

GLOSSARY

ability-to-pay principle the idea that taxes should be levied on a person according to how well that person can shoulder the burden

absolute advantage the comparison among producers of a good according to their productivity

accounting profit total revenue minus total explicit cost

adverse selection the tendency for the mix of unobserved attributes to become undesirable from the standpoint of an uninformed party

agent a person who is performing an act for another person, called the principal

aggregate demand curve a curve that shows the quantity of goods and services that households, firms and the government want to buy at each price level

aggregate risk risk that affects all economic actors at once

aggregate supply curve a curve that shows the quantity of goods and services that firms choose to produce and sell at each price level

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

Arrow's impossibility theorem a mathematical result showing that, under certain assumed conditions, there is no scheme for aggregating individual preferences into a valid set of social preferences

automatic stabilizers changes in fiscal policy that stimulate aggregate demand when the economy goes into a recession, without policy makers having to take any deliberate action

average fixed cost fixed costs divided by the quantity of output

average revenue total revenue divided by the quantity sold

average tax rate total taxes paid divided by total income

average total cost total cost divided by the quantity of output

average variable cost variable costs divided by the quantity of output

balanced budget where the total sum of money received by a government in tax revenue and interest is equal to the amount it spends, including any debt interest owing

balanced trade a situation in which exports equal imports

Bank of England the central bank of the United Kingdom

bank run when a substantial number of depositors suspect that a bank may go bankrupt and withdraw their deposits

benefits principle the idea that people should pay taxes based on the benefits they receive from government services

bond a certificate of indebtedness

budget constraint the limit on the consumption bundles that a consumer can afford

budget deficit an excess of government spending over government receipts

budget surplus an excess of government receipts over government spending

business cycle fluctuations in economic activity, such as employment and production

capital the equipment and structures used to produce goods and services

capital flight a large and sudden reduction in the demand for assets located in a country

cartel a group of firms acting in unison

catch-up effect the property whereby countries that start off poor tend to grow more rapidly than countries that start off rich

central bank an institution designed to regulate the quantity of money in the economy

circular-flow diagram a visual model of the economy that shows how money and production inputs and outputs flow through markets among households and firms

classical dichotomy the theoretical separation of nominal and real variables

closed economy an economy that does not interact with other economies in the world

Coase theorem the proposition that if private parties can bargain without cost over the allocation of resources, they can solve the problem of externalities on their own

collateralized debt obligations pools of asset-backed securities that are dependent on the value of the assets that back them up and the stream of income that flows from these assets

collective bargaining the process by which unions and firms agree on the terms of employment

collusion an agreement among firms in a market about quantities to produce or prices to charge

commercial paper short-term promissory notes issued by companies with a maturity ranging up to 270 days but averaging at 30 days

commodity money money that takes the form of a commodity with intrinsic value

common currency area a geographical area, possibly covering several countries, in which a common currency circulates as the medium of exchange

common resources goods that are rival but not excludable

comparative advantage the comparison among producers of a good according to their opportunity cost

compensating differential a difference in wages that arises to offset the non-monetary characteristics of different jobs

competitive market a market in which there are many buyers and many sellers so that each has a negligible impact on the market price

complements two goods for which an increase in the price of one leads to a decrease in the demand for the other

compounding the accumulation of a sum of money in, say, a bank account, where the interest earned remains in

the account to earn additional interest in the future

Condorcet paradox the failure of majority rule to produce transitive preferences for society

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

consumer price index (CPI) a measure of the overall cost of the goods and services bought by a typical consumer

consumer surplus a buyer's willingness to pay minus the amount the buyer actually pays

consumption spending by households on goods and services, with the exception of purchases of new housing

cost the value of everything a seller must give up to produce a good

cost-benefit analysis a study that compares the costs and benefits to society of providing a public good

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 of the first good divided by the percentage change in the price of the second good

crowding out a decrease in investment that results from government borrowing

crowding-out effect the offset in aggregate demand that results when expansionary fiscal policy raises the interest rate and thereby reduces investment spending

currency the paper banknotes and coins in the hands of the public

customs union a group of countries that agree not to impose any restrictions at all on trade between their own economies, but to impose the same restrictions as one another on goods imported from countries outside the group

cyclical unemployment the deviation of unemployment from its natural rate

deadweight loss the fall in total surplus that results from a market distortion, such as a tax

demand curve a graph of the relationship between the price of a good and the quantity demanded

demand deposits balances in bank accounts that depositors can access on demand by using a debit card or writing a cheque

demand schedule a table that shows the relationship between the price of a good and the quantity demanded

