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## **ECONOMICS 101**

*A complete study guide to all topics economics*



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## UNIT 1: Introduction to Economics

### What Is Economics?

- The study regarding how **money** is consumed, produced, and transferred.
- The study of choices that lead to the best possible use of resources in order to best satisfy human needs and wants (of which are constant and unlimited).

### Scarcity

- **Fundamental concept** of how economies function
- Exists because factors of production are **finite**/limited, while human wants are **infinite**/unlimited
- *Not enough* resources to produce everything that human beings need and want
- Human needs and wants are satisfied by **goods** and **services**:
  - Physical objects = goods (food, clothing, cars)
  - Non-physical activities = services (education, health care, banking)
- There are **3 questions** economies must pose because of scarcity:
  1. What to produce
  2. How to produce it
  3. Who to produce it for
- **Resource allocation** - to assign resources to specific uses, which are chosen among many choices
  - Includes **reallocation**, **underallocation**, and **overallocation**

### Factors of Production

- Resources are the **inputs** used to produce goods + services wanted by people
- These inputs are known as factors of production and are scarce.
- Examples: human labour, machines, metals inside the earth

From <https://simplestudies.edublogs.org>

### The 4 Factors of Production

Factor	What it is	Example
<b>Land</b> ( <i>aka natural capital</i> )	Natural resources, “gifts of nature”	Oil reserves, forests, mines
<b>Labour</b>	Physical and mental effort contributed	Economist, doctor, teacher
<b>Capital</b> ( <i>aka physical capital or capital good</i> )	The man made factors that physically produce the output	Tools, factories, buildings, machinery
<b>Entrepreneurship</b>	<p><u>*Organizes the other 3 factors</u>            Special human skill, involves ability to innovate by developing plans to allow business operations to function</p> <ul style="list-style-type: none"> <li>- Takes on risk or success of the business</li> </ul>	Skills, knowledge

### **Opportunity Cost**

- The value of the **next best alternative** and must be given up to gain something else.
- Results from scarcity and having to make a choice

### **Productions Possibility Model**

- A simple model that shows the important economic concepts (scarcity, choice, opportunity costs).
- Represents all efficient combinations of two goods produced
- **Bowed out curve** = increasing opportunity cost
- **Bowed down curve** = decreasing opportunity cost

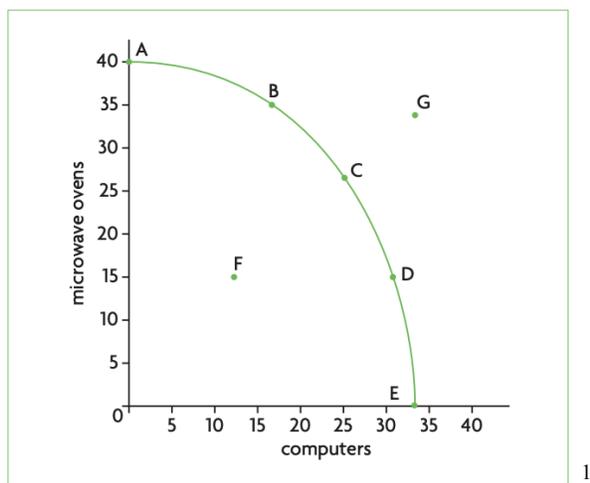
### Absolute Advantage

- When a good or service can be produced in a greater quantity and in a given amount of time

### Comparative Advantage

- When a good or service can be produced at a lower opportunity cost than another

### Example curve:



### Combination of the resources:

Point	Microwave ovens	Computers
A	40	0
B	35	17
C	26	25
D	15	31
E	0	33

<sup>1</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

<sup>2</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

- Curve represents the production possibilities when resources are allocated for this combination of resources: microwave ovens and computers.

## How Do Economists Approach the World?

- **Economists'** objective is to make decisions based on society's best interests.

### Economic decision-making:

- Based on assumptions and the outcome of certain decisions, made by posing statements that are positive and normative
- Positive economics:
  - Used to describe, explain, and predict outcomes
  - Based on positive, forward thinking
- Normative economics:
  - Basis of policy-making in government, based on beliefs of what outcomes should be

*\*\*These two economic basis of thinking for economist, work together to allow the economy to be successful*

## UNIT 2: Microeconomics

### WHAT IT IS

→ The behaviour of resource owners, firms, and consumers, where they make economic decisions in a market

### Competitive Markets

**Market:** A term referring to the relationship between sellers and buyers in terms of the exchange of good and services,. (Exists in all industries.)

#### The meaning of a competitive market:

- Where rivals compete to be able to reach a certain goal
- Example: Two firms may compete to see who can produce more output in a given amount of time.

