I'm not a robot

Absolute advantage A concept that helps to explain international trade. If country A is better at making toasters than country B, and B is better at making kettles than A, it makes sense for each country to focus on the area where they have this advantage, and then trade toasters for kettles. But see, more importantly, comparative advantage. Active management A branch of investment management that attempts to outperform other investors by selecting a limited number of assets, and trading them regularly. See also passive management. Activist investing Fund managers who take a stake in a company and then agitate for a change of management, or strategy, in the belief that this will increase profits, and thus the share price. Adverse selection A risk associated with insurance, and linked to asymmetric information. People who are worried about their health will be more inclined to pay for health insurance than those who are fighting fit. One way to avoid the problem is to make insurance compulsory for all, as happens with car ownership. For more detail, see our Schools Brief. Agency costs The expense involved in using a third party to carry out a task. Examples include hiring a fund manager to look after an individual's investment portfolio, or the cost to shareholders of having professional managers run a business. See also principal-agent problem. Aggregate demand The flow of spending, across the economy, on goods and services. Demand can fall, even if people's income and wealth are unchanged, if they decide to save, rather than spend. Agriculture The cultivation of crops and the tending of animals for the purpose of supplying food. For millennia, this was mankind's primary economic activity. Alpha That part of an investment return that is due to the skill of the fund manager. This can be very hard to measure. Amortisation The gradual reduction in the value of an asset (or a debt) over time. A debt (such as a mortgage) is amortised via regular repayments. Companies use amortisation to steadily reduce the value of intangible assets on their balance-sheets. Animal spirits Term used by John Maynard Keynes to describe sentiment among businesspeople and consumers. If sentiment is depressed, economies may struggle to escape from recession. For more detail, read this article. See also Keynesian economics. Antitrust Term used to describe laws or regulations designed to stop firms from exploiting their monopoly positions in markets at the expense of consumers or rival businesses. To learn more, see our Schools Brief. Appreciation The rise in the value of an asset. In particular, currencies are often described as appreciating when they go up and depreciating when they go down. Arbitrage The practice of exploiting price differentials in different markets; for example, buying an asset cheaply in London and selling it for a higher price in New York. Thanks to the speed of modern information flows, risk-free arbitrage opportunities are rare. See also regulatory arbitrage. Asset Something that can be used to create economic value. An asset can be tangible, such as a building or machinery, or intangible, such as a patent or a brand name. Assets make up one side of a company's balance-sheet; the other is liabilities. Asset stripping The practice of buying a company and rapidly selling off the component parts with the aim of making a profit. This often leads to great disruption in the business and a loss of jobs. Asset value One measure used by investors to calculate the worth of a company. Normally, a company's debts are deducted to calculate a net asset value. Also known as book value. Asymmetric information This occurs when one party to a transaction knows more than the other. Asymmetry can lead to market abuse, as when those with inside information of a coming takeover buy shares in the target company. It can also lead to inefficiencies. Since buyers of used cars know less than sellers, they will be inclined to regard all cars as potential "lemons", leading to lower prices. See also adverse selection and moral hazard. To learn more, see our Schools Brief. Auctions These are usually associated with the sale of livestock, antiques and works of art. But in recent decades, they have been favoured by economists as a means of ensuring that sellers get the best price for a wider range of assets. For example, governments have used auctions to sell off parts of the electromagnetic spectrum to mobile telecoms companies. See this article for more detail. Austerity A term used to describe efforts to reduce the share of public spending in GDP, particularly in the 2010s. When the economy is already weak, Keynesian economists view austerity programmes as a mistake, because they reduce demand. But free-market economists worry that, without austerity, the government's role in the economy inexorably expands over time. Austrian school A group of libertarian economists, notably Friedrich Hayek and Ludwig von Mises, focused on the individual and deeply suspicious of state planning. The school developed in opposition to communism and social democracy, and believes in low taxes and a minimal state. Autarky Self-sufficiency. Authoritarian regimes sometimes pursue a policy of autarky in order to reduce their dependence on other countries. Economists generally regard this approach as inefficient since trade in goods and services allows a country to specialise in those activities which it is best at producing, exploiting comparative advantage. Authoritarian capitalism Usually applied especially to China and Russia, this describes economies in which big business co-exists with an authoritarian government. Businesses are allowed to make money but if they dare to criticise the government, or appear too independent, they may face criminal or financial sanctions. Backwardation A term used in the commodity market for when the price for delivering a product today (the spot price) is higher than for delivery in future. Normally, the future price is higher, a situation known as contango. Backwardation is normally the sign of a supply shortage, causing traders to compete to get the product immediately. Balance of payments A term used to describe a country's transactions with the rest of the world. The import and export of goods and services are captured in the current account, which also includes investment income and transfers (such as expatriate workers sending money home). The capital account captures financial transactions such as foreign direct investment or purchases of bonds and equities. These will balance in the sense that a current-account deficit (or surplus) must be offset by a capital-account surplus (or deficit). Balance-sheet In accounting, a statement of the assets and liabilities of a business. It must balance in the sense that assets equal liabilities. The assets such as cash or equipment or inventory are being used in the business; the liabilities show how those assets were funded, whether in the form of debt (owed to creditors) or equity (owed to shareholders). Bank rate Term used in Britain to describe the official rate set by the Bank of England when it pays interest to commercial banks. By manipulating this rate, the Bank of England affects the level of rates that businesses and consumers pay to borrow money. Bank run In a crisis, bank depositors may start to doubt they will get their money back. So they may demand to withdraw it. Since banks have lent out this money, it is impossible for them to repay all depositors instantly. The bank may fail. To avoid this, most countries have schemes of deposit insurance. Banks Institutions at the heart of the financial system. Commercial banks take in deposits and make loans, thereby creating money. In a crisis, banks may cease lending (or insist on the repayment of past loans) causing immense economic damage. Investment banks advise on transactions such as acquisitions and make markets in financial assets such as bonds and shares. Many institutions act as both commercial and investment banks. Barter The direct swap of goods and services for other goods and services, without the use of money. This is normally a less efficient form of trade, since the wants and needs of buyers and sellers rarely match exactly. Basis point One hundredth of a percentage point. The term is often used to describe interest rate changes. A quarter-percentage-point rise or fall in rates is described as 25 basis points. Baumol's cost disease In theory, workers should get higher pay because they get more productive. But an economist called William Baumol noticed this isn't always true; musicians take the same time to play a string quartet as they did in Mozart's day, but are paid more nevertheless. The reason is competition for labour; musicians can take other jobs. So rising wages in productive parts of the economy (eg, manufacturing) lead to higher wages in less productive sectors. For more on the disease, read this article; for more on Baumol, read this one. Bear Investor who expects the price of an asset or assets in general to fall. Behavioural economics School of thought that believes that the economic decisions of individuals are often driven by psychological biases rather than the rational analysis of expected returns. One example is the endowment effect. Individuals value the goods they own more highly than they would pay for the same item in an open market. For more, see this article. Beta This ratio measures the sensitivity of an individual asset's price to that of the overall market. A stock that tends to go up even more rapidly than the market when it is rising, and drop more precipitously when it is falling, is described as "high beta"; one that moves less violently than the market is "low beta". Big Mac index A light-hearted guide to whether currencies are over- or undervalued, invented by The Economist in 1986. The index is based on the theory of purchasing-power parity—the notion that in the long run exchange rates should tend to equalise the prices of goods in different currencies. Fresh helpings of burgernomics are served up regularly. You can tuck into the latest—with a side of more details about the index—here. Bill of exchange A short-term financial instrument, originally used to finance international trade. The buyer of goods would give the seller a signed bill, equal to the value of the purchase, which the seller could then cash with a banker. In modern finance, bills are a catch-all term for short-term debt such as Treasury bills and commercial bills. Blockchain A distributed ledger used to make a digital record of the ownership of assets, in particular cryptocurrencies. Bonds IOUs issued by a borrower which normally promise repayment of the money on a set date (the maturity) with regular interest payments during the life of the bond. The more risky the issue, the higher the interest rate (or yield) on the bond. Governments issue bonds to cover the gap between the amount they receive in taxes and the amount they spend. Companies issue bonds to finance investment programmes. Book value Another term for asset value. Boom A state of rapid economic expansion, as opposed to bust. Bounded rationality A theory which assumes that, while individuals try to act rationally, there is a limit to the amount of information they may have, or can absorb. This may make their decisions look irrational (see also behavioural economics). Bretton Woods Location in New Hampshire of a conference in 1944 which decided the post-war economic order. It led to the establishment of the International Monetary Fund and the World Bank. And it agreed on a currency system that linked all currencies at fixed exchange rates to the dollar, which was convertible into gold at $35 an ounce. Bubble The concept that asset prices can rise far higher than can be justified by their fundamentals, such as the expected cashflows that will derive from them. A famous example is the South Sea bubble of the early 18th century. Economists who believe in efficient markets are dubious that bubbles ever occur. Identifying bubbles at the time isn't always easy: see this article. Budget The annual process