

### Topic 1: Introduction

positive analysis	descriptive, make a claim how the world is
normative analysis	prescriptive, make a claim how the world ought to be
comparative advantage	when comparing opportunity costs of two producers, produce at lower cost than anyone else
opportunity costs	What it costs someone to produce something is the opportunity cost – the value of what is given up
trade-off	Best allocation of your resources in order to make better decisions.
incentive	Decision making may change, when involved costs and benefits change. People respond to incentives → motivation
model	Models are purposeful representations of (parts of) the economic system and simplify reality in order to improve our understanding of it
macroeconomics	The study of production, employment, prices and policies on a nationwide scale
microeconomics	the study of economics in an individual, group, or company level.
marginal change	describe small incremental adjustments to an existing plan of actions
productivity	the amount of goods and services produced from each hour of a workers' life

### Topic 2: Demand and Supply

market	a group of buyers and sellers of a particular good or service.
competitive market	many buyers and sellers. Each has a negligible impact on the market outcome.
price taker	As sellers (and buyers) have no influence on the prices they are said to be price takers.
law of demand	if, other things being equal (ceteris paribus), the price of a good rises, the quantity demanded falls and vice versa; the quantity demanded is negatively related to the price
normal good	a good for which – ceteris paribus – an increase in income leads to an increase in demand.
inferior good	is a good for which – ceteris paribus – an increase in income leads to a decrease in demand.
substitutes	two goods for which an increase in the price of one leads to an increase in the demand for the other
complements	two goods for which an increase in the price of one leads to a decrease in the demand for the other.

### Topic 2: Demand and Supply (cont)

law of supply	the quantity supplied of a good rises, if – ceteris paribus – the price of the good rises; the quantity supplied is positively related to the price supply schedule: the relationship between the price of a good and the quantity supplied shown in a table
individual supply curve	supply curve of an individual firm
individual demand curve	demand curve of an individual customer or firm
market supply curve	Sum of all individual supply curves horizontally to obtain the market supply curve
market demand curve	sum of the individual demand curves horizontally to obtain the market demand curve
market equilibrium	quantity supplied and demanded are equal. The price that balances supply and demand is called equilibrium price and the related quantity equilibrium quantity

### Topic 2: Demand and Supply (cont)

price elasticity of demand	a measure of how much the quantity demanded of a good responds to a change in the price of that good, computed as the percentage change in quantity demanded divided by the percentage change in price
price elasticity of supply	how much does the quantity supplied of a good respond to a change in the price of that good, computed as the percentage change in quantity supplied divided by the percentage change in price.
cross price elasticity of demand	a measure of how much the quantity demanded of one good responds to a change in the price of another good, computed as the percentage change in quantity demanded for the first good divided by the percentage change in the price of the second good
income elasticity of demand	a measure of how much the quantity demanded of a good responds to a change in consumers' income, computed as the percentage change in quantity demanded divided by the percentage change in income.

### Topic 2: Demand and Supply (cont)

inelastic	Inelastic is an economic term referring to the static quantity of a good or service when its price changes. Inelastic means that when the price goes up, consumers' buying habits stay about the same, and when the price goes down, consumers' buying habits also remain unchanged. Demand is said to be inelastic if the quantity demanded responds only slightly to changes in the price.
unit-elastic	a change in price will cause an equal proportional change in quantity demanded
elastic demand	Demand for a good is said to be elastic if the quantity demanded responds substantially to changes in the price

### Topic 3: Market and welfare

tax incidence	to the distribution of a tax burden. determined by the elasticity of the demand and the supply curve
welfare economics	the study of how the allocation of resources affects economic well-being
willingness to pay	the maximum amount that a buyer will pay for the good

### Topic 3: Market and welfare (cont)

consumer surplus	a buyer's willingness to pay minus the amount the buyer actually pays. measures the benefits to buyers of participating in the market.
producer surplus	is the amount a seller is paid for a good minus the seller's cost, and producer surpluses measure the benefit to sellers for participating in a market.
total surplus	the sum of consumer and producer surplus
deadweight loss	The fall in total surplus that results when a tax (or some other policy) distorts a market outcome
efficiency	If an allocation of resources maximizes total surplus we say that it is an efficient allocation. markets (in equilibrium) produce the efficient quantity of a good.
equity	deal with the fair distribution of economic prosperity among members of society

### Topic 4: Market Failure

regressive tax	high-income taxpayers pay a smaller fraction of their income than do low-income tax-payers
proportional tax	high-income and low-income taxpayers pay the same fraction of income
progressive tax	high-income taxpayers pay a larger fraction of their income than do low-income tax-payers

### Topic 4: Market Failure (cont)

**negative extern-ality** arises when a person engages in an activity that (directly, not through market prices) negatively influences the well-being of another person without this person being compensated for the harm caused by the other person.

