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1. Basic Economic Ideas and Resource Allocation

1.1 Scarcity & Choice

The fundamental economic problem: of scarcity arises due to unlimited human wants of consumption exceeding finite economic resources for production.

- **Consumption:** is process by which consumers satisfy their wants.
- **Production:** is process of creating goods and services in an economy
- Needs are necessary, wants are not.
  - Thus, choices have to be made at all levels
- Consumers – maximum satisfaction.
- Producers – maximum profit.
- Governments – maximum benefits.
  - **Choice:** is the need to make decision about the possible alternative uses of scarce resources due to scarcity. It gives rise to the concept of opportunity cost and the 3 basic economic problems.
  - **Opportunity cost:** is the cost of choosing something in terms of the benefit derived from the best alternative forgone.
  - **Economic resources/factors of production:** are inputs available for production of goods are [sic] services.

1.2 Factors of Production

Factor	Definition	Reward
Land	Natural resources	Rent
Labour	Physical and mental human effort	Wage
Capital	Man-made resources	Interest
Enterprise	Production organization, risk-bearing	Profit

- **Specialization:** is the concentration of production of certain goods and services of comparative advantage at any level.
  - Division of labour: is the process whereby a manufacturing process is split into a sequence of individual tasks to allow workers to specialize.

1.3 Division of Labour

Advantages	Disadvantages
• Time saving. • Application of technology. • Increase in skill. • Increased productivity. • Higher earnings.	• Dependency on others. • Dependency on technology. • Boredom, mistakes. • Loss of skills. • Unemployment.

- Specialization gives rise to need of markets, to trade surpluses and shortages and money, as a means of exchange.

1.4 Resource Allocation in Different Economic Systems

- Different economic systems answer the 3 basic economic questions differently.
  - Note, that mixed economics try to gain advantages and avoid disadvantages of both market and planned economies.

Question	Market economy	Planned economy
What to produce	Price mechanism	Cost-benefit analysis
How to produce	Least cost combination	Directives to SOEs
For whom to produce	Purchasing power	Vulnerable groups

Comparison between market & planned economies

Feature	Market economy	Planned economy
Ownership	Private	State
Decision	Consumers	Governments
Mechanism	Price mechanism	Directives to SOEs
Key sector	Private	Public
Public goods	Absent	Present
Profit motive	Present	Absent
Other names	Free enterprise, private enterprise, *laissez faire*	Central, collectivist, state-owned.
Examples	USA	North Korea

- Note that in reality, all economic systems are mixed.
- SOE: State-owned enterprise.

Market economy

Advantages	Disadvantages
• Efficiency. • Consumer sovereignty. • Government freedom. • Quick response. • Profit incentive. • Maximizes producer and consumer surplus.	• Information failure. • Public goods not provided • Merit goods under-consumed. • Demerit goods over-consumed. • Negative externalities. • Unemployment of resources. • Factor immobility. • Market power abuse. • Advertising distortion. • Too much consumer goods. • Poor lack purchasing power. • Inflation.

Planned economy

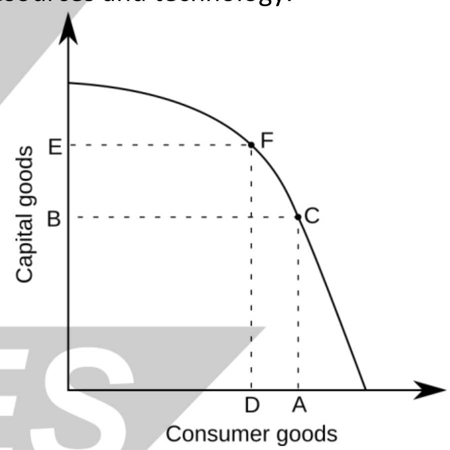
Advantages	Disadvantages
• Provision of public goods. • Merit goods encouraged. • Demerit goods discouraged. • Full cost-benefit analysis. • Full employment. • Wasteful duplication avoided. • Vulnerable groups protected.	• No incentives; low production. • Low competition; efficiency. • Bureaucracy. • Unresponsive. • Too much of capital goods. • Lack of consumer sovereignty.

- **Transitional economy:** is one which is in process of changing from a planned economy to a mixed economy where market forces have greater importance.
- **Issues of transition:**
  - o Inflation.
  - o Industrial unrest.
  - o Fall in output.
  - o Unemployment.
  - o Balance of payments' deficit.
  - o Reduction in welfare services.

- **Economic structure:** refers to the way in which an economy is organized in terms of sectors and their contributions to the economy's GDP.
- **GDP:** i.e. gross domestic product is the total value of all goods and services produced in a country over a year.
  - o Primary sector: Extraction.
  - o Secondary sector: Manufacture.
  - o Tertiary sector: Service.
  - o Quaternary sector: Information.
- As economies develop, their structures change progressing from primary to secondary to tertiary activities.
  - o Note that the quaternary sector is considered to be a part of the tertiary one.

1.5 Production Possibility Curves

Production possibility curve: is one which joins together the different combinations of products that can be produced in an economy, over a period of time, given existing resources and technology.