through which a government sets out its spending plans and tax measures. A balanced budget is when revenues are expected to match expenditure. More usually, spending outstrips revenues and the government runs a budget deficit. Creating or expanding a deficit can be a deliberate act to boost an economy (see Keynesian economics). Bull Investor who expects the price of an asset or assets in general to rise. Business cluster When companies in an industrial sector gather in a specific area, such as technology companies in Silicon Valley. When a cluster forms, companies will find it easier to attract high-skilled staff, workers have a wider choice of employers, innovations can circulate more quickly and start-up companies may find it easier to get finance. Business cycle Another term to describe the way that economies tend to expand and contract over time. Various economists have tried to calculate the length of a typical cycle but these have varied widely over history. Booms tend to be much longer than busts, particularly in recent decades. As this article explains, economists still lack a proper understanding of business cycles. Bust A sudden economic contraction, also known as a recession. Capital A word that serves a lot of purposes in economics. It is used to refer to the investment that an entrepreneur puts into a new project or business (hence capitalism); to any lump sum that has been saved; and more broadly to the people and institutions who invest in the world's financial markets. It can also refer to a bank's equity capital. Capital account In international trade, the component of the balance of payments that comprises financial transactions, such as foreign direct investment. On a company's balance-sheet, the capital account largely comprises the equity capital invested by the owners and retained profits. Capital asset pricing model A financial model that relates the return of an asset class to its riskiness. It is based on the idea of a risk-free asset (usually defined as government bonds). Investors in riskier assets (like equities) should demand a higher return than they get from government bonds to reflect the greater risk of loss. This risk relates to the beta of the asset concerned. Capital controls Regulations designed to prevent money from moving across borders. They are often used in regimes with a fixed exchange rate; by preventing money from flowing abroad, they protect the domestic currency from depreciation. Capital controls were a key component of the Bretton Woods system. For more detail, read our Explainer. Capital flight What happens when investors try to avoid high taxes, or the prospect of currency devaluation, by sending their money abroad. Governments try to prevent such flight by imposing capital controls but they need to act quickly. Investors will anticipate the introduction of capital controls by indulging in capital flight. Capital gains tax A tax levied when investors sell assets for more than the purchase price. Some economists argue that such taxes discourage risk-taking. But if capital gains are taxed at a lower rate than income, that creates a potential incentive; ingenious accountants will find ways to transform income into capital gains. Capital goods Physical assets that companies use in the manufacturing process. Capital markets Those markets where governments, companies and other institutions raise long-term money in the form of equities and bonds. By contrast, the term "money markets" is used for the places where short-term finance is raised. Capitalism A term coined to describe the use of private capital to finance economic activity. Investors and entrepreneurs use their money to create businesses, hiring workers, renting property and buying equipment as needed. Any surplus, or profit, belongs to the entrepreneur or investors. Communism is seen as the obverse of capitalism, as all economic activity is controlled by the state. Carbon tax A tax levied on carbon emissions. The aim is to penalise heavy emitters and encourage alternative approaches that do not contribute to global warming. For more on their design—and unpopularity—see this article. Carry trade An attempt to profit from the differing yields of two assets. Imagine a trader borrowing Japanese yen at a near-zero interest rate, for instance, then investing the proceeds in American Treasury bonds that yield 5%. They could pocket the profits—unless the yen strengthened before the debt came due, making it more expensive to pay back. Read our explainer on why borrowing cheaply to buy high-yielding assets is popular, but risky. Cartel Agreement where a group of producers collaborate to fix the price, or restrict the supply, of a good or service. Perhaps the best known example is the Organisation of the Petroleum Exporting Countries, or OPEC. Cartels among companies are often outlawed by government antitrust regulations because they restrict competition. Central bank The institution at the heart of a country's financial system. It has many roles. Traditionally, it sets the level of short-term interest rates through its interactions with commercial banks. It uses rate changes to control inflation (often under an inflation targeting regime) and affect the level of economic output. More recently, central banks have attempted to affect long-term interest rates through quantitative easing. The central bank acts as a lender of last resort to protect the financial system from collapse; some central banks also act as regulators. Central banks also control foreign exchange reserves and can use these to intervene in the currency markets. Chicago school A school of thought that emerged from the University of Chicago and was associated with belief in the free market, monetarism, and that people are rational, and act in their self-interest. Its leading exponents include Gary Becker, Ronald Coase and Milton Friedman. The school gained influence in the 1970s, as conservative politicians adopted its nostrums and the Keynesian post-war consensus broke down. See also monetarism and public choice theory. Classical economics The dominant school of thought in the late 18th and 19th centuries, as developed by Adam Smith and David Ricardo. It largely focused on the self-correcting nature of economies if left alone by governments and thus argued for a laissez faire approach and, thanks in part to the theory of comparative advantage, developed by Ricardo, a belief in free trade. Coase theorem A concept, developed by Ronald Coase (see article), that deals with externalities. Coase thinks of the problem in terms of conflicting property rights such as the right of a factory to operate noisy machinery and the right of its neighbours to enjoy peace and quiet. If property rights are clearly delineated then, in the absence of transaction costs, bargaining should lead to an efficient outcome, such as the factory compensating its neighbours for the noise. Coase's work on externalities, along with that on the theory of the firm, won him a Nobel prize in 1991. Coase's theory of the firm (theory of the firm) Ronald Coase, a British economist, tried to explain why companies exist in "The nature of the firm", a paper published in 1937. His answer was that markets can be expensive and fiddly to use, especially for non-standard goods. Rather than arrange contracts for each and every transaction, entrepreneurs set up firms and employ workers to do a range of tasks. This allows them to shift employees from one area to another as they see fit. The paper, along with his work on externalities and property rights, helped to win Coase the Nobel prize for economics in 1991. For more detail, read our Schools Brief. Collateral An item pledged as security against a loan. An obvious example is a house or flat, which homeowners used as collateral when taking out a mortgage. In financial markets, safe securities such as Treasury bonds are often used as collateral by traders and investors. Commercial banks Banks that focus on taking in money in the form of deposits and lending it out to individuals and businesses. Such banks have a weakness in that most deposits can be withdrawn instantly whereas it can take time to recall loans. This can lead to a bank run. Commodity A raw material, such as oil or copper, that is usually traded in bulk. Changes in commodity prices can have significant economic effects by, for example, feeding through into consumer prices. A sharp rise in energy prices can adversely affect consumer demand; because consumers have to spend more on energy, they have less to spend elsewhere. For more, read this Explainer. Commodity cycle A pattern of rising and falling commodity prices and production. Rising commodity prices cause consumers to cut back their use and producers to expand output. In the ensuing glut, prices fall and output falls until commodities are so cheap that their use rises again. Communism A system, devised by Karl Marx, in which the state controls virtually all economic activity. Private property is outlawed and income inequality is reduced. The theory is idealistic; in practice, communist regimes have been highly authoritarian. Comparative advantage This idea has been called one of the most profound insights in economics. If country A can make cars more cheaply than country B, and B can produce shirts more cheaply than A, it clearly makes sense to trade. Each has an absolute advantage in one area. But what if A is more efficient at producing everything than B? It still makes sense for them to trade, with B producing the goods where it is more competitive; if for example it is 90% as efficient as A in making shirts, and only 60% in car manufacturing, then it should specialise in making shirts and trade them for cars. Both countries will gain. Competition A concept at the heart of economics. Firms compete to sell the best goods and services to consumers, and to attract the best workers. The aim is to allocate resources in the most efficient manner. Conglomerate A large company that has diversified across a range of countries and business areas, normally through making acquisitions. Consumer confidence A measure, taken from a survey, of the public's attitude towards the economic outlook. If people are worried about their jobs, or political unrest, or a pandemic, they will be less likely to spend money. Consumer prices index A measure of the cost of a "typical" assortment of goods and services, used to calculate the rate of inflation. Statisticians first calculate the composition of the basket of goods and services bought by the average consumer: eg, bread, petrol and electrical goods. They then compare the cost of those goods in one period with that in another, weighting the goods and services to reflect the amount the average consumer spends. The change in this consumer prices index over the period (eg, a year) is the inflation rate. For more detail, read our explainer. Consumption The spending of money on goods and services by households. Consumers can either spend their income, or save it. When consumers are cautious, they spend less and save more. This can have adverse economic effects as consumption is usually the largest component of aggregate demand, ahead of public spending and investment. Contango When the futures price of a commodity is higher than the spot price. See also backwardation. Cost-benefit analysis A process of assessing the feasibility and profitability of a public-sector project or business decision. As the name suggests, all the potential costs are compared with the potential revenues and other benefits. Although the idea is sound, the estimates are subject to a lot of uncertainty. Building projects are notorious for running over time and over budget. Quantifying non-monetary factors (eg, the value of life or the environment) is difficult—and controversial: see this Explainer and this article. Coupon Term given to the interest rate on a bond, which stems from a time when physical coupons were attached to bond certificates. On a fixed-rate bond, the coupon does not change but the price of the bond does; the yield of the bond is determined by the relationship between the coupon and