### Supply and Demand

#### DEMAND:

**Law of Demand:** the negative relationship between price and quantity demand

*-As the price of goods increases, the quantity demanded decreases.*

#### Non-price determinants of market demand:

- Income with normal goods -- Refers to most goods, demand increases as a result of an increase in consumer income

- Example: shoes
- Income with inferior goods -- Demand falls as consumer income increases, consumers turn to more expensive alternatives
  - Example: used cars, second-hand clothing
- Preferences and tastes -- the good becomes more trendy or popular, demand increases
- Demographic changes -- increase in the number of buyers causes demand to increase, proves that market demand is the sum of all individual demands
- Price of substitute goods -- two goods that satisfy a similar need, a decrease in the price of one substitute results in a decrease in demand of the other substitutes (rightward shift)
- Price of complementary goods -- two goods that tend to be used together, a decrease in the price of one results in an increase in the demand of the other
- Number of consumers in the market

**REMEMBER:**

\*A change in **price** = change in the quantity demand = **movement** of demand curve,

&

\*A change in a **non-price** determinant = change in demand = **shift** of **entire** demand curve

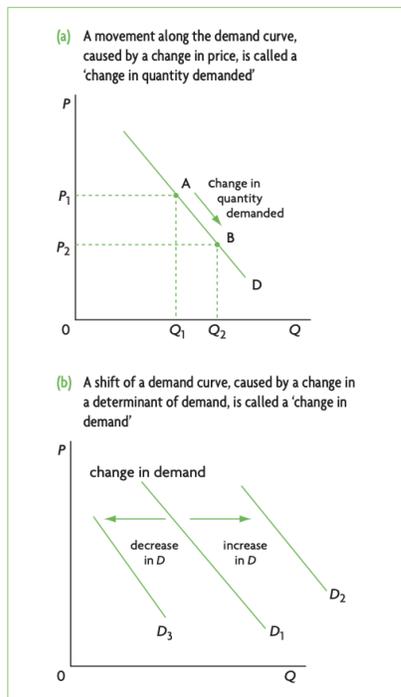


Figure 2.4 Movements along and shifts of the demand curve

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## SUPPLY:

**The Law of Supply:** Explains the positive/direct causal relationship between price and quantity supplied. (*As the price of the supplied good increases, the quantity also increases.*)

<sup>3</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

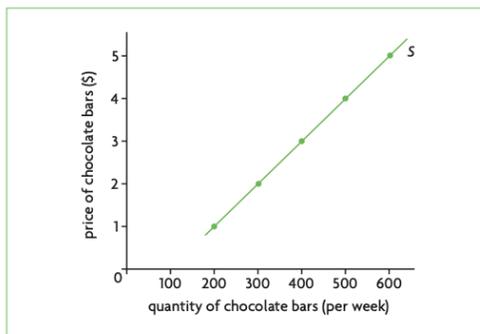


Figure 2.5 Supply curve for a firm

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*\*Higher prices = profit increase = incentive to produce more output*

*\*Lower prices = lower profitability = incentive to produce less output*

### **Non-price determinants of market supply:**

- Costs of factors of productions
  - Input prices -- land, labour, capital
  - Technology -- better technology = lower costs of production = higher profitability
  - Taxes (government intervention) -- imposes new tax or increases an existing tax = increase in production costs = decreased supply
  - Subsidies (government intervention) -- payment made to a firm by the government, opposite of tax, given to firms to increase production
- Prices of related goods (competitive supply) -- goods competing for the use of the same resources, each firm will end up producing more of one and less of the other
- Number of firms -- increases in number of firms producing the good = increased supply
- Unpredicted events/shocks -- includes unexpected events such as weather or war

<sup>4</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

## Market Equilibrium

- The point at which the quantity of both demand and supply are equal.

**Equilibrium:** when quantity supplied is equal to quantity demanded

- Here there is no tendency for the price to change
- Determined at the point where demand curve intersects supply curve
- At this point -- consumers are satisfied and won't make changes

**Disequilibrium:** excess demand (shortage) or excess supply (surplus)

- At any price other than the equilibrium price, there is a market disequilibrium

**Changes in Equilibrium:** when the non-price determinants of supply and demand change (There is a shift in the curve and the equilibrium price adjusts.)

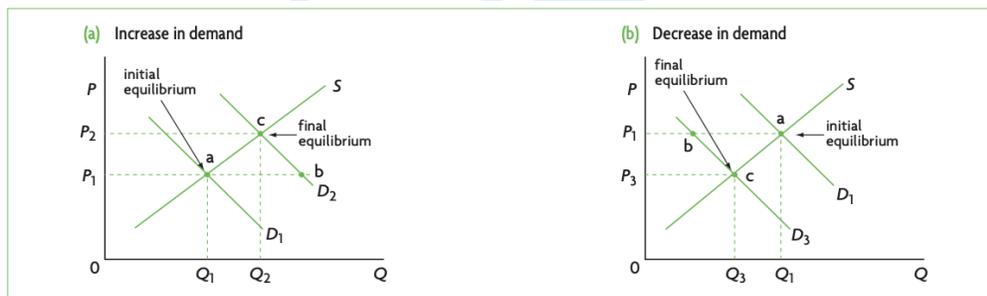


Figure 2.10 Changes in demand and the new equilibrium price and quantity

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<sup>5</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