- It is also known as production transformation frontier, boundary or a production transformation curve. It demonstrates the ideas of choice, trade-offs and opportunity cost.
- Point inside curve indicates unemployment and point on curve shows full employment. This is productive efficiency.
- Point shifting occurs owing to allocative efficiency.
- Production point shifting from C to F requires a reallocation of resources to capital goods and factor mobility determines the speed of this. This would act as an investment, shifting the PPC to the right. This indicates economic growth.
- **Factor mobility:** is extent of reallocation of resources or ease of moving factors of production.

- **Investment:** is expenditure of capital goods, both fixed and working.
- **Economic growth:** is an expansion in the productive capacity in an economy.
  (Lowering of long-run average cost, i.e. LRAC ensures this.)
- **Other causes of PPC shifting right:**
  - New resources.
  - Increased labour supply.
  - Improvements in human capital.
  - Improved resource management.
  - Privatisation.
- **Straight** PP line indicates constant opportunity cost which is next to impossible.
- **Curved** PP line indicates increasing opportunity cost which occurs when the extra production of one good involves ever-increasing sacrifices of another as less suitable economic measures have to be diverted into the production of the former, increasing marginal cost and decreasing productivity.

1.6 Economic Simplifications for Modeling

- **Ceteris paribus:** is a Latin term meaning "all other things being equal", i.e. the other factors which could influence a relationship between 2 variables are assumed to be constant.
- **Margin:** is the point at which the last unit of a product is produced or consumed. Decision making at all levels is based on choices at the margin, since post-behaviour optimization any change will be detrimental, ceteris paribus.

TIME DIMENSION

Run	Variables
Short	All factors of production but one.
Long	All factors of production.
Very long	All factors of production and key inputs, e.g. technology, regulations, social opinions, etc.

Statement	Basis	Type
Positive	Facts	Objective
Normative	Value judgments	Subjective

- **Value judgments:** reflect particular beliefs, while facts: are evident to all.

1.7 Money

- **Money:** is anything which is universally acceptable as a means of payment for goods and services. Most money, except coins is 'legal tender' for settlement of debt.
- **Functions:**
  - Medium of exchange.
  - Measure of value.
  - Standard for deferred payment.
  - Store of value.
- **Characteristics:**

Acceptability.	Scarcity.
Divisibility.	Stability of supply and value.
Portability.	Recognizable.
Durability.	Uniformity.

- **Advantages over barter:**
  - Avoids double coincidence of wants.
  - Permits evaluation.
  - Enables giving change.
  - Eases saving.
- **Barter:** is the direct exchange of one product for another. It was used before money.

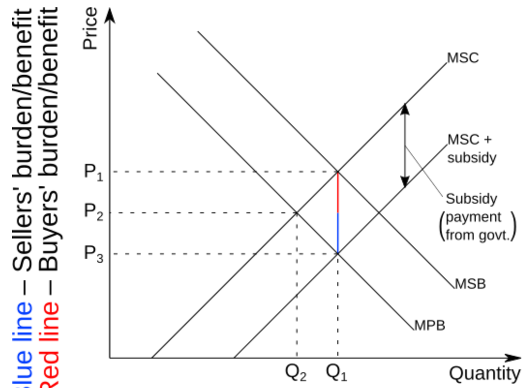
Cash + Bank deposits = Money

- **Cash:** includes the notes and coins in an economy. It is the most liquid form of asset.
- **Bank deposits:** are money held in accounts with a financial institution, e.g. bank, building, society, etc.
- **Liquidity:** refers to the extent and ease of converting a non-cash asset into cash.
- **Near money:** or 'quasi-money' are non-cash assets that can be quickly and easily converted into cash.
- **Cheques:** are written instruction to a financial institution to pay an amount of money from an account. So, they are means of payment through bank deposits, not money.

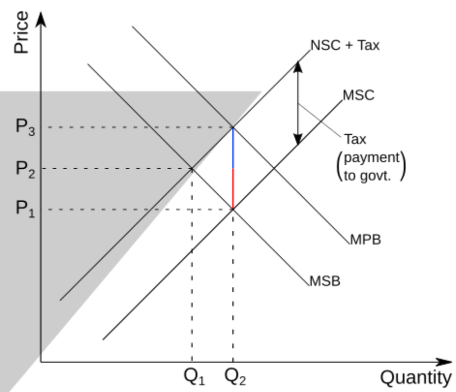
1.8 Classification of Products

Good	Opportunity cost & scarcity	Rivalry	Excludability	Free-rider	Rejectability
Free	✗	✗	✗	✓	✗
Economic/ Private	✓	✓	✓	✗	✓
Public	✓	✗	✗	✓	✗