the price, plus any capital gain or loss that would result in holding the bond until it matures. Crawling peg An exchange-rate system in which a currency is tied to another, but can fluctuate within a range, or band, depending on certain conditions. See also currency peg and fixed exchange rate. Creative destruction A concept, developed by Joseph Schumpeter, to explain economic innovation. Old inefficient companies must go out of business to release capital and workers so they can be used in new, more innovative ways. Credit A catch-all term for the extension of loans to individuals, companies or organisations. The term is also used more generally to refer to the total amount of debt in an economy, as in credit crunch and credit expansion. More narrowly, a credit is a sum added to a bank account, as opposed to a debit. Credit crunch A sudden reduction in the willingness of banks and others to lend money. This usually has adverse economic consequences. Credit default swap A derivative contract between two parties in which one insures the other against the default of a bond or loan. One of the products at the heart of the 2007-09 financial crisis. See also swaps. Credit expansion An increase in the willingness of banks and others to lend money. This normally happens in the course of an economic boom. If credit expands too fast, this can be a sign of excessive speculation, often in the property market. Credit ratings See ratings. Creditor A person or institution that is owed money. Crony capitalism An economic system in which businesses thrive because of their connections with political leaders rather than prowess in a competitive market. The Economist devised a crony-capitalism index, ranking several big economies, in 2014 (see article). See also rent-seeking. Crowding out The notion that actions by the state might restrict the options of the private sector. It usually applies to credit. If the government borrows a lot, and pushes up interest rates, then investors may not have enough capital to supply the investment needs of businesses. Cryptocurrency Tokens created digitally and at the moment privately, although some central banks have created their own (see this article). Enthusiasts see the currencies as a way of avoiding fiat currency and hence the oversight of governments and banks; ownership and transfer are recorded in a distributed ledger, called the blockchain. The value of cryptocurrencies has been highly volatile, making it difficult for them to be either a store of value or medium of exchange, two essential functions of a conventional currency. Currency The monetary unit of a nation state, or group of states. Examples are the American dollar, the euro and the Japanese yen. In the modern era, most currencies are allowed to rise and fall in value against each other and are traded in the foreign exchange market. Currency peg A system in which a national currency is fixed in relation to another currency (usually the American dollar). In the modern era, this tends to be done by a developing country with a history of inflation and currency depreciation; the peg is supposedly a way of imposing some discipline. Often, however, maintaining the peg leads to pain in the form of high interest rates and recession, so the link is abandoned. (See also: fixed exchange rate.) Current account This measures all the non-financial transactions between a country and the rest of the world—chiefly its imports and exports of goods and services—and transfers such as remittances and financial aid. Since the balance of payments must balance, a current account deficit necessitates a capital account surplus (an inflow of money) to balance it. Debt Money borrowed from someone else, whether a bank, a company or a person. Default When a borrower fails to repay a debt. Widespread defaults are problematic since they can lead to a collapse in the banking system. Deflation Falling prices across an entire economy. Deflationary years were quite common under the gold standard when prices were stable over the long run, with some up and some down years. But deflation tends to be a problem in the modern era since it is often associated with falling nominal incomes. Since debt repayments are fixed in nominal terms, deflation often leads to a crisis as debtors struggle to repay their loans. Not to be confused with disinflation. For more, see this Explainer. Demand See aggregate demand. Demographics Characteristics of a population, such as size or composition by age. Demographics and demographic change can have an effect on economic growth; if there are more people of working age, growth is likely to be stronger. Dependency ratio The proportion of the population that is not of working age, compared with that which could work, if it chose to. Conventionally, dependants are defined as those aged up to 14 or over 65. Sometimes the figures are separated into youth dependency and old-age dependency. The higher the ratio, the greater the tax burden that is likely to fall on the working population; this is a problem for many developed economies, given the numbers now surviving into old age. See also economically inactive. Deposit insurance A scheme whereby a government agrees to compensate depositors if a bank goes bust. This can help prevent bank runs, when depositors panic. Depreciation In the foreign exchange markets, this means a decline in the value of a currency; eg, "the pound depreciated by 10% against the dollar". (See also devaluation.) In accounting, this relates to the gradual decline in the value of an asset, due to wear and tear. Companies depreciate their assets over their lifetime; this will show up as a deduction on the income account and a reduction in the value of assets on the balance-sheet. Depression A prolonged and sharp fall in economic output, associated with a high level of unemployment. The Great Depression of the 1930s is the most notable example. Deregulation It is a staple of conservative thought that there are too many regulations which hold back economic growth. So every few years, governments announce a policy of deregulation to cut back the red tape. It turns out, however, that public opinion often demands that governments act to ban things that are bad, or that are disliked. And so more regulations are introduced. Derivatives Financial assets whose value "derives" from something else, such as a stockmarket index or a commodity price. Examples include futures, options and swaps. Derivatives are often used to insure against a sudden change in the value of a key variable, such as a sharp rise in the oil price. But they can also be used to speculate on price movements which is why Warren Buffett, a veteran investor, described them as "financial weapons of mass destruction". Devaluation A formal reduction in the value of a currency. This occurs when a country has a fixed exchange rate and decides to alter the rate; for example, sterling was devalued in 1949 and 1967. Depreciation, in contrast, is a day-to-day currency decline. Developed countries A term used for nations where incomes per person are high, relative to the global average. These countries tended to industrialise early and are mainly based in Europe, and in former European settler colonies in North America and Australasia. Many Asian nations such as Japan and South Korea are also classified as developed. For more, see this article. Developing countries A term used to describe countries where income per person is lower than in "developed nations". These countries will usually have industrialised later than those in Europe or America. There is no official designation of developing countries and the World Bank uses the terms "lower-middle" and "low-income". Diminishing returns Production involves certain inputs; labour, machinery, raw materials. At first, adding more inputs will improve productivity substantially; using fertilisers on crops for example or adding waiters in a restaurant to serve more diners. But eventually the marginal gains from adding more inputs will reduce; the waiters will have fewer people to serve. This is the law of diminishing returns, Direct taxes Taxes collected directly by the government. Examples include income tax and corporate profits tax. See also indirect taxation. Discount rate The rate the Federal Reserve charges for lending to commercial banks (like the bank rate in Britain). In addition, a discount rate is used by any investor or company trying to calculate the present value of a series of future cashflows. Since money in the future is worth less than money today, these cashflows must be reduced or discounted. The chosen discount rate, usually related to current interest rates or bond yields, can make a big difference to the net present value. For more, see this article. See also time value of money. Discouraged workers See economically inactive. Disinflation A situation where prices across the economy are rising, but more slowly than before—eg, a fall in the annual inflation rate from 10% to 5%. Not to be confused with deflation. Disintermediation Cutting out the middleman, or connecting customers directly with producers. In theory, this should reduce costs. In practice, middlemen emerge in a new form; high-street travel agents may have declined in importance but many people use online versions such as Expedia or Booking.com. Diversification The practice of spreading one's interests widely. In investment, diversification is considered best practice: a big pension fund will own shares in a wide range of companies, across many nations, and will own bonds and property as well. Companies will also diversify across nations. Diversifying across business activities to form a conglomerate is more controversial; many commentators think that focusing on a small range of activities is more efficient. Dividend A regular payment made by a company to its shareholders. The payment comes from a company's profits. Normally companies try to increase dividends over time; when they cut the dividend, this is a sign of trouble. Dividend discount model A way of valuing shares, based on the future stream of dividends that an investor will receive, discounted to allow for the time value of money. Division of labour One of the fundamental principles of economics, described by Adam Smith in "The Wealth of Nations". Work can be undertaken more efficiently if broken up into discrete tasks. It is also more efficient for individuals to focus on their own jobs and use their wages to purchase goods and services, rather than attempt to grow their own food or make their own electrical devices. See also specialisation. Dumping Selling something for less than the cost of producing it. This practice may be adopted by a dominant supplier in an industry in the hope of driving competitors out of business. More commonly, countries argue that producers in other nations are "dumping" goods and gaining market share; this can be used as an excuse to adopt protectionist measures such as tariffs. Duopoly A situation where two producers control a market. See also monopoly, oligopoly and cartel. Econometrics The use of statistical analysis to quantify economic relationships. Economic rent The extra income that accrues to the owner of a limited asset or resource. So a skilled worker may be able to earn far more than the lowest wage he or she would be willing to accept; a landlord may earn higher rent on a property if the local authority builds a railway station nearby. Economically inactive A term generally used to cover people of working age (generally 15 to 64 years old) who are not seeking a job, nor in full-time education. This includes people who are caring for relatives, those who are too sick to work, those who have retired before the state pension age and "discouraged workers" who have given up trying for a job. See also voluntary unemployment. Economies of scale The owner of a firm needs to buy machinery, rent property, and so on. Some of these costs are fixed. As the firm produces more, these costs are spread over more units; the average cost of production falls. These economies of scale mean that mass production tends to result in