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

depression a severe recession

diminishing marginal product the property whereby the marginal product of an input declines as the quantity of the input increases

diminishing returns the property whereby the benefit from an extra unit of an input declines as the quantity of the input increases

direct tax a tax that is levied directly on a person's income

discount rate the interest rate at which the Federal Reserve lends on a short-term basis to the UK banking sector

discrimination the offering of different opportunities to similar individuals who differ only by race, ethnic group, sex, age or other personal characteristics

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

diversification the reduction of risk achieved by replacing a single risk with a large number of smaller unrelated risks

dominant strategy a strategy that is best for a player in a game regardless of the strategies chosen by the other players

economic activity the amount of buying and selling (transactions) that take place in an economy over a period of time

economic profit total revenue minus total cost, including both explicit and implicit costs

economics the study of how society manages its scarce resources

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

efficiency the property of society getting the most it can from its scarce resources

efficiency wages above-equilibrium wages paid by firms in order to increase worker productivity

efficient markets hypothesis the theory that asset prices reflect all publicly available information about the value of an asset

efficient scale the quantity of output that minimizes average total cost

elasticity a measure of the responsiveness of quantity demanded or quantity supplied to one of its determinants

equilibrium a situation in which the price has reached the level where quantity supplied equals quantity demanded

equilibrium price the price that balances quantity supplied and quantity demanded

equilibrium quantity the quantity supplied and the quantity demanded at the equilibrium price

equity the property of distributing economic prosperity fairly among the members of society

European Central Bank (ECB) the overall central bank of the 12 countries comprising the European Monetary Union

European Economic and Monetary Union (EMU) the European currency union that has adopted the euro as its common currency

European Union a family of democratic European countries, committed to working together for peace and prosperity

Eurosystem the system made up of the ECB plus the national central banks of each of the 12 countries comprising the European Monetary Union

excludability the property of a good whereby a person can be prevented from using it

explicit costs input costs that require an outlay of money by the firm

exports goods and services that are produced domestically and sold abroad

externality the uncompensated impact of one person's actions on the well-being of a bystander

factors of production the inputs used to produce goods and services

Federal Reserve (Fed) the central bank of the United States

fiat money money without intrinsic value that is used as money because of government decree

finance the field of economics that studies how people make decisions regarding the allocation of resources over time and the handling of risk

financial intermediaries financial institutions through which savers can indirectly provide funds to borrowers

financial markets financial institutions through which savers can directly provide funds to borrowers

financial system the group of institutions in the economy that help to match one person's saving with another person's investment

fiscal federalism a fiscal system for a group of countries involving a common fiscal budget and a system of taxes and fiscal transfers across countries

Fisher effect the one-for-one adjustment of the nominal interest rate to the inflation rate

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

fractional-reserve banking a banking system in which banks hold only a fraction of deposits as reserves

free rider a person who receives the benefit of a good but avoids paying for it

frictional unemployment unemployment that results because it takes time for workers to search for the jobs that best suit their tastes and skills

fundamental analysis the study of a company's accounting statements and future prospects in order to determine its value

future value the amount of money in the future that an amount of money today will yield, given prevailing interest rates

game theory the study of how people behave in strategic situations

GDP deflator a measure of the price level calculated as the ratio of nominal GDP to real GDP times 100

Giffen good a good for which an increase in the price raises the quantity demanded

gilt-edged stock or 'gilts' (known as Treasury securities in the US) are bonds

issued by the UK government with differing maturities and interest rates; they are considered to be risk-free in that the government guarantees to honour them; original certificates had gilded edges, hence the name

government purchases spending on goods and services by local, state and national governments

gross domestic product (GDP) the market value of all final goods and services produced within a country in a given period of time

horizontal equity the idea that taxpayers with similar abilities to pay taxes should pay the same amount

human capital the accumulation of investments in people, such as education and on-the-job training

idiosyncratic risk risk that affects only a single economic actor

implicit costs input costs that do not require an outlay of money by the firm

import quota a limit on the quantity of a good that can be produced abroad and sold domestically

imports goods and services that are produced abroad and sold domestically

income effect the change in consumption that results when a price change moves the consumer to a higher or lower indifference curve