- **Rivalry:** refers to extent to which consumption limits availability.
- **Excludability:** refers to extent to which free-riders can be prohibited from consumption.
- **Free-rider:** is someone who has no incentive to pay for the consumption of a product.
- **Rejectability:** refers to extent to which consumers can avoid consumption of a product.
- **Quasi-public goods:** are those which have some but not all characteristics of public goods.
- **Merit good/Demerit good:** is a product which has positive/negative externalities, but would be under/over consumed and produced in a market economy as a result of imperfect information held by consumers.
- **Imperfect information:** is a situation in which producers and consumers lack information needed to make rational decisions, causing inefficiency. It is also known as information failure. 2 situational examples in welfare economics include:
  - **Moral hazard:** is the tendency of people who are insured or otherwise protected to take greater risks due to information failure by producer.
  - **Adverse selection:** is where information failure by consumer leads to unsuitable person obtaining insurance.
- **Imperfection:** is a situation where a market doesn't behave as expected, resulting in misallocation of resources.
- **Paternalism:** is a situation where society knows best and has some right to make a value judgment.
- **Subsidies:** are government grants to:
  - Lower market prices of essential goods.
  - Encourage merit goods.
  - Equitably redistribute income.
  - Directly provide free merit goods and services, e.g. education , healthcare, etc. (This may cause allocative inefficiency and extra tax burden)
  - Raise producer's income, especially farmers.
  - Allow exporters to compete globally.
  - Reduce import dependence by helping domestic producers of close substitutes.



Under-production and consumption of a merit good (*MSB* > *MPB* due to positive externalities)



Over-production and consumption of a merit good (*MSB* < *MPB* due to negative externalities)

2. The Price System & the Micro Economy

2.1 Demand & Supply Curves

- **Demand/supply:** is the quantity of a product that **consumers/producers** are willing and able to **buy/sell** at various prices per period time.
- **Note** that demand & supply are also referred as market forces or the invisible hand.
- **Laws of demand/supply:**

$$Supply \propto Price \propto {}^{1}/_{Demand}$$

- **Schedules:** lists these relations while **curves:** graphically represent them.
- **Notional demand/supply:** isn't backed up by ability to **pay/sell** but effective **demand/supply** is.
- **Individual:** refers to a certain producer/consumer in the **market:** which is an arrangement for buyers and sellers to trade.
- Products in joint demand/supply: are produced/consumed together.

- Products in alternative demand/supply: are those whose consumption/production reduces need/availability of the other.
- Multi-purpose products have composite demand.
- Products which help in producing other product have a demand **derived** from the product produced.
- **Note:** As **income** rises, demand of **normal** goods rises, **inferior** good falls.
- Contractions/Extensions of demand/supply: are movement along curves due to changes in price, while:
- Shifts of demand/supply: are movements of the whole curve due to changes in conditions.
- Their effects on equilibrium price, quantity and revenue will depend on degree of shifting and price elasticity of other curve.

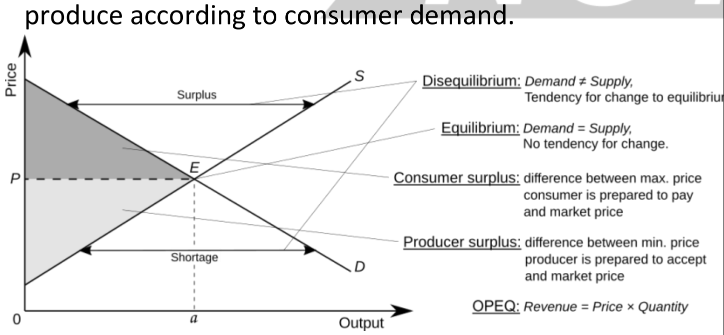
Demand conditions	Supply conditions
• **Disposable income.** • **Price of related products.** • **Taste and fashion.** • **Population structure.** • **Price speculation.** • **Income distribution.** • **Taxes and subsidies.**	• Costs of production. • Price of related products. • Climate. • Technology. • Government regulations. • Availability of resources. • Taxes and subsidies.

Note: Effect of taxes and subsidies on demand and supply will depend on: **impact, incidence and type of taxation.**

2.2 Interaction of Market Forces

Prices:

- Signal surpluses/shortages.
- Ration resources to uses.
- Transmit preferences by encouraging producers to produce according to consumer demand.



2.3 Elasticities of Market Forces

- **Elasticity:** is responsiveness of quantity **demanded/supplied** to a change in **price, income or prices of related products.**
- **Note:** It is a numerical measure of the inverse of the gradient, so lower elasticity gives steeper curve.

Elastic	**>1**	Perfectly elastic	**∞**	Horizontal line
Inelastic	**<1**	Perfectly inelastic	**0**	Vertical line
Unitary	**=1;**	**Such PED gives rectangular hyperbola, i.e. change in demand/supply doesn't affect revenue.**		

$PED = \frac{\% \Delta QD}{\% \Delta P}$	**(−)ve; used to inspect** revenue and tax effects**.**	
$PES = \frac{\% \Delta QS}{\% \Delta P}$	(+)ve; indicates **allocative efficiency** and need to expand.	
$YED = \frac{\% \Delta QD}{\% \Delta Y}$	(+)ve – **normal good**	(−)ve – **inferior good**
$PED = \frac{\% \Delta QD}{\% \Delta P\ (another)}$	(+)ve – **substitutes**	(−)ve – **complements**

PED conditions	PES conditions
• Time period. • No. of substitutes. • Degree of necessity. • Durability. • Proportion of income.	• Time period. • Availability of resources. • Spare capacity/stocks. • No. of firms in market. • Allocative efficiency of factors.