cheaper goods. Efficient market hypothesis The theory that market prices reflect all public information. Trading, or investing, on the basis of that information will thus not offer any advantage. The hypothesis explains why so many fund managers fail to beat the market, after costs, and has led to the popularity of low-cost index funds, which simply buy all the securities in the index. For more, see this article. Elasticity A measure of the responsiveness of one variable to changes in another. For example, if a good rises in price by 10%, then demand could fall by less than 10% (it is price-inelastic) or more than 10% (price-elastic). Demand for essential goods like food and fuel tends to be price-inelastic. Emerging markets A term, largely used in investment circles, for developing countries. Investors might put their capital into emerging markets because they believe the growth prospects for such countries (and thus the returns on equities) will be higher. But emerging markets tend to be risky, and can suffer from capital flight when investors become risk-averse. Endogenous growth theory A hypothesis, put forward by Paul Romer, that economic growth does not simply arise from exogenous factors (such as the creative insights of inventors) but also from government policies, such as investment in research and development and laws that protect intellectual property. Gordon Brown, Britain's former prime minister, was mocked for referring to "post-neoclassical endogenous growth theory" in a speech. Mr Romer's work earned a Nobel prize, but economists still don't fully understand how and why economies grow. Endowment effect A psychological bias that causes people to be more willing to retain an object than acquire the same object if they don't own it. Put another way, they value an object they won more highly than the market value. This may explain behaviour that is not "rational" in economic terms. See behavioural economics. Entrepreneur Individual who puts together the factors of production (labour, machinery, business) to found a new business. Entrepreneurs tend to be much praised as risk-takers who boost economic growth. Equilibrium One of the commonest concepts in economics. At its simplest, equilibrium means a balance between the supply of and demand for a good at a market-clearing price. But economists also study equilibria across the entire economy ("general equilibrium") or in which markets do not clear (see involuntary unemployment). Unhelpfully, equilibria need not be stable (see the commodity cycle) or socially optimal. See also Nash equilibrium. Some economists think too much attention has been given to equilibrium: see this article. Equity Long-term capital raised from investors in the form of shares. The shareholders are the owners of the company and share in its assets and profits; to take over a company, a rival must make an offer that satisfies its shareholders. In normal circumstances, equity is never repaid (unlike debt). Shareholders have voting rights (over issues such as the appointment of directors) and will sometimes receive income in the form of dividends. ESG investing The initials stand for "environmental", "social" and "corporate governance". The amount of money devoted to ESG investing increased substantially in the second decade of the 21st century, and is linked more broadly to belief in stakeholder capitalism. Supporters said that companies which neglected these issues would eventually come a cropper in the face of regulation, consumer backlash or scandal; opponents argued that the criteria for ESG investing were often woolly and that companies simply paid lip service to the issues involved. For (much) more detail, read our Special Report. Euro zone Those countries within the European Union (20 at the time of writing) that have adopted the euro as their currency. In addition, six non-EU countries (Andorra, Kosovo, Monaco, Montenegro, San Marino and the Vatican City) use the currency. Monetary policy in the euro zone is set by the European Central Bank. Eurobond A bond issued by a government or company in a foreign currency. The first eurobond raised $15m for Autostrade, operator of Italy's motorway network, in 1963. European Central Bank The monetary authority for the euro zone. The bank is based in Frankfurt and describes its main task as to "maintain price stability". It also supervises banks in the euro area. Its governing council comprises six members of the executive board plus the governors of the central banks of euro-zone countries. Exchange rate The rate at which one currency is exchanged for another. Generally, this is either a fixed exchange rate or a floating exchange rate although halfway houses (such as a crawling peg) have been attempted. Exports Goods and services sold to foreign buyers. When a foreign tourist buys a meal in Spain, that counts as a Spanish export. Externality An externality is a cost or benefit to a third party as a result of someone else's actions. Externalities lie outside the market system. Polluted air, caused by a chemical plant's emissions, is a negative externality. A common textbook example of positive externalities involves beehives next door to an orchard: the nectar feeds the bees, which in turn pollinate the trees. See also Coase theorem, free rider, Pigouvian taxes and public goods. Factors of production The ingredients necessary for economic activity: land, labour, capital and entrepreneurship, which is needed to bring the other three elements together. Fair trade An approach which argues that consumers should not simply focus on the cost of the goods they buy but on the working conditions and wages of the workers that supply them. Various schemes offer to certify that a product (such as coffee) has been made in a fair-trade fashion. Fat tails A situation when more extreme events occur more frequently than in a normal distribution. In 2007, during the financial crisis, David Viniar, the chief financial officer of Goldman Sachs, said the firm had experienced "25 standard deviation events, several days in a row". This was a sign that the firm's models were wrong, as they had not anticipated fat tails. Federal Reserve System The most powerful actor in the global financial system. Set up in 1913, America's central bank actually divides the country into 12 Reserve districts, each with its own regional Federal Reserve bank. These are overseen by the Federal Reserve Board, consisting of seven governors based in Washington, DC. The key decisions on monetary policy are made by the Federal Open Market Committee or FOMC. For more detail, see this Explainer. Fiat currency A currency declared to be legal tender in a country by a government. Such a currency is not backed by gold or another asset; the government simply issues an order (or fiat) that it is legal tender, and can insist it be used to pay taxes. Most countries have fiat currencies and they achieve widespread acceptance as a medium of exchange because of their convenience. Financial markets The places where money is invested, in the form of short-term loans, bonds, equities and derivatives. Often anthropomorphised in the media (eg, "The markets were unhappy with the government's budget plans"). First mover advantage The benefit that can, but does not always, accrue to the first company to introduce a product, or an innovation. Consumers may come to associate the product with the company name and other firms may be discouraged from entering the market. More broadly, first mover advantage can apply in any adversarial game: see game theory. Fiscal drag A way in which inflation can boost tax revenues. In most tax systems, workers must earn a certain amount before they pay income tax, or pay it a higher rate. If those allowances are not uprated every year in line with inflation, workers end up paying more in tax in real terms when their wages rise. Fiscal policy Decisions relating to the amount a government raises in taxes and spends on public services. Fiscal tightening means the government is raising taxes, or cutting spending (or both) and thus taking demand out of the economy. Fiscal easing means the government is lowering taxes, or raising spending (or both) and thus adding demand. A fiscally neutral budget would neither add nor subtract demand by, say, raising taxes and spending by the same amount. Fixed costs Costs of production that do not change when output changes, for example the rent paid on a factory. See also economies of scale and variable costs. Fixed exchange rate When the value of one currency is tied to that of another or (in the past) to gold. Fixed exchange rates were common until the 1970s as they offered certainties; importers knew the cost of goods bought from abroad; exporters knew the value of the revenues they would receive for selling goods to foreigners. But they proved difficult to maintain as capital flowed more freely across national boundaries. Before the creation of the euro zone its founding members maintained fixed exchange rates with one another. See also floating exchange rate and gold standard. Fixed rate When the interest rate on a bond, or other financial instrument, is invariable. Floating exchange rate When a currency's value moves freely against that of other countries. Floating rates have been widespread since the 1970s after the weakening of capital controls. In theory, the exchange rate bears the burden of economic adjustment; a currency with a trade deficit can let its currency decline in order to make its goods more competitive, rather than slash workers' wages. Floating rate note Financial instrument where the interest rate varies over time according to a set formula. Flotation The term used when a company lists its shares on a stockmarket for the first time. This is also known as an initial public offering, or IPO. Foreign direct investment (FDI) When a foreign investor sets up a new operation in a country, or buys an existing business. FDI is distinct from portfolio investment, the purchase of a small stake in a business by a pension fund or sovereign wealth fund. FDI can boost productivity, by bringing new technology and upgrading the skills of domestic workers. It expanded rapidly at the end of the 20th century. But governments can be suspicious if a foreign company takes over an industry in an area (like technology or defence) which is perceived to be strategically important. Foreign exchange market The forum where currencies are traded. Often abbreviated to FX or forex. Foreign exchange reserves Assets, normally held by a central bank, that can be used in a financial crisis or to influence the country's exchange rate. Central banks tend to hold their reserves in major currencies like the dollar or euro, as well as gold. Reserves were vital under the gold standard and other fixed exchange rate systems, since the central bank could sell the reserves and buy the domestic currency to support its price. In the modern era, the scale of daily currency trading is so great that it is hard for any country to hold enough reserves to combat the markets. Forward exchange rate A rate agreed between two parties for trading currencies in a few months' or a year's time. The difference between the forward rate and the spot rate is driven by the interest rate differentials between the two countries concerned. Forward rate agreement Contract between two parties that determines the rate of interest to be paid in the future. May be used by borrowers to fix their interest costs in advance. Framing In behavioural economics, the idea that how a proposition is framed can affect the reaction of individuals. So expressing the cost of an annual subscription at $72 a year will attract fewer customers than describing it as $6 a month. Free rider A free rider benefits from a good or service without paying the full price, or anything at all. The term derives from those who ride on a bus or train without paying. More generally, free-rider problems relate to positive externalities, especially those associated with public goods such as clean air or water. See also tragedy of the commons. Free trade The cause that led to the founding of The Economist in 1843. Free-trade enthusiasts believe that the unfettered international exchange of goods and services leads to more efficient economies (see comparative advantage) and thus, in the long run, greater prosperity for all: see this Explainer. Opponents argue that workers in domestic industries lose their jobs when exposed to international trade, and this leads many governments to adopt tariffs and protectionist policies. Free trade area Region which has dropped tariffs, quotas and other controls on imports and exports. The best-known examples are the European Union, which also embodies much deeper economic integration, and NAFTA (now the USMCA). Free-market economists Those who believe that the market is better at allocating resources than governments and that excessive regulation and high public spending tend to diminish growth in the long run. See also Austrian school, Chicago school, laissez-faire and neoliberalism. Frictional unemployment The joblessness that results from people quitting their jobs in search of better opportunities or that occurs as struggling firms shed labour and rising firms hunt for new workers. For more detail, read this Explainer. Full employment When everyone who wants a job at prevailing wages can find one. Zero unemployment is not possible since companies go bust, or shed labour, and it can take time for workers to find a new job (see frictional unemployment). Central banks and governments may aim to achieve full employment but it is hard to define the rate (2%? 