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

indexation the automatic correction of a money amount for the effects of inflation by law or contract

indifference curve a curve that shows consumption bundles that give the consumer the same level of satisfaction

indirect tax a tax that is levied on goods and services bought

inferior good a good for which, other things equal, an increase in income leads to a decrease in demand

inflation an increase in the overall level of prices in the economy

inflation rate the percentage change in the price index from the preceding period

inflation tax the revenue the government raises by creating money

informationally efficient reflecting all available information in a rational way

in-kind transfers transfers to the poor given in the form of goods and services rather than cash

internalizing an externality altering incentives so that people take account of the external effects of their actions

investment spending on capital equipment, inventories and structures, including household purchases of new housing

investment fund an institution that sells shares to the public and uses the proceeds to buy a portfolio of stocks and bonds

job search the process by which workers find appropriate jobs given their tastes and skills

labour force the total number of workers, including both the employed and the unemployed

labour force participation rate the percentage of the adult population that is in the labour force

law of demand the claim that, other things equal, the quantity demanded of a good falls when the price of the good rises

law of supply the claim that, other things equal, the quantity supplied of a good rises when the price of the good rises

law of supply and demand the claim that the price of any good adjusts to bring the quantity supplied and the quantity demanded for that good into balance

liberalism the political philosophy according to which the government should choose policies deemed to be just, as evaluated by an impartial observer behind a 'veil of ignorance'

libertarianism the political philosophy according to which the government should punish crimes and enforce voluntary agreements but not redistribute income

life cycle the regular pattern of income variation over a person's life

liquidity the ease with which an asset can be converted into the economy's medium of exchange

lump-sum tax a tax that is the same amount for every person

macroeconomics the study of economy-wide phenomena, including inflation, unemployment and economic growth

marginal changes small incremental adjustments to a plan of action

marginal cost the increase in total cost that arises from an extra unit of production

marginal product the increase in output that arises from an additional unit of input

marginal product of labour the increase in the amount of output from an additional unit of labour

marginal rate of substitution the rate at which a consumer is willing to trade one good for another

marginal revenue the change in total revenue from an additional unit sold

marginal tax rate the extra taxes paid on an additional unit of income

market a group of buyers and sellers of a particular good or service

market economy an economy that allocates resources through the decentralized decisions of many firms and households as they interact in markets for goods and services

market failure a situation in which a market left on its own fails to allocate resources efficiently

market for loanable funds the market in which those who want to save supply funds and those who want to borrow to invest demand funds

market power the ability of a single economic agent (or small group of agents) to have a substantial influence on market prices

maximin criterion the claim that the government should aim to maximize the well-being of the worst-off person in society

median voter theorem a mathematical result showing that if voters are choosing a point along a line and each voter wants the point closest to his most preferred point, then majority rule will pick the most preferred point of the median voter

medium of exchange an item that buyers give to sellers when they want to purchase goods and services

menu costs the costs of changing prices

microeconomics the study of how households and firms make decisions and how they interact in markets

model of aggregate demand and aggregate supply the model that most economists use to explain short-run fluctuations in economic activity around its long-run trend

monetary neutrality the proposition that changes in the money supply do not affect real variables

monetary policy the set of actions taken by the central bank in order to affect the money supply

money the set of assets in an economy that people regularly use to buy goods and services from other people

money market the market in which the commercial banks lend money to one another on a short-term basis

money multiplier the amount of money the banking system generates with each unit of reserves

money supply the quantity of money available in the economy

monopolistic competition a market structure in which many firms sell products that are similar but not identical

monopoly a firm that is the sole seller of a product without close substitutes

moral hazard the tendency of a person who is imperfectly monitored to engage in dishonest or otherwise undesirable behaviour

multiplier effect the additional shifts in aggregate demand that result when expansionary fiscal policy increases income and thereby increases consumer spending