3. GOVERNMENT MICROECONOMIC INTERVENTION

3.1 Microeconomic Problems & Policies

Governments intervene to reduce market failure.

Problem	Solution
Free riders	Finance public goods by taxation.
Income inequality	Taxes, benefits.
Merit goods	Provision, subsidies, information, regulation, max. price.
Demerit goods	Tax, regulation, information, min. price.
Pollution	Tax, regulation, tradable pollution permits.
Private monopolies	Regulation.

Note: Most methods will strain state funds.

3.2 Taxes, Subsidies and Transfer Payment

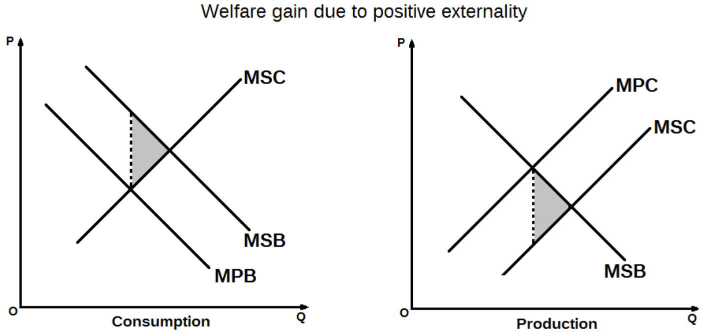
Fiscal measure	Levied on/ Given to	Shift	Burden/Benefit
Direct tax	Income	D ←	Consumer
Indirect tax	Expenditure	S ←	Elastic demand – producer & converse
Subsidy	Consumer	D →	Consumer
Subsidy	Producer	S →	Inelastic demand – consumer & converse

Note: Specific measures cause parallel shift, *ad valorem* ones non-parallel.

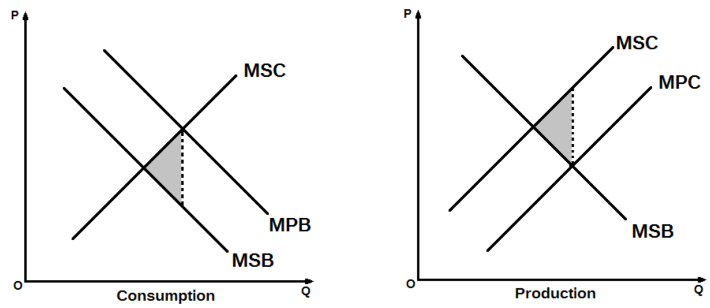
Tax type	Advantages	Disadvantages
Direct	• Economic stability • Progressive • Certain & convenient • Redistribute income	May discourage: • Saving • Effort • Risk-taking
Indirect	• Economic stability • May not discourage effort • Difficult to evade • Can be adjusted quickly • Discourage imports • Discourage demerit goods	• Regressive • Inflationary • Reduce consumer surplus • Move demand abroad • Distort choice • Effect depends of *PED*

Aims of taxes	Canons of taxes
• Demerit goods • Income distribution • Release resources • Discourage imports • Demand/supply management	• Cost • Efficiency • Equity • Transparency • Convenience

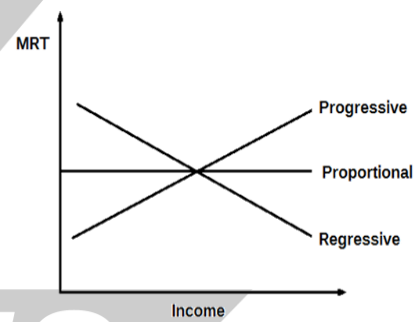
Welfare gain due to positive externality



Welfare loss due to negative externality



- **Impact of tax:** refers to unit on which a tax is levied.
- **Incidence of tax:** refers to burden of taxation.
- **Specific tax:** is paid in fixed amount.
- ***Ad valorem* tax:** on consumption, is paid as **percentage** of value of product.
- **Average rate of tax:** is the average percentage of total income that is paid in taxes.
- **Marginal rate:** is the **proportion of additional income** that is taken in income tax.
- **Marginal rate of taxation:** is the **addition to tax** paid out of change in income.



- **Transfer payment:** is a **govt. provided benefit to poor units, without protective effort**; so funds shift from **taxpayers to recipients**.
- **Means-tested benefit:** is paid to units whose income is below a level.
- **Universal benefit:** is paid to units without **income reference**.
- **Poverty-trap:** is a situation in which an individual has **work-disincentive**, as additional income will be taken away as **taxes & lost benefits**.
- **Negative income-tax:** is a system which brings together payment of tax and receipt of benefits thus, making markets more flexible by removing poverty-traps.

3.3 Price Control

Max. price control: is where a price ceiling is established **below** equilibrium price, creating a **shortage.**	**Min. price control:** is where a price floor is established **above** equilibrium price, creating a **surplus.**
-Cheap essentials	**-Demerit goods**
-Rent control	**-Proper wages**
-Restriction of fares	**-Import reduction**
-Queueing	**-PED dependent**
-Corruption	**-Unemployment**
-Black market	**-Smuggling**

- **Buffer stock:** is an amount of a commodity held to limit price fluctuation.