3%?) at which it is achieved. See also the Nairu and this Explainer. Future A contract, traded on an exchange, to trade a commodity, or a financial instrument, at a future date. Futures can be used to hedge against a price change (for example, a farmer might sell his crop in advance) or to speculate on a future price change. Game theory A technique for analysing how people, firms and governments behave in situations they must take into account what others are likely to do and might respond to what they do. For instance, competition among firms can be analysed as a game in which they strive for long-term advantage; game theory has also been applied to nuclear deterrence (see this article). See also Nash equilibrium; and for more detail, read our Schools Brief. GDP See Gross Domestic Product. Gearing See leverage. General Agreement on Tariffs and Trade The General Agreement on Tariffs and Trade or GATT was signed in 1947 and aimed to eliminate the protectionism that had dogged the global economy in the 1930s. It was followed by several rounds of negotiations which gradually reduced trade barriers and was eventually superseded in the 1990s by the World Trade Organisation or WTO. Giffen goods A basic product for which the normal relationship between supply and demand does not apply: when the price goes up, so does demand because the hit to real incomes from the higher price causes more expensive products to be shunned. Very few examples have been observed in practice, although staple products such as bread and rice can occasionally have Giffen characteristics. See also Veblen goods. Gig economy A term given to workers whose jobs are part-time or temporary, and who thus lack job security. Many work for the new wave of platform companies that have emerged in the 21st century such as Uber, a ride-sharing company, or Deliveroo, a food-delivery group. As contractors, gig-economy workers have few rights such as holiday pay or pensions, although courts have ruled that some must be treated as conventional employees. See also precariat. Gilts Bonds issued by the British government. At one stage, the debt certificates had a gilt edge but the term "gilt-edged" came to refer to the quality of the government's credit: investors could be assured of repayment. Gini coefficient An indicator designed to measure inequality of income and wealth. It ranges from zero, which indicates perfect equality, with every household earning or owning exactly the same, to one, which implies absolute inequality, with a single household earning a country's entire income or owning all its wealth. African countries tend to have high Gini coefficients; European countries tend to have low ones. Among rich countries, America has a relatively high coefficient (see this article for more detail). Despite being a notionally communist country, China has a higher coefficient than many rich countries (for more, read this article). Globalisation The tendency for national economies to become integrated with each other, through the movement of goods and services, capital and people. The first modern wave of globalisation in the late 19th century was brought to an end by the first world war. A second stage emerged during the late 20th century as China, and the ex-communist countries of eastern Europe, joined the global trading system. Gold Precious metal that

governments have issued government bonds of which the coupon and repayment value rise in line with inflation; these are known as index-linked bonds. Indexation also refers to a field of fund management that attempts to replicate the performance of a stock-market index; see passive management. Indirect taxation Tax collected by an entity other than the government. Examples include sales tax (collected by retailers), levies on alcohol and tobacco, and taxes on tourism (collected by hotels and airlines). Governments can favour these as a way of increasing revenues without changing the headline rate of direct taxes like income tax. Industrial policy The promotion of what a government considers to be strategic industries, often using an "infant industry" justification (see article). The disruption of supply chains during and after the covid-19 pandemic, concerns about the rise of Chinese economic power, and the Russian invasion of Ukraine have given industrial policy a new lease of life in the West. The widespread adoption of subsidies, tariffs and other measures to promote favoured industries raises the danger of renewed protectionism (see article). Inequality A subject of perennial debate among economists is how much inequality is "normal" and which changes in economic policy are likely to decrease or increase it? Inequality is often measured by the Gini coefficient but other gauges include the share of income and wealth taken by the top 1% or 10% of the population. One hypothesis, the Kuznets curve, suggested that industrialisation initially increases inequality, then decreases it. This seemed plausible during the Great Compression from 1940 to 1980 but inequality in the developed world has increased since then. This Briefing explores a debate among economists about whether inequality is increasing and this Explainer examines the relationship between inequality and economic growth. Infant industry A young sector that a government nurtures with protection from foreign competition, in the form of tariffs, subsidies and other barriers. Usually associated with developing economies hoping to kickstart industrialisation and accelerate economic growth—but developed economies also resort to the infant-industry argument for protectionism (see article). Inflation A general rise in the price level. This is normally calculated by comparing the price of a basket of goods (measured by a consumer price index) at different times, and can be used as a measure of the cost of living. But consumers can substitute cheaper products for more expensive ones (eg, chicken for beef) and a hedonic adjustment needs to be made to reflect the improved quality of goods. Central banks often have a mandate to control inflation and may look at a wide range of gauges to understand the underlying trend; for example, measures of "core" inflation that exclude volatile items such as food and energy. In this article, we ask whether inflation really matters. Inflation targeting In the modern era, governments in many countries have asked central banks to target a specific rate of, or range for, inflation and given them independence from political control of their operations. Inflation-targeting central banks have used various tools of monetary policy, such as changes in interest rates or quantitative easing. This article looks at the question of whether central banks' inflation targets should be raised and this one at central banks' independence. Informal economy Activities that have economic value but are not registered with the country's authorities; this may include teenagers who babysit for neighbours, hawkers who sell tourist souvenirs in big cities and ticket touts. The International Labour Organisation has estimated that 2bn people may have occasional involvement in the informal economy. Infrastructure The plumbing of the economy. Roads, railways, airports and container ports are all vital for an economy's operation. But they take up a lot of land and can have negative externalities, such as noise. Democracies can thus struggle to build infrastructure as quickly as autocracies such as China, which faces no democratic constraints (see article). Some infrastructure is built privately but roads, in particular, suffer from the free rider problem and tend to be built by the public sector. For more, see this article. Inheritance taxes Levies on the assets of those who die. In theory, this can help to ensure that societies stay meritocratic. But they tend to be unpopular with middle-class voters who hope to pass on their assets (usually in the form of houses) to their children. Governments also create exemptions to prevent small business and farms from being broken up on the owner's death. Accordingly, the OECD calculated in 2021 that only 0.5% of all government tax revenues came from this source, on average. See also wealth tax. Initial public offering (IPO) See flotation. Innovation Innovation is a key element in improving productivity, which in turn is a big driver of economic growth. In the modern era, innovation tends to be associated with new gadgets and disruptive technology (see this Explainer) but it can be a new way of organising work, such as Henry Ford's mass production line or the shift in agriculture from a two-field to a three-field rotation system, which increased yields substantially. Innovation can arise from the insight of entrepreneurs or from investment in research and development, which can be done by the government; the internet and the global positioning system were first developed by nation states. Insider trading The use of non-public information to gain an advantage in financial markets. It is illegal in many countries because it discriminates against other investors and can cause confidence in the probity of financial markets to fall. Institutional investors A catch-all term to describe some of the major investors in the financial markets: insurance companies, pension funds, sovereign wealth funds, charitable endowments and the like. Insurance The act of protecting yourself against the financial impact of risk. Traditionally, insurance was developed to cover fire, the sinking or seizure of a ship, or the death of the family breadwinner. Insurance companies attempted to calculate the likelihood of such risks occurring and protected themselves by diversification. In the modern era, insurance is also widely used to protect, or hedge, against risks such as changes in market prices or interest rates. Sometimes the other side of the risk is assumed by speculators hoping to make a profit. Intangible asset Something without physical form that can create value. Examples include patents and brand names. See also intellectual property. You can read more about intangible assets in this article. Intellectual property An asset created solely by human intelligence and creativity. Examples include copyrights, patents and trademarks. Interest on reserves The return paid by central banks on reserves held by commercial banks. These interest payments help to keep market interest rates at the desired level. Interest rates The return for lending money, and the cost of borrowing it. The level of interest rates depends on the time value of money, the credit risk of the borrower, the level of inflation and other