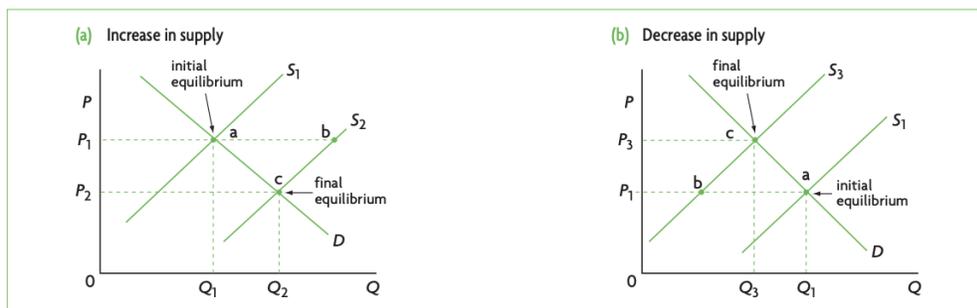


Figure 2.11 Changes in supply and the new equilibrium price and quantity

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\* { **Shortage** -- when quantity demanded is greater than quantity supplied }

{ **Surpluses** -- when quantity supplied is greater than quantity demanded } \*

## Elasticities

### PED - Price Elasticity of Demand

- Measures how responsive the demand of a good is to changes in its price

$$\text{price elasticity of demand} = PED = \frac{\text{percentage change in quantity of good X demanded}}{\text{percentage change in price of good X}}$$

If we abbreviate 'change in' by the Greek letter  $\Delta$ , this formula can be rewritten as:

$$PED = \frac{\% \Delta Q_x}{\% \Delta P_x}$$

Simplifying, the above formula can be rewritten as:

$$PED = \frac{\frac{\Delta Q_x}{Q_x} \times 100}{\frac{\Delta P_x}{P_x} \times 100} = \frac{\frac{\Delta Q_x}{Q_x}}{\frac{\Delta P_x}{P_x}}$$

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<sup>6</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

<sup>7</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

- The PED is a negative price because quantity demanded is negatively/indirectly related. THOUGH to avoid confusion, the **minus sign is dropped**.
  - The PED creates several possible values and ranges for it.

### PED Values, Characteristics, and What They Means

Value of PED	Classification	Interpretation
<b>Frequently encountered cases</b>		
$0 < PED < 1$ (greater than zero and less than one)	inelastic demand	quantity demanded is relatively unresponsive to price
$1 < PED < \infty$ (greater than 1 and less than infinity)	elastic demand	quantity demanded is relatively responsive to price
<b>Special cases</b>		
$PED = 1$	unit elastic demand	percentage change in quantity demanded equals percentage change in price
$PED = 0$	perfectly inelastic demand	quantity demanded is completely unresponsive to price
$PED = \infty$	perfectly elastic demand	quantity demanded is infinitely responsive to price

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### Determinants of PED:

1. Number of substitutes - the more there are, the higher the elasticity
2. Necessities vs. luxuries - demand for necessities is less elastic than that of luxuries, \*necessities are not as responsive to changes in price since we need and can't live without them
3. Length of time - the longer it takes for purchasing decision to be made, the higher the elasticity
4. Amount of income spent on a good - the more spent from one's income on a good, the higher the elasticity

<sup>8</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

## XED - Cross-price elasticity demand

- Measures how responsive the demand of one good is to the change in price of **another good**

cross-price elasticity of demand =  $XED = \frac{\text{percentage change in quantity demanded of good } X}{\text{percentage change in price of good } Y}$

$$XED = \frac{\% \Delta Q_x}{\% \Delta P_y}$$

which can be rewritten as:

$$XED = \frac{\frac{\Delta Q_x}{Q_x} \times 100}{\frac{\Delta P_y}{P_y} \times 100} = \frac{\frac{\Delta Q_x}{Q_x}}{\frac{\Delta P_y}{P_y}}$$

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## PES - Price Elasticity of Supply

- Measures the responsiveness of quantity supplied of a good to a change in price of the good. (along the supply curve)

price elasticity of supply =  $PES = \frac{\text{percentage change in quantity of good } X \text{ supplied}}{\text{percentage change in price of good } X}$

$$PES = \frac{\% \Delta Q_x}{\% \Delta P_x}$$

which can be rewritten as:

$$PES = \frac{\frac{\Delta Q_x}{Q_x} \times 100}{\frac{\Delta P_x}{P_x} \times 100} = \frac{\frac{\Delta Q_x}{Q_x}}{\frac{\Delta P_x}{P_x}}$$

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## PED Values, Characteristics, and What They Means

<sup>9</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

<sup>10</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

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## Determinants of PES

1. Length of time - responds to changes in price, adjusts their resources and quantity supplied
2. Mobility of factors of production - with how much ease and the pace at which companies adjust their resources and production
3. Extra capacity of firms - capacity not being used, makes it easier to increase output as a response to price increase of a good
4. Ability to store stocks - will likely have a higher PES than those that can't



