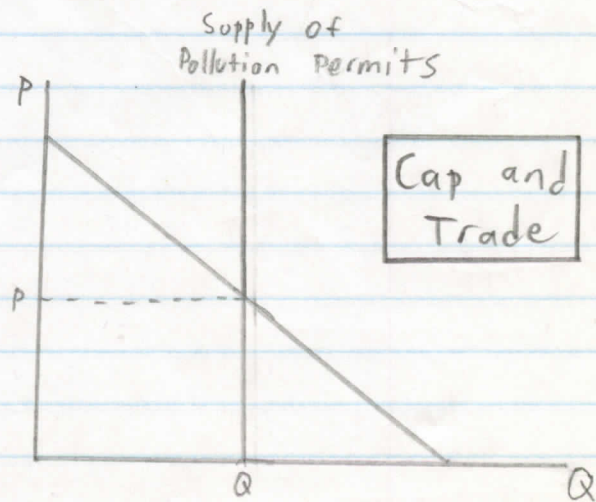
**Internalizing the Externality:** creating incentives within the market so people take it upon themselves to address the externality. opposed to direct Regulation.

**Command and Control:** Regulation

**Market-Based:** Corrective (Pigovian Taxes)



Sets Price of pollution



Sets Quantity of pollution

# Coase Theorem

① MB of dog to jim = \$200

② Barking problem to Jill = \$300

What will happen?

① If Jim is legally compelled to make his dog stop barking vs. if he isn't

\* Transaction costs (costs during the bargaining process) sometimes get so big the problem isn't resolved

# Chapter 11

If one person uses it can someone else  
Rival in Consumption then not use it?

Yes

NO

Yes

Private Goods

- Ice-cream cones
- clothing
- Congested toll roads

Club Goods

- Fire Protection
- Cable TV
- Uncongested toll roads

Excludable

No

Common Resources

- Fish in the Ocean
- The Environment
- Congested non-toll roads

Public Goods

- Tornado siren
- National Defense
- Uncongested non-toll roads
- Firework display

\* will not arise in a private market

Free Rider:

\*Problem

Someone who enjoys the MB of something but does not pay for it

Can someone be stopped from using it?

\*Common Resources are a problem because anyone can use them but it is possible to use it all up and then everyone loses



# Chapter 19 Intro to Macro

**Recession:** long term growth  
A fall in GDP  
short-term  
Fluctuations

**Nominal national income:**  
total income in current  
dollars

**Real National Income:**  
total income in constant  
\$'s. only changes when  
quantity changes

**$Y = \text{Actual Output}$**

**$Y^* = \text{Potential Output}$**  = If all Resources is put to use

$Y < Y^* = \text{recessionary Gap}$

$Y > Y^* = \text{Inflationary Gap}$

\*note, this  
can still  
happen

**Employment** = Number of adults  
with jobs

**Labour Force:** Total # of  
people employed or unemployed

**Unemployment** = # of adults who  
are unemployed and  
are looking for work

**Unemployment rate:**  
$$\frac{\# \text{ of people unemployed}}{\# \text{ of people in Labour force}} \times 100\%$$

**Frictional unemployment:**  
Standard turnover of people  
between jobs but are  
not currently working

YES

**Structural Unemployment:**

Labour force skill set  $\neq$  skills in  
demand for  
jobs

**Cyclical Unemployment:**

NO!

**Full Employment?**

Actual GDP  $\neq$  Potential GDP

Price Level: "P"

↑P = Inflation

\* Inflation reduces purchasing power of money and the real value of money

Nominal interest rate:  
Standard interest

Real interest rate:  
adjusts to take into consideration the change in buying power of money

Consumer Price Index / CPI:

choosing a base year and then seeing how much the same goods cost at a later date and measuring the % increase in price

↑ Exchange Rate = Depreciation  
∴ It now takes more Canadian dollars to buy a Euro

↓ Exchange Rate = Appreciation  
∴ It now takes less Canadian dollars to buy a Euro



# Chapter 20 National Income

## Intermediate Goods:

not the finished product.  
ie: flour which will become bread

## Final goods:

Final product, goods that will be consumed by consumers

## Value added:

Solution to the double counting problem

Value Added = Sales Revenue - Cost of intermediate Goods

National Income = National Product

## GDP

on the Expenditure side

## GDP

on the income side

### ① Consumption Expenditure:

both durable and non-durable goods. Goods or services which will eventually be consumed. ( $C_a$ )

### ① Factor Incomes:

- Wages and Salaries
- Interest
- Business Profits

Positive taxes

### ② Investment Expenditure:

goods not presently ready for consumption. ie: warehouse, metal, machines, factories. ( $I_a$ )

### ② Non-Factor Payments

- Indirect taxes
- Subsidies (net of subsidies)
- Depreciation

### ③ Government Purchases:

Govt. spending on stuff ie: roads, firehouses, soldiers, etc.... ( $G_a$ )

Factor Incomes + (Indirect Taxes - Subsidies) + Taxes - Depreciation

= GDP

### ④ Net Exports:

Foreign Trade. ( $NX_a$ )

$$C_a + I_a + G_a + NX_a = GDP$$

$$\boxed{\text{GDP Deflator}} = \frac{\text{GDP at Current prices} \times 100}{\text{GDP at base-period prices}} = \frac{\text{Nominal GDP} \times 100}{\text{Real GDP}}$$

\* CPI (Consumer Price Index) measures the avg change of price of goods

\* GDP Deflator measure avg change of price of goods produced in Canada

Not Everything Gets included in GDP Calculation

- Illegal activity

ie: Prostitution, drugs, illegal gambling

- Environmental costs

ie: oil spills

- Underground Economy

ie: A plumber fixes your sink and gets paid in cash and doesn't report the transaction