factors. Short-term rates are generally set by, or are closely linked to, the decisions of the country's central bank. Long-term interest rates, including long-term bond yields, are affected by the balance between the supply of savings and the demand for credit. Internal rate of return A measure used by businesses to calculate the profitability of a potential investment. Broadly speaking, the higher the internal rate of return the better. Businesses will usually set a minimum rate before commencing a project. See also rate of return. International Monetary Fund (IMF) One of the institutions set up after the Bretton Woods agreement of 1944. Its initial aim was to help countries suffering balance-of-payments crises. It is the international body that countries turn to when in financial difficulties. Its advice has often been controversial because of the perception that it imposes austerity on workers in order to benefit rich creditors. Its prescriptions in times of crisis, which include deregulation, privatisation and openness to international trade, have been dubbed the "Washington consensus" after the city where the IMF has its headquarters. Internet The internet, a system which connects electronic devices such as personal computers, has clearly transformed the global economy, changing the way many people work, communicate and shop. However, its rise has coincided with a slowdown in productivity growth in the developed world. Economists debate whether this is related to measurement issues or whether the internet is a less transforming technology than previous breakthroughs such as electrification and the internal combustion engine. Investment This term is used in two linked ways, both referring to putting money to work, usually for the long term. Business investment occurs when companies buy new machines, or build new factories, or conduct research and development, with the aim of increasing profits. Portfolio investment occurs when individuals or institutions put money into long-term assets such as bonds, equities and property. Investment banks Institutions that make their money from advising corporate clients, and from trading assets, rather than from taking in deposits and making loans (like a commercial bank). America's Glass-Steagall act of 1933, a response to the Great Depression, drew a rigid distinction between commercial and investment banks, but now the two are often combined. Investment management A sector that focuses on managing the money of others. Most charge an annual fee but some also add a performance fee. See also active management, passive management, hedge funds, pension funds and private equity. Invisible hand A metaphor used by Adam Smith to describe how an individual may be "led by an invisible hand to promote an end which was no part of his intention". This has been interpreted in the modern era to suggest that individuals who act in their own self-interest may end up promoting the good of society as a whole. Invisible trade Trade in non-physical things, particularly services such as banking and insurance. Involuntary unemployment The unemployment that results when not everyone who is willing to work at the prevailing wage can find a job. Causes can include a shortfall in aggregate demand or some rigidity in the labour market. A central idea in Keynesian economics. For more, see this Explainer. J-curve This describes the normal pattern of a country's balance of payments after the devaluation or sharp depreciation of its currency. Initially imports are more expensive and exports are cheaper, so the balance deteriorates (the deficit widens). Eventually, foreigners buy more of the country's exports while domestic consumers buy fewer imports and the balance improves. Job vacancies A measure of slack in the labour market. In an expansionary phase, job vacancies will increase, and this may lead to upward pressure on wages. In a contractionary phase, vacancies will contract. See also quit rate. Joint supply When the process of producing one product leads to the production of another. For example, the distillation of crude oil yields gasoline, kerosene, asphalt and more. Junk bonds Bonds that are deemed to be highly risky where the borrower might stop paying interest or default on repayment altogether. They offer a high yield as compensation for that risk. See ratings. Just-in-time manufacturing A process that aims to keep down costs and reduce waste by producing items only when ordered (rather than in advance) and by keeping inventory levels down. The risk of the approach is that companies can be caught out by disruptions in their supply chain, caused for example by natural disasters or the covid-19 pandemic. See also lean manufacturing. Keynesian economics John Maynard Keynes, a British academic and government official, changed the field of economics. Under classical economics, governments did little to manage the economic cycle, which they believed would right itself. But Keynes argued, in the face of the Great Depression, that a recession could dent the "animal spirits" of businesspeople and discourage consumers from spending. Governments, rather than balance their budgets, could borrow to spend money and this spending would revive demand. After 1945, many governments adopted a Keynesian approach and used fiscal policy to manage the economic cycle. Knightian uncertainty A concept, developed by Frank Knight, an American economist and a founder of the Chicago School of economics—to describe the problem faced by economic actors who are unable to quantify risk, because there is not enough information to assess the probability of the various potential outcomes. The probability distribution is only clear in a very limited set of circumstances; betting on a number in the game of roulette, for example. Labour A term used for both a factor for production and for the organised representatives of the working classes (trade unions and some political parties). The supply of labour is an important determinant of economic growth, and the shrinking of the working-age population in developed countries—and China—may be a limiting factor on growth in coming decades. Improving the skills of the workforce and enticing reluctant workers back into jobs may be vital. Labour market flexibility Making it easier to hire and fire workers. Those in favour of flexibility argue that giving workers too much job security discourages employers from taking on new labour, and results in a "two tier" market, comprising secure workers and a large number of long-term unemployed. Flexibility also helps with the process of creative destruction, allowing workers to move from old, unproductive industries to new, innovative ones. Opponents argue flexibility leads to a precariat of insecure, low-paid employees. Labour theory of value The idea, mentioned by Adam Smith and championed by Karl Marx, that the value of a good depends on the labour put into it. The problem is that the value of a good is also dependent on demand; someone might put an enormous amount of effort into assembling a model of the Eiffel Tower from old pencils, but it will have little market value if no one wants to buy it. Laffer curve Named after Arthur Laffer, an American economist, this curve shows tax revenues increasing as tax rates rise from zero but starting to fall when tax rates reach a certain level, because high taxes discourage work and enterprise. The argument is often cited by conservative politicians in America and Britain, and is probably true in principle. But it is not clear where the bend in the curve occurs (see this article), and it may be at tax rates much higher than current levels. Lagged effect The time taken for economic policy changes to affect the economy. Changes in interest rates, for example, can take as much as 18 months to have their full impact, as rates may only change when loan terms are renegotiated. The danger is that, by the time the policy starts to work, economic circumstances have changed. Lagging indicators Economic data that are more important for revealing the economic past than pointing to the future. Gross domestic product numbers are released well after a quarter has ended (and are often revised later); unemployment tends to be slow in falling when an economy recovers. See also leading indicators and real-time indicators. Laissez-faire This French term refers to the idea that governments should leave the economy alone as much as possible, and should allow free trade. Associated with the classical school of economics. Land One of the factors of production. Land is in fairly fixed supply (a little can be reclaimed from the sea, and some is lost to coastal erosion and desertification). Before the industrial revolution, expansion in land use and changes in the productivity of agricultural land were among the most important drivers of growth. Today, planning restrictions may be an important restraint on productivity improvements. Taxes on land values are popular with economists but not politicians: this article explains why. Leading indicators Economic data that are examined for clues to coming trends. Surveys of consumer confidence, for example, may provide a pointer to the outlook for retail sales; inflation in producer prices may herald changes in consumer inflation. Some view the stockmarket as a leading indicator of the economic outlook, although it is far from infallible. See also lagging indicators and real-time indicators. Lean manufacturing A concept, associated with the Toyota motor company, associated with the elimination of waste and the continuous improvement (kaizen in Japanese) of the production process. See also just–in-time manufacturing. Lemons An example used by George Akerlof, an American economist (and winner of a Nobel prize) to explain why markets might not operate efficiently because of adverse selection. There is information asymmetry in the used-car market, he pointed out, as sellers know a lot more about the condition of the vehicle than buyers. Buyers will be suspicious of purchasing a dud car, or lemon, and will thus reduce the price they are willing to pay. If sellers are unwilling to agree, there may be no deal at all. For more detail, read our Schools Brief. Lender of last resort A crucial role played by central banks during financial crises. There can be moments when depositors and creditors lose faith in the banking system, with the risk that the banks will collapse. By acting as lender of last resort to banks that would be solvent in the medium term, a central bank can reduce the economic damage. Leverage Investing, or speculating, with borrowed money or by putting down only a small part of the purchase price. For example, a company may buy another using a small amount of its own cash, and a larger amount of debt in the form of bank loans or bonds; the greater the proportion of debt, the higher the leverage, or gearing. See leveraged buyout. Another use of leverage is to buy shares on margin; if the investor puts up just 10% of the cost, and the share price rises by 10%, they have doubled their money. But if the share price falls by 10%, their investment is wiped out. Perhaps the commonest instance of leverage is associated with buying houses: most people pay a small proportion of the price at first and borrow the balance. Financial crises often have excessive leverage at their heart. Leveraged buyout A corporate takeover, usually undertaken by a private equity group, using a lot of borrowed money. The aim is to cut costs and sell assets at the target company, thereby bringing down the debt, and making it possible for the private equity group to make a profit for its investors. Liabilities Something owed to others, and the other side of the balance-sheet from assets. Often, this is in the form of money, such as a debt. But it could be a warranty to repair or replace a product that the company has sold or the legal costs involved in compensating customers for a defective product. Liberalisation In economic terms, this usually refers to reducing the role of the government, and the restrictions on the private sector, by privatising business and cutting