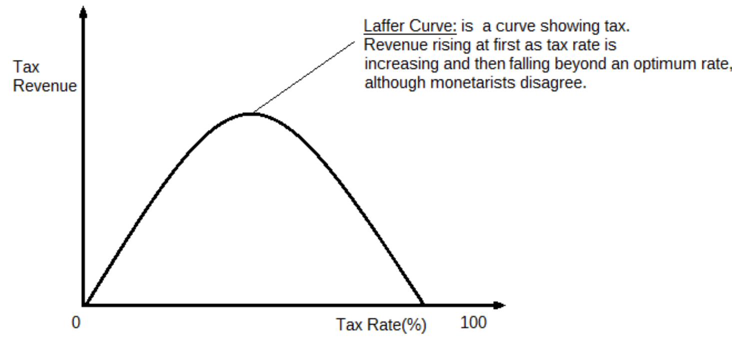
Prevents wide fluctuation	**It has costs**
Income stability	**Equilibrium price hard to establish**
Long-term planning	**High surpluses/shortages may strain stock**

3.4 Nationalisation & Privatization

- **Nationalisation:** is a process whereby private sector firms become part of the public sector of economy, with state involved in **direct provision of goods and services**.
- **The converse is: Privatization:** which is achieved by **sale of assets, deregulation, outsourcing & franchising.**

	Advantages	Disadvantages
Nationalisation	• Economies of scale. • Avoids wasteful duplication. • CBA is involved. • Private monopoly prevented.	• Inefficient. • Non-competitive. • Political-mileage. • SOE monopoly.
Privatization	• Economic efficiency. • Enterprise encouraged. • Lower price. • Govt. revenue. • Growth by investment.	• Private monopoly. • Wasteful duplication. • Unemployment. • Non-regular funds. • Regulations needed.

- **Government failure:** occurs when government intervention reduces economic performance rather than increasing, thus failing to correct market failure, due to:
  - o Imperfect information
  - o Policy conflicts
  - o Political mileage
  - o Corruption



4. The Macro Economy

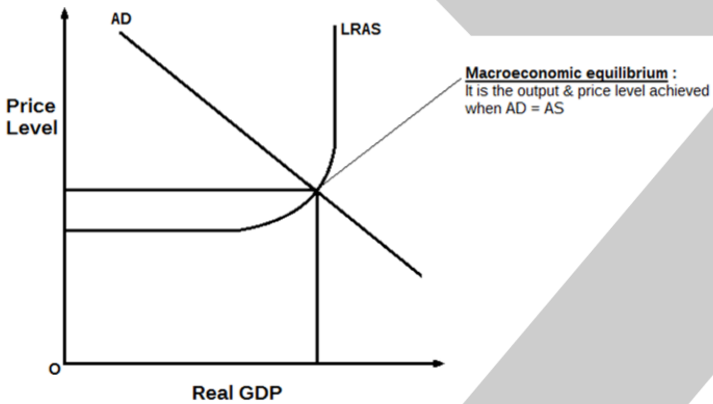
4.1 Aggregate Market Forces

- **Macroeconomy:** is the economy as a whole.
- **Aggregate demand** (AD)**:** is the total spending on an economy's goods and services, at a given price level in a given time period.

It consists of:	**Movement along it is caused by:**
-Consumption (C)	-Wealth effect.
-Investment (I)	-International effect.
-Government expenditure (G)	-Interest rate effect.
	-Note: $AD = C + I + G + (X - M)$

- **It shifts because:**
  - o **Consumption:** •Consumer confidence •Wealth •Income tax •Money supply •Population.
  - o **Investment:** •Business confidence •Technology •Corporation tax
  - o **Government expenditure:** •Policy •Bureaucracy
  - o **Net exports:** •Exchange rate •Incomes abroad •Product quality
- **Aggregate supply** (AS): is the total output (real GDP) that producers in an economy are willing and able to buy in a given time period.
- **Short-run aggregate supply** $(SRAS)$: is the total output that will be supplied in an economy when there hasn't been enough time for factor prices to change.
- **Long-run aggregate supply** $(LRAS)$: is the total output of an economy that will be supplied in the period when factor prices have fully adjusted.
  - o **Keynesians:** believe that government intervention is needed for employment.
  - o **New classical economists:** believe that $LRAS$ curve is vertical and that an economy will achieve full employment without government intervention.

- **Movement along $SRAS$ is caused by:**
  - o Profit effect.
  - o Cost effect.
  - o Misinterpretation effect.
- **It shifts because:**
  - o **Factor prices:** •Wage rates unmatched by productivity •Raw material costs
  - o **Taxes:** • Corporation • Indirect
  - o **Productive potential:** (represented by PPC, also affects $LRAS$)
  - o **Resource quantity:** -Net immigration -Working years -Net investment -Labour force participation rate -New resources -Land reclamation
  - o **Resource quality:** ▪ Technology ▪ Education and training



4.2 Inflation

- **Inflation:** is a sustained increase in general price levels in an economy over a given time period, causing a fall in purchasing power of a currency.
- **Creeping inflation:** has a low rate.
- **Hyper-inflation:** has an exceptionally high rate of inflation, which may result in people losing confidence in currency.
- **Inflation rate can be measured by CPI or RPI:**
  - o Selecting a **stable base year** for comparison.
  - o Carrying out **surveys** to find spending patterns.
  - o Attaching **weights** to products to indicate relative importance.
  - o Finding out **price changes**.
  - o Multiplying **weights by price changes**.
- **Deflation:** is a sustained decrease in general price levels in an economy over a given time period, causing a rise in purchasing power of a currency.
- **Disinflation:** is a fall in the inflation rate.