**positive extern-ality** arises when a person engages in an activity that positively (directly, not through market prices) influences the well-being of another person without this person having to pay for the benefits received caused by the first person's activity

**public good** Neither excludable nor rival. People cannot be prevented from using it and one person's use does not diminish other person's ability of using such a good.

**common resource** one person's use of the common resource reduces other person's ability to use it. not excludable but rival

### Topic 4: Market Failure (cont)

**benefit principle** People should pay taxes based on the benefits they receive from governmental services. This principle tries to make public goods similar to private goods. A person who uses lots of a public goods should pay more for it.

**ability-to-pay principle** Taxes should be levied on people according to how well these people can carry the burden. The idea behind is that all people should carry an equal burden when it comes to contributing to governmental expenses. (Because of what is conceived as a burden also depends on one's own income / wealth the ability-to-pay principle does not imply a lump-sum tax.)

**lump-sum tax** where everybody pays the same amount

### Topic 5: Cost of Production

**opportunity cost** the cost of something is what you have to give up to get it.

**total cost** the market value of the inputs it uses for production of its outputs

**profit** Profit = total revenue - total cost, in words it would be that the profit is the subtraction of total revenue with total costs

### Topic 5: Cost of Production (cont)

**total revenue** the amount a firm receives for the sale of its output

**production function** relationship between quantity of inputs used to make a good and the quantity of output of that good

**fixed costs** Costs that do not vary with the quantity of output produced

**variable costs** costs that vary with the quantity of output produced

**marginal costs** the increase in total costs that arises from an extra unit of production.  $MC = \Delta TC / \Delta Q$

**average fixed costs** fixed costs divided by the quantity of output

**average variable costs** variable costs divided by the quantity of output

**average total costs** total costs divided by the quantity of output.  $ATC(\text{average total costs}) = TC(\text{total costs}) / Q(\text{quantity})$

**economies of scale** the property whereby long-run average total cost falls as the quantity of output increases

**diseconomies of scale** the property whereby long-run average total cost rises as the quantity of output increases

**constant returns to scale** the property whereby long-run average total cost stays the same as the quantity of output changes

### Topic 6: Monopoly and Oligopoly

monopoly	A firm is a monopoly if it is the sole seller of a product and if this product has no close substitutes.
oligopoly	a market structure in which only a few sellers offer identical or similar products.
cartel	A group of firms that agree to cooperate in such a way that the output of a particular good is restricted, and prices are driven up
monopolistic competition	a market structure in which many firms sell products that are similar but not identical
price discrimination	a business practice of selling the same good at different prices to different customers
Nash equilibrium	a situation in which economic actors interacting with each other choose their best strategy given the strategies all other actors have chosen
game theory	The study of strategic decision making by interacting individuals or firms. Best outcome is hard to reach when not cooperating with each other
dominant strategy	When a firm chooses a strategy to get the most payoff, no matter what the other firm chooses, then it is called Dominant strategy

### Topic 8: Macroeconomics

Frictional unemployment	the time period between job when a worker is searching for, or transitioning from one job to another
structural unemployment	Unemployment caused by lack of demand for workers specific type of labour
labour productivity	(=connectivity) -the amount of output a typical worker turns out in an hour
potential GDP	the maximum sustainable amount that the economy will produce in the long run
cyclical unemployment	unemployment due to recession // the portion of unemployment that is attributable to a decline in the economy's total production.
GDP	is the value of all final goods and services produced within a country's border in a specific period of time, usually a year // The market value of all goods and services newly produced in a country in one year
nominal GDP	Gross domestic product not adjusted for inflation
real GDP	Gross domestic product adjusted for inflation