regulations. See also neoliberalism. Life-cycle hypothesis Most people see their incomes improve as their career progresses. But their need to spend is less variable than their incomes. So the life-cycle hypothesis, proposed by Franco Modigliani, an Italian-American economist and Nobel laureate, suggests that they will borrow to fund their spending (or to buy a house) at the start of their careers, save as they approach retirement and run down their savings after they stop working. See also permanent income hypothesis. Limited liability One of the most important concepts in modern capitalism. Limited liability means that investors who own the equity of a company can only lose their initial stake if the business collapses; creditors cannot pursue their other assets, such as their homes. By limiting liabilities in this way, more entrepreneurs are willing to take the risk of setting up businesses, and more investors are willing to back them. Liquidity The quality of being easily turned into cash. This can depend on the nature of the instrument; Treasury bills, short-term debt issued by the American government, are cash-like instruments. Or it can depend on the volume of trading in the market; government bonds are easier to sell quickly than debt issued by a small company. In times of crisis, investors tend to have a strong preference for liquidity; when asset markets are booming, illiquid assets seem more attractive. See liquidity trap. Liquidity trap A concept, introduced by John Maynard Keynes, that monetary policy has a limited effect when animal spirits are depressed. Cutting interest rates will not cause more businesses to invest, or consumers to spend rather than save, because they will prefer the liquidity of cash. In such circumstances, fiscal policy has to do the work of reviving the economy. See also zero lower bound. Loss aversion A psychological trait, discussed in behavioural economics, that dislikes the acceptance of losses. Investors may hold on to losing positions, rather than sell them, because they are unwilling to recognise their mistake. Depending on how a proposition is framed, people may act differently; a discount for paying taxes early will be less effective as an inducement for early payment than a penalty for paying late. See also framing and sunk cost syndrome. Lump of labour fallacy The assumption that there is a fixed amount of work to go round, so that letting new entrants into the job market will penalise existing workers. It was once used to argue against women joining the workforce and is still used against immigrants. But the fallacy ignores an obvious point; that new workers earn wages and then spend those wages on goods and services produced by other workers. Indeed, the global population has increased enormously over the past century, yet most people have found jobs. Macroeconomics The analysis of how the overall economy works; how the decisions of consumers, business, investors and governments affect key measures such as inflation, unemployment and gross domestic product. Economists try to use macroeconomic analysis to forecast economic indicators but human behaviour is hard to predict, especially as forecasts can affect individual decisions. But macroeconomic policy tools include fiscal policy, monetary policy and changes in laws and regulations designed to change behaviour. See also microeconomics. Macroprudential regulation Setting rules for the financial system to try to prevent a widespread collapse, on the lines of the 2007-09 crisis. Examples might include getting banks to have minimum amounts of equity capital or requiring home buyers to put up a larger deposit when they take out a mortgage. See also systemic risk. Manufacturing The process of making physical products from raw materials through the use of labour and machinery. Once dominant in developed economies, it now takes a smaller share of GDP than services. That is unlikely to be reversed: see this Explainer. Margin The term crops up quite often in economics and finance. In the stockmarket, investors and analysts often focus on profit margins; the difference between the revenues from selling a product and the costs of producing it, often expressed as a percentage of the latter. Investors can also buy shares on margin; putting up only a fraction of the overall cost (an example of leverage). The marginal product of labour is how much extra output a firm would get by employing an extra worker, or by getting an existing worker to put in an extra hour. See also marginal cost, marginal propensity to consume, marginal tax rate and marginal utility. Marginal cost The cost of producing an extra unit of something. When production is increased, the marginal cost of producing an extra item can be significantly lower than the average cost of production (see economies of scale). Marginal propensity to consume The proportion of an extra earned dollar that an individual would spend rather than save. People with lower incomes have a higher marginal propensity to consume than the rich. This means that attempts to ease fiscal policy are best targeted at those who are not well off. Marginal tax rate The proportion of an extra earned dollar that will be taken by tax. High marginal tax rates can reduce incentives to work. This occurs at both ends of the income scale. At the lower end, marginal tax rates can be high as welfare benefits are withdrawn once individuals' incomes pass certain levels. At the upper end, many societies impose higher marginal tax rates on those with high incomes. See also progressive taxation. Marginal utility The added (or lost) satisfaction or benefit gained by consumers from the increase (or decrease) of one unit. The usual assumption is that marginal utility declines as consumption increases: for a hungry person, the first slice of toast is very satisfying but they may stop eating before their seventh or eighth. Mark-to-market The practice of recording the value of an asset in a set of accounts at the current price, rather than the price at which it was bought. Though logical in theory, the practice has been criticised for encouraging short-termism. If the market value is hard to ascertain, then the company can exploit the uncertainty to manipulate the figures: mark-to-market accounting was at the heart of the Enron scandal. Market failure This occurs when a market fails to allocate resources efficiently, or fails to account for real-world costs. This can occur because of externalities, such as the pollution emitted by a chemical plant which is a cost that falls on people with no economic connection to the chemical company. Some goods (public goods), such as defence or roadbuilding, can only (or mainly) be supplied by the public sector since they are subject to the free rider problem. Market failures can occur if an industry is dominated by a monopoly or monopsony, or in the presence of asymmetric information. Marxism See communism. Mass production One of the breakthroughs in 20th-century manufacturing was the development of mass production, normally associated with the Ford Motor Company. Mass production usually involved the division of labour, specialised machinery and standardised products. The economies of scale involved allowed manufacturers to lower their prices and vastly expand the potential market for their goods. Maturity A term which applies to debt, and refers to the amount of life before the debt needs to be repaid and thus refinanced. Medium of exchange One of the important functions of a currency is that it is easy to use to buy and sell goods. Modern fiat currencies achieve this feat but cryptocurrencies have yet to do so. Mercantilism An economic school of thought, common in the 17th and 18th centuries, which argued that countries should focus on building up their supplies of gold and silver. This required nations to restrict imports and attempt to boost exports, and to restrict free trade. Mercantilists believed trade was a zero-sum game. Adam Smith's arguments against state intervention were linked to his belief that mercantilism was misguided. Mergers and acquisitions (M&A) This term, often abbreviated to M&A, concerns corporate takeovers. Genuine mergers, in which two companies of roughly equal size combine, are much rarer than acquisitions, in which a larger company buys a smaller one. And hostile acquisitions, in which the smaller company resists the deal, are rarer than agreed takeovers. The deals are very lucrative for investment banks, and other advisers, who are thus understandably happy to recommend them. But the buying company faces the risk of overpaying for the target and the danger that the culture of the two businesses is incompatible, leading to disappointing returns. Microeconomics The branch of economics that studies the decision-making of individual entities, such as individuals and businesses. Microeconomists look at how these agents will respond to incentives, or to changes in prices, regulations or taxes. By contrast, macroeconomics looks at the behaviour of the economy in aggregate. Middle income trap A problem that can affect developing countries as they get stuck at a certain level of GDP per person. Such countries can have success in manufacturing low-value goods but then supposedly struggle to develop higher value-added sectors in services or technology. For a sceptical view, see this article. And on China's prospects of escaping it, see this one. Minimum wage An hourly pay rate for workers, set by law, with the aim of reducing poverty and protecting workers from exploitation. Many economists were historically dubious about the benefits of a minimum wage (see Explainer), believing it would reduce demand for labour and thus drive up unemployment. The evidence in practice is that there has been relatively little impact on employment, perhaps because higher wages attract better-skilled workers and reduce staff turnover, or because, in many sectors, using minimum-wage labour is still cheaper than using machinery. For more detail, see our Schools Brief. Minsky moment A sudden collapse in market sentiment. Named after Hyman Minsky, an economist, who developed a financial instability hypothesis. As asset prices rise, investors become more and more confident and use leverage to finance their positions. By the end, they will be buying regardless of underlying valuations. At some point, confidence will falter and investors will rush to sell and repay their debts, causing prices to collapse. For more, read our Schools Brief. Misery index The sum of the rates of inflation and unemployment. Created in the 1970s by Arthur Okun, an American economist, to gauge the cost of stagflation. Mixed economy An economic system that combines elements of free enterprise and state planning. Few economies are not mixed to some degree, with the possible exception of North Korea. Even communist Cuba allows some market activity. Models A description of economic relationships in mathematical or graphical form, designed to allow hypotheses to be tested. Inevitably, models have to simplify the incredibly complex nature of relationships in the real world. Although models can add clarity and mathematical rigour to statements about the economy, some are criticised for their unrealistic assumptions (such as perfect information and rational expectations). And a fondness for complex mathematical equations has led economists to be accused of "physics envy"; trying to create precise rules in a social science. Modern monetary theory (MMT) A school of economic thought which argues that a government, which can borrow in its own currency, can issue as much debt, and run as large a deficit, as it likes, subject only to the constraint of higher inflation. The government does not have to worry about financing its deficit, since the central bank can buy the extra debt, or indeed just create the required money. Only if the economy is at full capacity will this credit creation lead to inflation. Adherents to MMT tend to believe that the business cycle should be managed with fiscal policy rather than interest rates. Orthodox economists are dismissive of MMT: see this article and our