Nash equilibrium a situation in which economic actors interacting with one another each choose their best strategy given the strategies that all the other actors have chosen

national saving (saving) the total income in the economy that remains after paying for consumption and government purchases

natural monopoly a monopoly that arises because a single firm can supply a good or service to an entire market at a smaller cost than could two or more firms

natural-rate hypothesis the claim that unemployment eventually returns to its normal, or natural, rate, regardless of the rate of inflation

natural rate of output the output level in an economy when all existing factors of production (land, labour, capital and technology resources) are fully utilized and where unemployment is at its natural rate

natural rate of unemployment the normal rate of unemployment around which the unemployment rate fluctuates

natural resources the inputs into the production of goods and services that are provided by nature, such as land, rivers and mineral deposits

negative income tax a tax system that collects revenue from high-income households and gives transfers to low-income households

net capital outflow the purchase of foreign assets by domestic residents minus the purchase of domestic assets by foreigners

net exports the value of a nation's exports minus the value of its imports; also called the trade balance

nominal exchange rate the rate at which a person can trade the currency of one country for the currency of another

nominal GDP the production of goods and services valued at current prices

nominal interest rate the interest rate as usually reported without a correction for the effects of inflation

nominal variables variables measured in monetary units

normal good a good for which, other things equal, an increase in income leads to an increase in demand

normative statements claims that attempt to prescribe how the world should be

oligopoly a market structure in which only a few sellers offer similar or identical products

open economy an economy that interacts freely with other economies around the world

open-market operations the purchase and sale of non-monetary assets from and to the banking sector by the central bank

opportunity cost whatever must be given up to obtain some item

optimum currency area a group of countries for which it is optimal to adopt a common currency and form a currency union

originator a bank or financial institution which securitizes assets

outright open-market operations the outright sale or purchase of non-monetary assets to or from the banking sector by the central bank without a corresponding agreement to reverse the transaction at a later date

Pareto improvement where resources can be allocated amongst different uses to make at least one person better off without making any other individual worse off

perfect complements two goods with right-angle indifference curves

perfect substitutes two goods with straight-line indifference curves

permanent income a person's normal income

Phillips curve a curve that shows the short-run trade-off between inflation and unemployment

physical capital the stock of equipment and structures that are used to produce goods and services

Pigovian tax a tax enacted to correct the effects of a negative externality

positive statements claims that attempt to describe the world as it is

present value the amount of money today that would be needed to produce, using prevailing interest rates, a given future amount of money

price ceiling a legal maximum on the price at which a good can be sold

price discrimination the business practice of selling the same good at different prices to different customers

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 a measure of how much the quantity supplied of a good responds to a change in the price of that good, computed as the percentage change in quantity supplied divided by the percentage change in price

price floor a legal minimum on the price at which a good can be sold

price level the price of a basket of goods and services measured as the weighted arithmetic average of current prices

principal a person for whom another person, called the agent, is performing some act

prisoners' dilemma a particular 'game' between two captured prisoners that illustrates why cooperation is difficult to maintain even when it is mutually beneficial

private goods goods that are both excludable and rival

private saving the income that households have left after paying for taxes and consumption

producer price index a measure of the cost of a basket of goods and services bought by firms

producer surplus the amount a seller is paid for a good minus the seller's cost

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

production possibilities frontier a graph that shows the combinations of output that the economy can possibly produce given the available factors of production and the available production technology

productivity the quantity of goods and services produced from each hour of a worker's time

profit total revenue minus total cost

progressive tax a tax for which high-income taxpayers pay a larger fraction

of their income than do low-income taxpayers

proportional tax a tax for which high-income and low-income taxpayers pay the same fraction of income

public goods goods that are neither excludable nor rival

public saving the tax revenue that the government has left after paying for its spending

purchasing power parity a theory of exchange rates whereby a unit of any given currency should be able to buy the same quantity of goods in all countries

quantity demanded the amount of a good that buyers are willing and able to purchase

quantity equation the equation $M \times V = P \times Y$, which relates the quantity of money, the velocity of money, and the dollar value of the economy's output of goods and services

quantity supplied the amount of a good that sellers are willing and able to sell

quantity theory of money a theory asserting that the quantity of money available determines the price level and that the growth rate in the quantity of money available determines the inflation rate

random walk the path of a variable whose changes are impossible to predict

rational expectations the theory according to which people optimally use all the information they have, including information about government policies, when forecasting the future

real exchange rate the rate at which a person can trade the goods and services of one country for the goods and services of another

real GDP the production of goods and services valued at constant prices

real interest rate the interest rate corrected for the effects of inflation

real variables variables measured in physical units

recession a period of declining real incomes and rising unemployment: the technical definition gives recession occurring after two successive quarters of negative economic growth