## Role of Government in Microeconomics

### Indirect Taxes

- Imposed on spending of goods and services
- **Paid by consumers to producers**, and then from producers to governments
- Differs from *direct taxes*, which are paid by consumer directly to the government

**Excise taxes:** on particular goods and services (like gas and alcohol)

***Why they are imposed:***

<sup>11</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

1. Source of revenue for the government
2. Discourage consumption of goods that harm individuals (such a cigarettes)
3. Used to redistribute income
4. Improves inefficient resource allocation by improving negative externalities

### **Effects on Stakeholders**

Consumers - price increases

Producers - fall in price and quantity output of good sold

Government - positive, only stakeholder that gains from this tax

Workers - less output if fewer workers are needed for production, unemployment

### **Subsidies**

- A way for the government to **assist firms and consumers**
- Through direct cash payments, loans, and more
- Usually a **fixed** amount
- Allocation of resources due to how they affect relative price, **leading to higher production and consumption**

### ***Why they are imposed:***

- **Supports** growth of industries
- **Encourages** exports of certain goods
- To encourage production and consumption

### **Effects on Stakeholders**

Consumers - decrease in price and increase in quantity purchased

Producers - positive, high price and larger quantity leading to higher revenue

Government - negative, they take on the burden paying the subsidy

Workers - more workers hired, employment

## Market Failure

### WHAT IT IS

- **Failure of the market to achieve allocative efficiency - leading to overallocation or underallocation**

**Externalities:** happen when the producers and consumers give rise to negative and positive side effects who are not part of it (third-parties), come from either consumption or production activities

\*Positive - external benefits

\*Negative - external costs

**MPC, Marginal Private Costs:** costs to producers of producing one more unit of a good

**MSC, Marginal Social Costs:** costs to society of producing one more unit of a good

**MPB, Marginal Private Benefits:** benefits to consumers of consuming one more unit of a good

**MSB, Marginal Social Benefits:** benefits to society of consuming one more unit of a good

## \*Negative Externalities

### *Fixing it: Market-based policies to manage negative externalities*

- **Tax** - tax on output (per unit), tax on pollutants emitted (per unit) such as **carbon tax**
- **Tradable permits** - policy where polluting is permitted to firms by government

**Advantages:** these policies work to internalize the externality

**Disadvantages:** technical difficulties with designing the tax and risk of the effectiveness of the policy

## \*Positive Externalities

### **Positive production externalities**

- Underallocation of resources going towards a good with a positive production externality leads to **welfare loss**.
- These losses to society are a result of a **scarcity** of the good being produced.
- **Merit goods:** desired by consumers but are underallocated and underprovided by the producers

### *Ways of correcting positive production externalities*

- Government provisions
- Subsidies

### **Positive consumption externalities**

- Benefits created by consumers, externally and socially
- Welfare loss from this is seen in difference between MSB and MSC

### ***Ways of correcting positive consumption externalities***

- Government provision
- Legislation
- Advertising
- Subsidies

### **\*Sustainability with resources**

- **Sustainable resources** are able to reproduce and don't become depleted, because they are used correctly and at the right pace.
- Combines the economy and environment
  - Problem with sustainability - conflict between **economic and environmental goals**



## **UNIT 3: Macroeconomics**

### **WHAT IT IS**

- The study of how the economy function as a whole, on a much larger scale
- Looks at specific resource and product markets, and how people behave
- We study the total rather than each individual stakeholder alone

### **Main Objectives:**

- Full employment

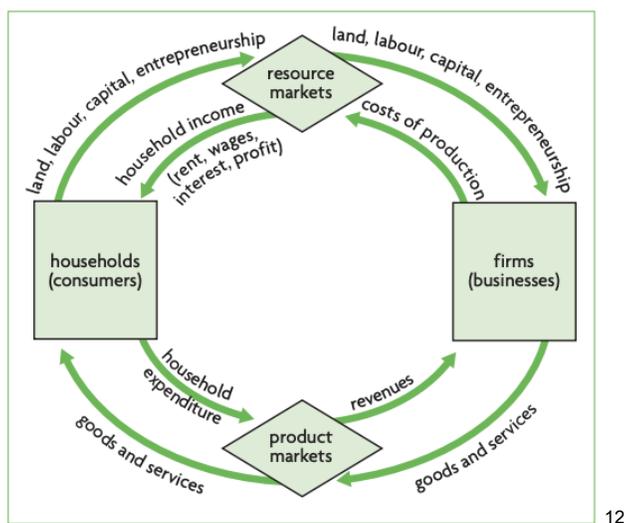
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- Stable rising price level
- Economics growth
- Equitable income distribution