Causes	Inflation	Deflation
Good	$AD \uparrow$	$AS \uparrow$
Bad	$AS \downarrow$	$AD \downarrow$

- **Money values:** are of prices operating at the time.
- **Real values:** are adjusted for inflation.
- **Menu costs:** are incurred by firms for having to change prices.
- **Shoe-leather costs:** are incurred by firms moving money for high-interest.
- **Fiscal drag:** is pushing of income into **higher tax brackets** by inflation.
- **Inflationary noise:** is confusion over relative prices.
- **Causes of inflation:**
- **Cost-push inflation:** is caused by increases in costs of production decreasing aggregate supply, e.g.
  - o Wages rising by more than productivity.
  - o Raw material costs rising (**especially imported ones**).
  - o Increase in indirect/corporate taxes.
  - o Rise in profit margins.
- **Demand-pull inflation:** is caused by increase in aggregate demand unmatched by equivalent rise in aggregate supply, e.g.
  - o Consumer boom.
  - o Money supply growing faster than output (**monetarist**)
  - o Growing budget deficit.
  - o Increase in net exports.

Advantages	Disadvantages
• Reduction in net exports.	• Stimulate output.
• Unplanned redistribution of income.	• Reduce burden of debt.
• Investment discouragement.	• Prevent some unemployment.
• Unemployment.	**Factors effecting extent of consequences**
• Cost-wage spiral.	• Cause of inflation.
• Menu costs.	• Rate of inflation.
• Shoe-leather costs.	• Stability.
• Fiscal drag.	• Expectancy
• Inflationary noise.	• Comparability.

4.3 Balance of Payments

- **Balance of payments:** is a record of a country's economic transactions with the rest of the world over a year. It consists of:

Current account:	Financial account:
• Visible trade in goods • Invisible trade in services • Income, e.g. profits, interest • Current transfers (no exchange involved)	• Direct investment • Portfolio investment • Reserve assets • Other investment
Capital account:	**Balancing item:**
• Capital transfers • Nonfinancial assets	• Net errors and omissions

Note: Money into country, credit (+) items, e.g. export.
Money out of country, debit (−) items, e.g. import.

- **Balance of payments equilibrium/disequilibrium:** occurs when net inflow of money in a country is **(not)** equal to the net outflow of money over a period of years, thus government intervention **is (not)** required.
- **Note:**
  - **Surplus:** $Credit > Debit$
  - **Deficit:** $Credit < Debit$
  - **Short-run deficit:** self-correcting
  - **Long-run deficit:** non-self-correcting
- **Causes of disequilibrium:**

Consequences of disequilibrium	
Domestic	**External**
• Change in money supply • Change in government policies • Changes in standard of living owing to different access of imports. • Confidence & FDI levels change, leading to changes in AD, employment, growth etc	• Change in exchange rate both appreciation & depreciation naturally and artificial devaluation & evaluation. • Government pressured to change protectionist measures.

- **Current account:**
  - ❖ Deficit owing to limited domestic production and lack of confidence in over-priced & poor-quality products.
  - ❖ Overvalued exchanged rate, high inflation & low productivity.
  - ❖ Trade cycle and exchange of economic resources.
- **Capital account:**
  - ❖ Debt forgiveness
  - ❖ Sale of patents, copyrights, etc.
- **Financial account:**
  - ❖ Hot money flows
  - ❖ Lack of business confidence
- **Balancing item:**
  - ❖ Imperfect information
  - ❖ Smuggling, black market

4.4 Exchange Rates

- **Factors determining exchange rate:**
  - **Balance of payments disequilibrium** – Deficit causes reduction.
  - **Inflation rate** – High rate reduces confidence, hence demand.
  - **Foreign direct investment** – Inflows increase rate.
  - **Speculation** – Acts in a way to aggravate problem.
- **Purchasing power parity:** is a way of comparing international living standards by using an exchange rate based on amount of each currency needed to purchase some basket of products.
- **Nominal exchange rate:** is price of one currency in terms of another.
- **Trade-weighted exchange rate:** is price of one currency against a basket of weighted currency.
- **Real effective exchange rate:** is a currency's value in terms of its real purchasing power.

$$\therefore Real\ effective\ exchange\ rate = \frac{Nominal\ exchange\ rate \times Domestic\ price\ rise}{Foreign\ exchange\ rate}$$

Effect of changing exchange rates		
	Aspect	**Effect**
Domestic	**Inflation**	Depreciation will make imports more expensive. **(Imported cost push inflation)**
	Unemployment	Appreciation will make exports more expensive reducing AD.
	Economic growth	Depreciation will reduce terms of trade, leading to economic growth if Marshall-Lerner condition holds.