### Topic 9: Stimulating economics

Production function	Shows how much output an economy can produce depending on a varying input (e.g. labour) for given other factors (e.g. capital, technology).
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### Topic 9: Stimulating economics (cont)

growth policy	Policies that increase the growth of the GDP (e.g. increasing the limit of work hours)
an economy's human capital	Human capital is the knowledge, education, training etc, possessed by an individual or population.
research and development – R&D	activities aimed at inventing new products or processes, or improving existing ones
formal and informal institutions	Formal institutions are all the legal rules that restrict (or allow) economic and other type of development. This also includes rules and regulations to ensure legal compliance. Informal institutions are norms, and other “unwritten” rules that determine human behaviour.
marginal propensity to consume	is the ratio of changes in consumption relative to changes in disposable income that lead to the change in consumption. The MPC tells us how much more consumers will spend if disposable income increases by €1.

### Topic 10: Unemployment and/or inflation

**Recessionary gap** The difference between real and potential GDP is called recessionary gap // A situation wherein the real GDP is lower than the potential GDP at the full employment level

**inflationary gap** The difference between real and potential GDP is called an inflationary gap// the amount by which the actual GDP exceeds the full employment GDP

**income-expenditure diagram** With the support of the income-expenditure diagram we are now able to derive the aggregate demand curve

**stagflation** The consequence is stagflation (inflation while the economy is growing slowly or is in a recession). A period of stagflation is part of the normal aftermath of a period of excessive aggregate demand.

**recession** when two successive quarters or six months show a decrease in real GDP

**depression** a severe recession

**inflation** an increase in a currency supply relative to the number of people using it, resulting in rising prices of goods and services over time

**deflation** a decrease in the general price level of goods and services

### Topic 11: Money

**Commodity money** This is an object in use as a medium of exchange but which also has a substantial value in alternative (nonmonetary) uses (e.g. cigarettes, cattle,...)

**fiat money** Fiat money is money that is decreed as such by the government. It is of little value by itself but maintains its value because people have faith that the issuer will stand behind the pieces of printed paper and limit their production

**fractional reserve banking** is a system under which bankers keep as reserves only a fraction of the funds they hold on deposit

**bank run** A bank run occurs if more people want their money back than what the bank holds as reserves. Then there is the risk that the bank collapses

**central bank** An institution that manages a country's currency, alters money supply, and sets interest rates. It may also act as a lender of last resort to banks

### Topic 11: Money (cont)

**expansionary/contractionary monetary policy** Monetary policy that expands (reduces) the monetary supply normally lowers (increases) interest rates. // Government policies aimed at changing the money supply or interest rates in order to stimulate or slow down the economy.

### Topic 12: Fiscal Policy

**Automatic stabilisers** is a feature of the economy that reduces its sensitivity to shocks such as sharp increases or decreases in spending

**national debt** is the government's total indebtedness at a moment in time. It is the result of previous deficits (and surpluses)

**budget surplus** an excess of tax revenue over government spending

**budget deficit** is the amount by which the government's expenditure exceed its receipts during a specified period of time, usually a year

### Topic 12: Fiscal Policy (cont)

**structural budget deficit/surplus** To seek a better measure of deficit or surplus, the concept of structural budget deficit or surplus has been developed. This hypothetical measure replaces both spending and taxes in the actual budget by estimates of how much the government would be spending and receiving (given current tax rates and expenditure rules) if the economy were operating at some fixed, high-employment level.

**Fiscal policy** The way a government adjusts its spending levels and tax rates to monitor and influence a nation's economy → adjusting government spending or taxes

### Topic 14: Exchange rate

**Currency appreciation** an increase in the value of a currency as measured by the amount of foreign currency it can buy

**currency depreciation** a decrease in the value of a currency as measured by the amount of foreign currency it can buy

**devaluation** (if a unit of a nation's currency can buy fewer units of foreign currency)

### Topic 14: Exchange rate (cont)

**revaluation** (if a unit of a nation's currency can buy more units of foreign currency)

**balance of payments deficit** The balance of payments deficit is the amount by which the quantity supplied of a country's currency (per year) exceeds the quantity demanded

**balance of payments surplus** The balance of payments surplus is the amount by which the quantity demanded of a country's currency (per year) exceeds the quantity supplied.

**foreign reserves** assets held by a central bank or other monetary authority, usually in various reserve currencies, mostly the United States dollar

**fixed exchange rates** when a government sets its own exchange rate

**flexible exchange rates** also known as floating exchange rates is when the equilibrium is set by supply and demand