## Economic Activity

### Overall Economic Activity

**Circular flow of income simple model (in a closed economy and no government):**



- Shows the concepts and relationships of the **macroeconomy**
- \*Shows that the value of output = total income generating in producing the output
- **4 factors of production and their payment methods:**
  1. Rent (for land)
  2. Wages (for labour)
  3. Interest (for capital)
  4. Profit (for entrepreneurship)

<sup>12</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

**Income flow:** from firms to households

**Expenditure flow:** from households to firms

### Leakages and Injections (withdrawals)

- Paired together, so whatever leaks out can come back through injections

**Leakages include:** *saving, taxes, imports*

**Injections include:** *investment, government spending, exports*

**Saving:** consumer income that isn't spent

**Investment:** spending of firms in order to produce capital goods

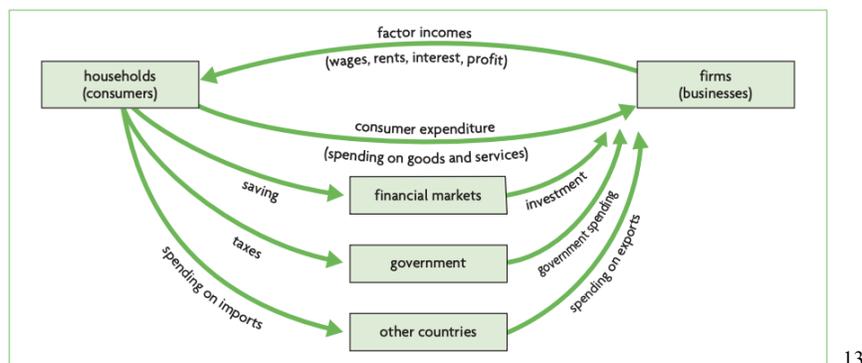
**Taxes:** paid by households to the government

**Government Spending:** funds that go towards government expenditures and go back into the expenditure flow

**Imports:** goods and services produced in other countries, purchased by domestic buyers

**Exports:** goods and services produced domestically, purchased by foreign buyers

**Circular flow of income, including leakages and injections:**



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### Measuring Economic Activity

- **Assesses economic performance overtime**
- **Compares income and output with other economies**
- **Creates a basis for developing policies to deal with economic issues**

**3 ways of measuring aggregate output** (all within a country, over a given period of time):

1. **Expenditure approach** - All the spending to buy final goods and services produced within a country is added up.
2. **Income approach** - All income earned by factors of production that lead to production of all goods and services.
3. **Output approach** - The value of all final goods and services produced.

**4 components of total spending:**

**Consumption (C):** spending/purchases by a household in a year, except housing

<sup>13</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

**Investment (I):** spending by firms on capital goods

**Government spending (G):** spending by government of factors of production

**Net Exports (X-M):** exports (X) - imports (M)

\* { Adding the 4 components, you get GDP:  $C + I + G + (X-M) = GDP$  } \*

**GDP:** The market value of all final goods and services produced in a country, in a given time period. (usually a year)

**GNI:** A form of aggregate output, which is the value of all final goods and services produced by a country's residents. (*regardless of where it came from*)

**Nominal value:** A measure of money value in terms of the price at the time it was measured.

**Nominal GDP:** current prices, doesn't account for price changes

**Real value:** A measure of value that looks at changes in price over time, rather than at the time.

**Real GDP:** price change overtime

\**Green GDP = GDP - value of environmental degradation*

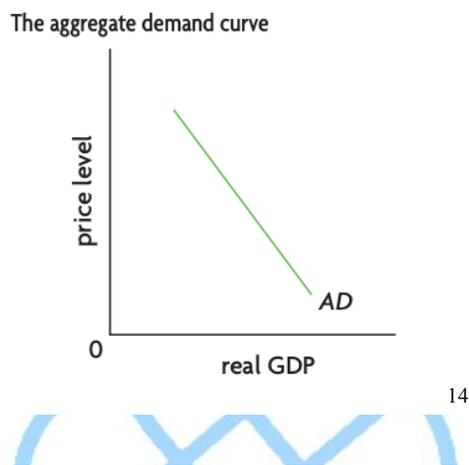
## Variations in Economic Activity: Aggregate Demand and Aggregate Supply

From <https://simplestudies.edublogs.org>

### Aggregate Demand and Curve:

**Aggregate demand (AD):** The total amount of aggregate output/real GDP that output buyers (consumers, firms, government and foreigners) want to buy at each of economy's price levels.