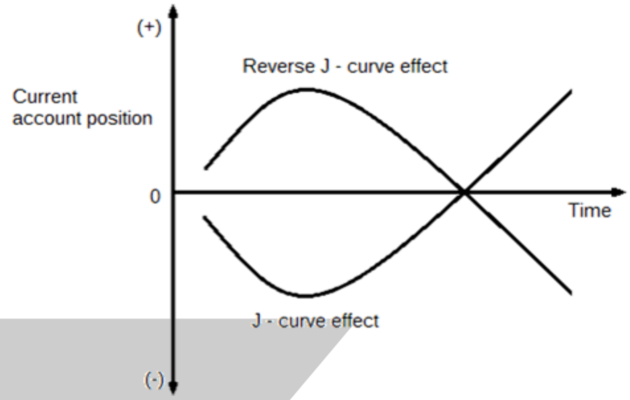
	Aspect	Effect
External	Capital flows	If change in exchange rate is speculated to be beneficial for an economy, money will flow into economy.
	Hot money	Depreciation causes people to speculate further fall withdrawing money and causing further fall. **(Marshall-Lerner condition doesn't hold.)**

Term	Appreciation	Depreciation	Revaluation	Devaluation
Rate	Increase ↑	Decrease ↓	Increase ↑	Decrease ↓
Cause	Market forces		Government	

- **Types of exchange rates:**
  - o **Floating exchange rate:** is determined by market forces of demand and supply.
  - o **Managed float:** is influenced by state intervention.
  - o **Dirty float:** is deliberately set low to gain a trade advantage.
  - o **Fixed exchange rate:** is set by government and maintained by the central bank buying and selling the currency and changing the interest rate.
- **Speculation:** means people predicting and gambling on the exchange rate of a currency.

Fixed	• **Advantages** o Encourages trade by certainty. o Perusal of macroeconomic objective. o Imposes discipline on government. • **Disadvantages** o Pressure from market forces. o Requires reserves of foreign currency. o Interest rate can't be used to affect economy. o No automatic restoral of current account.
Floating	• **Advantages** o No foreign currency reserves needed. o Automatic adjustment of current account. o Maintaining exchange rate is not an objective, so interest rate can be used for other aims. • **Disadvantages** o May discourage trade by uncertainty. o Subject to ratchet effect by speculation. o Reduces pressure on government.

- **Marshall-Lenner condition:** states that sum of PED of exports and imports must be >1 for depreciation to be successful in reducing current account deficit.
- **J-curve effect:** is a depreciation raising current account deficit before reducing as it takes time for demand to respond, i.e. PED is inelastic in short-run.



4.5 Terms of Trade

- **Terms of trade:** is ratio of export prices to import prices.

$$\therefore \textit{Terms of trade index} = \frac{\textit{Index of export prices}}{\textit{Index of import prices}} \times 100$$

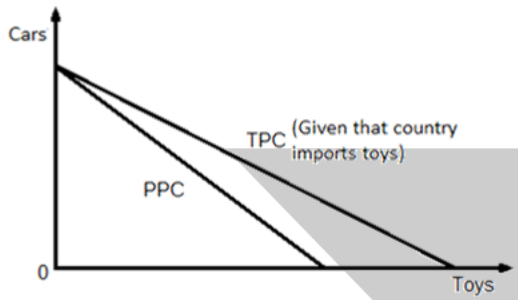
- **Globalization:** is the expansion of world trade in goods and services, together with capital flows, leading to greater international interdependence, reducing terms of trade for importing countries and increasing terms of trade for exporting countries.
- **Other factors influencing terms of trade:**
  - o PED
  - o Competition
  - o Economic development
  - o Protectionist measures
  - o Exchange rate
  - o Population growth
  - o Individual market forces of demand & supply of exports & imports
- **Note that ToT tends to move against primary producing countries (Prebisch-Singer hypothesis)**
- **Impact of changes in terms of trade:** is good if caused by rise in demand or fall in costs of production.

$ToT \uparrow$	PED >1	C.A.(−)
	PED <1	C.A.(+)

$ToT \downarrow$	PED >1	C.A.(−)
	PED <1	C.A.(+)

4.6 Principles of Absolute and Comparative Advantage

- **Absolute advantage:** is the ability to produce more of a product than another country using same amount of resources.
- **Comparative advantage:** is ability to produce **at lower opportunity cost.**
- **Trading possibilities curve:** is the consumption possibilities of rations post specialization and trade at any term of trade.



4.7 Trade Blocs

- **Free trade:** is unprotected exchange of products between countries.
- **Trade bloc:** is a regional group of countries that have entered into trade agreements.
- **Free trade area:** is where member countries indulge in free trade.
- **Customs union:** is a free trade area with **common external tariff.**
- **Economic union:** is a customs union with **common economic policies.**
- **Monetary union:** has **common currency or mutual exchange rate.**
- **Trade creation:** is transfer of consumption from high to low cost products.
- **Trade diversion:** is transfer of consumption from low to high cost products.
- **Shadow economy:** is output of products excluded from official national income figures.