refinancing rate the interest rate at which the European Central Bank lends on a short-term basis to the euro area banking sector

regressive tax a tax for which high-income taxpayers pay a smaller fraction of their income than do low-income taxpayers

repo rate the interest rate at which the Bank of England lends on a short-term basis to the UK banking sector

repurchase agreement (repo) the sale of a non-monetary asset together with an agreement to repurchase it at a set price at a specified future date

reserve ratio the fraction of deposits that banks hold as reserves

reserve requirements regulations on the minimum amount of reserves that banks must hold against deposits

reserves deposits that banks have received but have not loaned out

risk averse exhibiting a dislike of uncertainty

rivalry the property of a good whereby one person's use diminishes other people's use

sacrifice ratio the number of percentage points of annual output lost in the process of reducing inflation by 1 percentage point

scarcity the limited nature of society's resources

screening an action taken by an uninformed party to induce an informed party to reveal information

securitization the creation of asset-backed securities

shoeleather costs the resources wasted when inflation encourages people to reduce their money holdings

shortage a situation in which quantity demanded is greater than quantity supplied

signalling an action taken by an informed party to reveal private information to an uninformed party

Single European Market a (still-not-complete) EU-wide market throughout which labour, capital, goods and services can move freely

special purpose vehicle (SPV) in the context of securitization, an entity set up with the purpose of buying collections of assets and which issues bonds to investors to raise the finance to buy the collection of assets

social security government benefits that supplement the incomes of the needy

stagflation a period of falling output and rising prices

standard of living the amount of goods and services that can be purchased by the population of a country, usually measured by the inflation-adjusted (real) income per head of the population

stock a claim to partial ownership in a firm

store of value an item that people can use to transfer purchasing power from the present to the future

strike the organized withdrawal of labour from a firm by a union

structural unemployment unemployment that results because the number of jobs available in some labour markets is insufficient to provide a job for everyone who wants one

substitutes two goods for which an increase in the price of one leads to an increase in the demand for the other

substitution effect the change in consumption that results when a price change moves the consumer along a given indifference curve to a point with a new marginal rate of substitution

sunk cost a cost that has already been committed and cannot be recovered

supply curve a graph of the relationship between the price of a good and the quantity supplied

supply schedule a table that shows the relationship between the price of a good and the quantity supplied

supply shock an event that directly alters firms' costs and prices, shifting the economy's aggregate supply curve and thus the Phillips curve

surplus a situation in which quantity supplied is greater than quantity demanded

tariff a tax on goods produced abroad and sold domestically

tax incidence the manner in which the burden of a tax is shared among participants in a market

technological knowledge society's understanding of the best ways to produce goods and services

theory of liquidity preference Keynes's theory that the interest rate adjusts to bring money supply and money demand into balance

total cost the market value of the inputs a firm uses in production

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

total revenue (in a market) the amount paid by buyers and received by sellers of a good, computed as the price of the good times the quantity sold

toxic debt mortgage-backed securities and other debt (such as bonds) that are not able to be repaid in many cases because the value of the assets against which they are secured has fallen significantly

trade balance the value of a nation's exports minus the value of its imports; also called net exports

trade deficit an excess of imports over exports

trade policy a government policy that directly influences the quantity of goods and services that a country imports or exports

trade surplus an excess of exports over imports

Tragedy of the Commons a parable that illustrates why common resources get used more than is desirable from the standpoint of society as a whole

tranching splitting collections of assets into groups with different levels of risk, which in turn attracts different types of investor

transaction costs the costs that parties incur in the process of agreeing and following through on a bargain

unemployment insurance a government programme that partially protects workers' incomes when they become unemployed

unemployment rate the percentage of the labour force that is unemployed

union a worker association that bargains with employers over wages and working conditions

unit of account the yardstick people use to post prices and record debts

utilitarianism the political philosophy according to which the government should choose policies to maximize the total utility of everyone in society

utility a measure of happiness or satisfaction

value of the marginal product the marginal product of an input times the price of the output

variable costs costs that vary with the quantity of output produced

velocity of money the rate at which money changes hands

vertical equity the idea that taxpayers with a greater ability to pay taxes should pay larger amounts

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 a good

world price the price of a good that prevails in the world market for that good