**AD Curve:** The relationship between total real output demanded by the 4 components and the economy's price level.



### Reasons for negative slope:

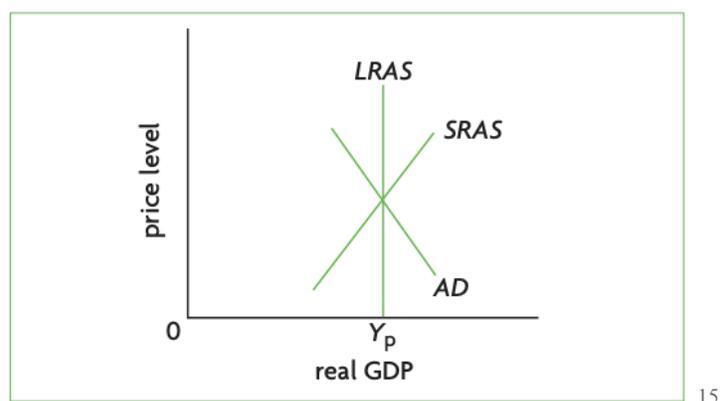
- **Wealth effect:** changes in price level affecting people's wealth, price level decrease = more output demanded, leading to downward movement along curve
- **Interest rate effect:** changes in price level affecting interest rates and then aggregate demand, price level increase = higher demand for money = increased interest rates = decreased consumer borrowing and investments, leading to downward movement along curve
- **International trade effect:** increase in domestic price level while other countries' stays the same = exports to become more expensive = less quantity demand, leading to downward movement along curve

<sup>14</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

## Aggregate Supply Curves and Changes

**Long-run aggregate supply (LRAS):** The **long-run** relationship between price level and aggregate output, shown with **LRAS Curve**.

**Short-run aggregate supply:** The **short-run** relationship between price level and aggregate output, shown with **SRAS Curve**.



- The LRAS and SRAS curve intersect, occurring at the GDP

**Inflationary gap:** output gap, actual equilibrium output is **greater** than potential output

**Deflationary gap:** output gap, actual equilibrium output is **less** than potential output

## Inflation and Deflation

**Inflation:** sustained **increase** in the overall price level

**Deflation:** sustained **decrease** in the overall price level

**Disinflation:** when inflation occurs at a **lower rate**, from one year to the other

<sup>15</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

**Consumer Price Index (CPI):** measures the cost of living for a household compared to a hypothetical basket of goods, measured through consumers

**Problems:**

- Different households experience *different inflation rates* due to different levels of income and consumption of goods and services.
- Different inflation rates *depend on cultural and regional factors*.
- There are changes in..
  - the quality of the goods and services
  - the consumption as a result of discounts, sales, deals
  - the consumption as a result of new products
  - the comparison to other countries around the world

**Producer Price Index (PPI):** The indices of prices that producers receive at a number of different stages in the production process, and measures level changes through producers not consumers.

**Consequences of Inflation:**

- A rise in inflation rates leads to risks and uncertainties with certain stakeholders:
  - **People with fixed income/wages** -- as inflation rises, they become worse off
  - **People with income/wages that increases at a lower rate than inflation** -- when it doesn't keep up, their income will fall
  - **Cash holders** -- as inflation rises, cash value and purchasing power decreases
  - **Money savers** -- when rate of interest is lower than rate of inflation, their money goes down in value and results in less savings

**An appropriate rate of inflation:**

- A low and stable rate, in the range of 2-3% each year
- Not a zero rate, because this is too close to deflation

### Causes and Consequences of Deflation:

- **Deflation** (like inflation) creates uncertainties for firms because of the decreasing price levels, making it difficult for them to make changes in their prices
- **Wages of workers don't easily fall** -- difficult for firms to lower prices and wages since profit would decrease, so they keep them high
- **Oligopolistic firms fear price wars** -- when one lowers price, the other follows, so firms avoid lowering their prices
- **Firms want to avoid lowering menu costs** -- believe deflation is only for short period of time, and so they keep prices the same

## Economics of Inequality and Poverty

### Issue of Equity and Income Distribution:

- Because of unequal distribution in areas of factors of distribution, there is inequity when it comes to how income is distributed.
  - Example: People may want to work, but lack skills that firms look for when hiring.

### Issue of Poverty

- The inability to satisfy minimal needs of consumption due to a lack of basic financial and other essential resources.

**Absolute poverty:** defines minimum income level (poverty line) to sustain a family's basic needs

**Relative poverty:** compares income of households and individuals to median incomes and related to how equally incomes are distributed among the population

### Causes:

- Low income
- Unemployment

From <https://simplestudies.edublogs.org>

- Low levels of ownership - of capital and land
- Discrimination
- Age
- Demographics
- Inaccessibility of social services

### **Consequences:**

- Low standards of living
- High infant/child mortality rate
- Lack of access to healthcare, aid, and education
- Higher risk of preventable diseases - due to lack of resources and aid
- Unable to reach full potential - in terms of talent, education, career

## **Demand-Side Policies: Monetary and Fiscal Policy**

### **Fiscal Policy:**

**Fiscal Policy:** The manipulation by the government of its own expenditures, taxes, and spending to influence economic conditions.