4.8 Protectionism

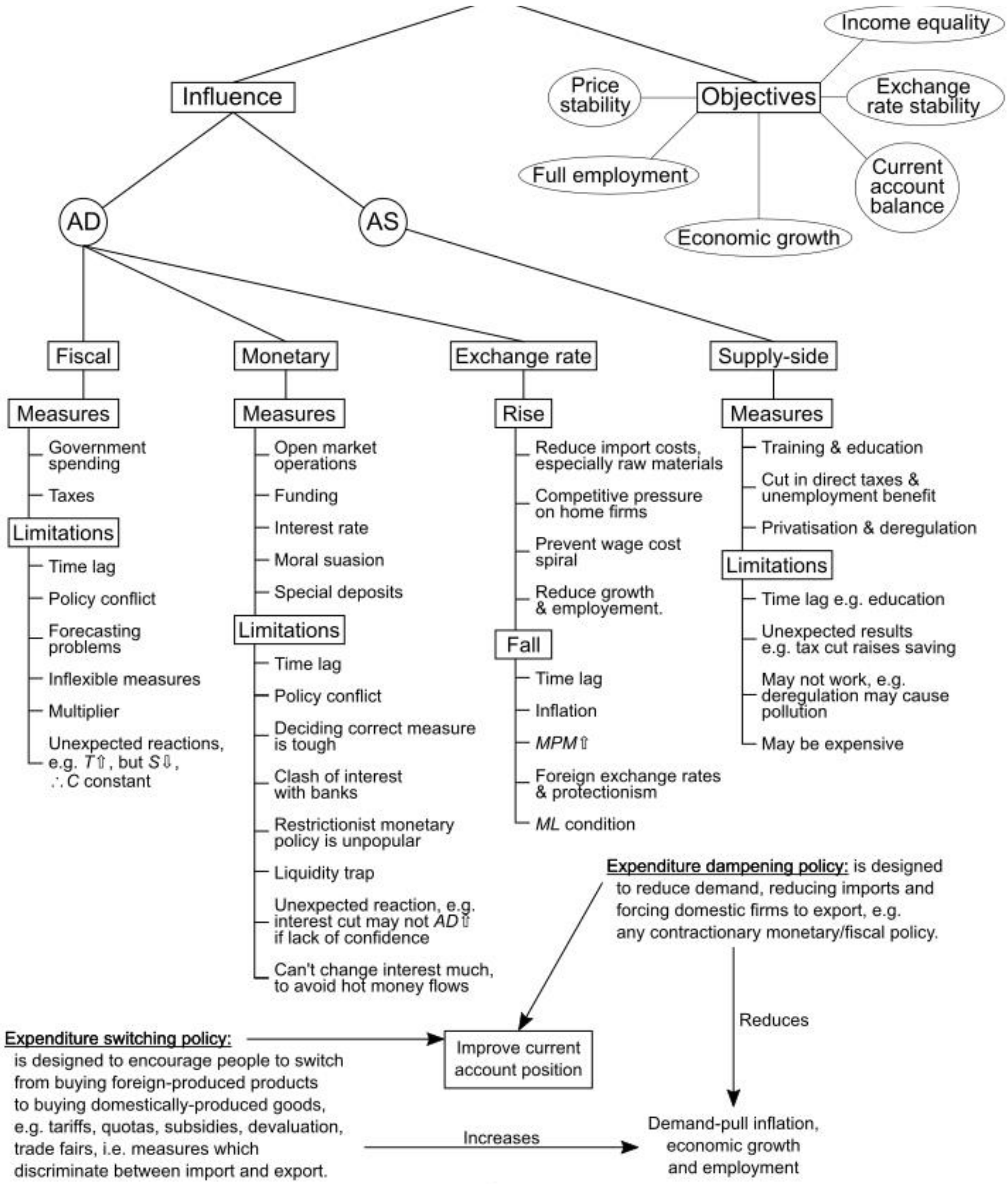
- **Protectionism:** is an action designed to help domestic products from foreign competition by reducing international trade.

Measures include:

- Tariffs (tax)
- Quotas (limits)
- Foreign currency exchange control
- Export subsidies
- Embargoes (bans)
- Voluntary export restraint (agreed limit)
- Red tape (administrative delays)
- Dirty float exchange rate.

Free trade	Protectionism
• Foreign products within reach • Greater variety • Better quality • Lower price • Greater competition • Larger market • Economies of scale • More sales • Importing raw materials • Spread of ideas & technology	• Avoids over specialization • Improve terms of trade • Reduce current account deficit • Protect employment • Retaliation • Raise revenue • Prevent dumping • Infant/sunrise industries • Declining/sunset industries • Strategic industries

5. Macroeconomic Policies



Budget: is an annual statement in which government outlines plans for its spending and tax revenue.

Cyclical deficit: is caused by economic activity change while structural one by imbalance between spending and tax revenue.

Inflation target: is the rate a central bank is set to achieve to keep prices stable. (around 5%)

Tradeoff: is when, in order to obtain an economic aim, it is necessary to accept an adverse effect on another. This is related to opportunity cost and *PPC*.

Stagflation: is high levels of both unemployment & inflation.