**Expansionary fiscal policy:** for eliminating a deflationary/recessionary gap, works to **expand aggregate demand**

**Contractionary fiscal policy:** for eliminating an inflationary gap, works to **contract aggregate demand**

### *These policies can:*

- Increases government spending
- Decreases business taxes

- Decreased personal income taxes

### ***Strengths:***

- Pulls an economy out of a severe recession/deflation
- Spending of the government directly impacts aggregate demand and is made certain that changes in spending **will** be made
- Affects long-term growth of the economy in terms of potential output

### ***Weaknesses:***

- Time lags
- Political pressure and constraints
- Deficit spending
- Unable to deal with instability in terms of supply
- Tax cuts may not increase aggregate demand (risk)

### **Monetary Policy:**

**Monetary policy:** A policy carried out by banks and regulates money supply, interest and exchange rates, and borrowing in order to achieve macroeconomic goals.

### **The role central banks play (in every country):**

- ***Bankers for the government*** -- (for the government) They hold cash deposits, receive payments, make payments, and manage government borrowing.
- ***Bankers for commercial banks*** -- (for commercial banks) They hold cash deposits and loans.
- ***Conductor of the monetary policy*** -- Responsible for this policy, which involves making changes to money supply, interest and exchange rates, and borrowing.

**Chart: Demand-side policies for recessionary and inflationary gaps**

## Expansionary policy (in recession)

Type of policy	Measures	Effects
Fiscal policy	increase government spending	increase AD
	lower personal income taxes → increase consumption spending	increase AD
	lower business taxes → increase investment spending	increase AD
Monetary policy	increase supply of money → lower interest rate →	
	(i) increase consumption spending	increase AD
	(ii) increase investment spending	increase AD

## Contractionary policy (in inflation)

Type of policy	Measures	Effects
Fiscal policy	decrease government spending	decrease AD
	raise personal income taxes → decrease consumption spending	decrease AD
	raise business taxes → decrease investment spending	decrease AD
Monetary policy	decrease supply of money → raise interest rate →	
	(i) decrease consumption spending	decrease AD
	(ii) decrease investment spending	decrease AD

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## Supply-Side Policies

**Supply-side policy:** The production and supply side of the economy, specifically to aggregate supply.

### Two categories:

1. **Interventionist:** relies on government involvement to achieve economic goals
2. **Market-based:** relies on competitive markets to achieve economic goals

### Interventionist supply-side policies include..

- Investments in human capital (education and healthcare), infrastructure, new technology, industrial policies, and improving the accessibility to healthcare

### Market-based supply-side policies include..

1. **Encouraging competition**
  - Privatisation -- transfer of ownership from public to private sector
  - Deregulation -- eliminating or reducing government regulation of private activities
  - Private financing of public activities

<sup>16</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

## 2. *Labour market reforms*

- Eliminating or reducing minimum wage legislation
- Weakening power of labour unions
- Reducing unemployment benefits
- Reducing job security

## 3. *Incentive-related policies*

- Lowering personal income taxes
- Lowering business taxes
- Lowering taxes on capital investments



## UNIT 4: International Economics

### What is trade?

- It involves buying and selling goods and services internationally.

**Globalization:** The spread of products, tech, info, jobs across the globe.

- Main mechanism - international trade

**Absolute advantage (recall):** when the country is the only source of a product or is able to make more of a product using the same or fewer resources than others

- France has this advantage in wine, though is being challenged by Italy and Spain

**Comparative advantage (recall):** when a good or service can be produced at a lower opportunity cost than another

**Opportunity cost (recall):** The benefit you miss when one alternative is chosen over the other.

**Efficiency:** The output for a given amount of time and within a given amount of resources.

**Balance of trade:** The difference in value of a nation's imports and exports during a specific period. \*exports-imports\*

**Balance of payments:** The difference between flow of money into the country and flow going out. \*includes everything - imports, exports, tourism, loans, foreign aid\*

**Trade surplus:** The selling of more products than purchasing, results in favourable balance

**Trade deficit:** The purchasing of more products than selling, unfavourable balance

## { 2 Key Measures of Effectiveness of International Trade }

### 1. Managing the National Credit Card

- Trade deficits aren't always bad. It's good if the economy is strong enough to keep growing.
- Trade surpluses can be bad possibly for consumers, and the domestic goods prices might get high.

### 2. Balance of payments

- Having unfavourable balance of payments is bad for the stability of a country's currency.  
(esp in long run)
- Many are worried about the U.S dollar due to this. (They have many negative balances, and to cover the debt, they borrow from other countries.)
  - \*U.S imports more than it exports\*

## Benefits of International Trade

### Why Nations Trade:

- *High monetary value for international trade*
  - *Different countries produce different products*
  - *Economies of scale*
  - *Gaining resources needed by a certain country*
  - *Free trade*
  - *New ideas and technology*
  - *Reduces hostility and violence between countries*
  - *Increases competition*
  - *Greater efficiency in production process*
  - *Foreign exchange*
- ~ Overall economic growth ~

**Importing:** buying products overseas and reselling in one's country

- For many - this is the **biggest link to the global market**

**Exporting:** selling domestic products to foreign customers

- Companies can identify an international market and become exporters to get into the global arena.

***Factors to consider when deciding between importing and exporting:***

1. Cost of labour
2. Knowledge capital
3. Resource availability

**International licensing agreement:** Allows foreign companies to sell domestic company's products or use its property in exchange for royalty fees.

**International franchise:** when domestic companies give foreign companies the **right to use its brand and sell its products** (A popular form of global expansion, expanding overseas)

- Example: McDonalds, KFC, hotel chains

**Types of Trade Protection**

**Tariff:** The **most common form of trade restriction**, which protects domestic industries from foreign competition and increases revenue for the government.

**Effects:**

- **Increased quality supplied, decreased quality demanded**
- Domestic consumers are at a disadvantage
- Domestic producers are at an advantage

- Foreign producers are at a disadvantage
- Government earns revenue from the tariffs

**Quota:** The limit on the amount of goods that can be imported over a certain period of time (usually a year), and the effects are tariffs.

**Embargo:** **extreme quota**, where imports and exports to a country are banned

**Dumping:** selling exported goods below the price that producers would normally charge in domestic market

**Subsidies (recall):** government payments to certain industries to **promote and regulate trade**

## Exchange Rates

**Exchange rates:** value of one currency relative to another

## U.S. Dollar

### Hypothetical exchange rate between US dollar and Euro:

- Number of US dollars per euro:  $1.5 \text{ dollars} = 1 \text{ euro}$
- Number of euros per dollar:  $0.67 \text{ euro} = 1 \text{ dollar}$
- Estimates 62% of world's currency reserves (IMF), most commonly traded
  - Foreign Currency Reserves: assets held by central banks in foreign currencies
  - Kept as backup funds in in the case where nation currency devalues
- **Post World War 2** - currency of western EU, Australia, Japan were pegged by USD
  - Pegged: country maintains its currency value at fixed exchange rate relative to USD

- Relative strength is strong
- Many countries adopted/rely on USD, thus are willing to hold large amounts of it

**Strengthening dollar:** buys more of another currency

**Weakening dollar:** buys less of another currency

### **Changes in Exchange Rate**

**Appreciation:** an increase in the exchange rate for a currency

- Caused by increase in demand or increase in supply
- Requires a **higher amount of the foreign currency** to purchase one dollar
- Dollar is worth more in this case
- More expensive for foreigners to buy exports, cheaper for countries to buy imports

**Depreciation:** a decrease in the exchange rate for a currency

- Caused by increase in demand or increase in supply
- Requires **less of the foreign currency** to purchase one dollar
- Dollar is worth more in this case
- Cheaper for foreigners to buy exports, more expensive for countries to buy imports

*\*Both appreciation and depreciation affect imports and exports*

### **Causes of changes in exchange rate:**

- Foreign demand for domestic exports
- **Domestic demands for imports**
- Relative **inflation rates**

- Investment from foreign countries
- Changes in **income**

### ***Effects of changes in exchange rate:***

- **Cost-push inflation**
- **Demand-pull inflation**
- Effects **employment**
- Effects economic growth
- Effects on foreign debt

### **Balance of Payments**

1. **Balance of payments:** All transactions between residents of a country and residents of all other countries. (usually over the course of a year)
- **Having unfavourable balance of payments is bad** for the stability of a country's currency, especially for the long term  
(Many are worried about the U.S dollar due to this)
    - They have many negative balances, and to cover the debt, they borrow from other countries
- \*U.S also imports more than it exports\***

### ***Structure of the balance of payments:***

#### **Includes:**

1. Balance of trade in goods
2. **Current transfers**
3. **Balance on current amount**
4. Capital account
5. Financial account

### ***Example of balance of payments***

<b>Current account</b>	
1. Exports of goods	+40
2. Imports of goods	-65
<b>Balance of trade in goods (items 1+2)</b>	<b>-25</b>
3. Exports of services	+25
4. Imports of services	-15
<b>Balance of trade in services (items 3+4)</b>	<b>+10</b>
<b>Balance of trade in goods and services (items 1+2+3+4)</b>	<b>-15</b>
5. Income (inflows minus outflows)	-6
6. Current transfers (secondary income) (inflows minus outflows)	+1
<b>Balance on current account (items 1+2+3+4+5+6)</b>	<b>-20</b>
<b>Capital account</b>	
7. Capital transfers (inflows minus outflows)	+0.7
8. Transactions in-produced, non-financial assets (inflows minus outflows)	+0.3
<b>Balance on capital account (items 7+8)</b>	<b>+1</b>
<b>Financial account</b>	
9. Direct investment (inflows minus outflows)	+23
10. Portfolio investment (inflows minus outflows)	-4
11. Reserve assets (official reserves)	+1
<b>Balance on financial account (items 9+10+11)</b>	<b>+20</b>
12. Errors and omissions	-1
<b>Balance (sum of all items from 1 to 12)</b>	<b>0</b>

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<sup>17</sup> Ellie Tragakes, *Economics for the IB Diploma* (Cambridge: Cambridge University Press, 2020).

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