Schools Brief. Monetarism The belief that changes in the money supply are the main determinant of changes in inflation, associated especially with Milton Friedman, an American economist. Cases of hyperinflation have indeed been associated with the rapid printing of money. But when governments adopted monetarist policies in the late 1970s and early 1980s, they found money supply hard to control and also struggled to decide which measure of money supply was best to target. Monetarist policies were abandoned in favour of inflation targeting. Monetary financing The direct financing of government spending by the central bank. This happened during the hyperinflation in Germany in 1923 and was thus regarded as anathema for a long period afterwards. As a result, some commentators viewed quantitative easing after the financial crisis of 2007-09 with great suspicion. Technically, however, QE is not monetary financing, because central banks only buy government bonds in the secondary market and because they pay interest on reserves (the money they create). Monetary policy The use, normally by the central bank, of interest rates and other tools to try to influence the economy. Interest rates are raised when the bank is trying to control inflation and lowered when inflation is low and it is trying to revive the economy. The financial crisis of 2007-09 led central banks to face the zero lower bound. This prompted many of them to use a new tool, quantitative easing, which was designed to bring down long-term rates or bond yields. Money The oil that greases the economy's wheels, and acts as the unit of account for economic activity. Money can be any token that is accepted as payment; past examples have included seashells and the giant stones on the island of Yap. For a while, money was linked to precious metals but modern money is largely fiat currency and is electronic in form. Whatever its form, money needs to be a reasonably stable store of value and an acceptable medium of exchange. Money illusion Failing to take account of the effect of inflation. Employers may find workers more willing to agree to a pay rise of 4% when inflation is 6% than to accept a pay freeze when prices are falling. Savers should be happier about earning a return of 2% when inflation is zero than the prospect of earning 4% when inflation is 6%. See also real terms. Money markets A term used to describe the borrowing and lending of money on a short-term basis (generally for less than a year). Banks need to finance themselves with short-term borrowing on a regular basis, so when the money markets freeze (as they did in 2008) a crisis usually follows. Money supply The total amount of money in an economy. This is very hard to define; notes and coins are only a small part of the money we use. Current-account balances, unused credit-card balances and holdings of money-market funds can all be added to the mix. Measuring all these, and deciding which are the most important, dogged the application of monetarism in practice. Monopoly A company with a controlling position in an industry or sector. Traditionally, the main fear was that monopolies would exploit their position to overcharge customers. But in the internet age, concerns have shifted to the idea that technology companies with strong franchises will strangle competition by denying new firms access to their platforms, or by simply acquiring them to add the product to their range, thereby increasing their dominance. See antitrust. Monopsony Whereas a monopoly is a seller with a dominant position, a monopsony is a dominant buyer. An example could be a food producer which is the main buyer of coffee beans or fresh chickens from farmers. A monopsonist can exploit its position by insisting on low prices. Moral hazard The risk that providing insurance might alter the behaviour of those being insured. Homeowners or car drivers may take more risks if they know that an insurance company will cover their losses. This is also a problem for central banks when they act as a lender of last resort for banks; knowing they will be rescued in a crisis, bank executives may take more risks and investors may be less choosy about the banks with which they do business. See asymmetric information. Most favoured nation A core principle of the World Trade Organisation (WTO) and the GATT, this requires countries to treat the imports and exports of all other WTO members in the way that they treat the "most favoured nation" among their trading partners. In other words, there is no special treatment for any one country. Multiplier effect This concept, central to Keynesian economics, relates to the proportional increase, or decrease, in demand that can arise from an injection, or withdrawal, of spending. So a government increase in spending on, say, roadbuilding will mean more jobs for workers who spend their wages on other goods and services, which encourages the employment of more workers, and so on. For more detail, see our Explainer and Schools Brief. NAFTA (North American Free Trade Agreement) A deal signed in 1993 by America, Canada and Mexico to eliminate tariff barriers between the three countries by creating a free trade area. The agreement was disliked by many on both the left and the right of American politics and President Donald Trump renegotiated it during his first term in office, renaming it the US-Mexico-Canada Agreement (USMCA). The main change was that a greater proportion of a car or truck's components had to be manufactured in America to qualify for tariff exemption. Nairu (Non-Accelerating Inflation Rate of Unemployment) The lowest rate of unemployment that does not lead to a jump in wages and inflation. It is a development of the "natural rate of unemployment", a concept developed by Milton Friedman. This holds that a certain level of unemployment is inevitable, as workers switch jobs or take time to upgrade their skills. Trying to force unemployment below this level does nothing but stoke inflation. However, calculating the Nairu at any given moment is very tricky; it clearly varies over time. See also frictional unemployment, Phillips curve. For more detail, read our Schools Brief. Nash equilibrium A definition of equilibrium, devised by John Nash, an American mathematician, in the late 1940s, that has become one of the most powerful ideas in economics. Every agent chooses their optimal strategy, taking the strategies of everyone else as given. Nash equilibrium is thus the best everyone can do, but need not be the best for society. The idea won Nash a share of the Nobel prize for economics in 1994. For more, see our Schools Brief. National debt The sum of government debt, usually expressed as a proportion of GDP. The debate over whether this proportion has any real significance has sharpened in recent years, particularly in the light of quantitative easing, which has led to central banks owning large chunks of government bonds. Clearly, it matters what interest rate is payable, the maturity of the debt, the currency of denomination and who the creditors are. Governments struggle most if they have a lot of short-term debt to refinance in a foreign currency. National income See gross domestic product and gross national product. Nationalisation The takeover by the state of private businesses. Under communism, all large businesses are state-owned and the previous private owners are rarely compensated. In a social democracy, the state tends to focus on certain industries, notably utilities (power generation, water etc), those deemed to be strategically important (steel, coal) and loss-making businesses that employ a lot of workers. Nationalisation was common after 1945 but was reversed under the privatisation programmes of the 1980s and 1990s. Natural experiment Unlike scientists in a laboratory, economists do not, as a rule, carry out controlled experiments on real economies (see, however, randomised control trials). But sometimes circumstances throw up similar opportunities, known as natural experiments—eg, a rise in the minimum wage in one place but not another. The pioneering work in this field was carried out by David Card, who shared the Nobel prize in 2021 (see article) and the late Alan Krueger (see this appreciation). Natural rate of unemployment See Nairu. Negative equity This arises when a borrower buys a property and the price falls sharply, so that the size of the loan is greater than the value of the property. This was a big problem in the American housing market in the mid-2000s. Negative equity meant, at best, borrowers would be unable to move and at worst, they would default, with resulting losses for the lenders as well as themselves. Negative income tax A payment made to people on low incomes as a way of reducing poverty. The approach can be an alternative to welfare payments, which can be complex to administer and carry social stigma. Instead the state just makes a payment to those whose incomes are below a certain level. Negative interest rates A modern development that would have surprised economists from earlier eras, negative rates mean that investors are in effect charged for lending, or depositing, their money. They emerged in the wake of the 2007-09 financial crisis, as central banks found new ways to ease monetary policy. Investors had a number of reasons for tolerating negative yields on government bonds; they might face bigger losses investing elsewhere; falling prices could make negative rates positive in real terms; and holding their money in cash (banknotes) was impractical. See also zero lower bound. And see this article for more. Neoclassical economics A school of thought, associated with Alfred Marshall, an English economist, that developed in the late 19th and early 20th centuries. Rather than focus on the cost of production as the most important element in determining the price of a good or service (as did the classical school), neoclassical economists focused on the preferences of consumers, and the utility they attach to the product. The focus on both producers and consumers in maximising utility allowed the neoclassicists to build models of how the economy works. Neoliberalism A term, often used by opponents, applied to the economic reforms pursued by Margaret Thatcher and Ronald Reagain in the 1980s. Broadly, the reforms included lower taxes, constraints on public spending, privatisation and deregulation. Neither politician used the term to refer to their own policies. See also supply-side economics. Net present value A standard approach used in business investment. A firm estimates all the future revenues that will flow from a project and then discounts them to reflect their value in today's money. The calculation is highly sensitive to the assumptions about future revenue growth and the discount rate applied; the risk is overoptimism. See also time value of money. Network effect The benefits that accrue to consumers and producers when more customers buy a product; it is little use being the only person to own a telephone, for example. Network effects have been significant in the development of the internet; platforms such as eBay and Airbnb benefit from network effects as consumers are attracted by a plethora of suppliers and suppliers flock to platforms with many consumers. See also first mover advantage. Nobel prize for economics This award was first awarded in 1969, well after Alfred Nobel's death, and was set up in his memory, with Sweden's central bank funding the prize. Notable winners have included Paul Samuelson, Simon Kuznets and Milton Friedman. Nominal interest rates The stated level of interest rates, taking no account of inflation. A nominal return of 5% might sound good, but if inflation is 8%, then the purchasing value of the saver's money is declining (by about 3%). Real interest rates adjust for actual, or expected, inflation. Normal distribution Also known as the bell curve, this describes phenomena where most data points cluster around the average and there are few outliers; human heights are a classic example. When bankers use the normal distribution in financial models, however, they can be caught out by extreme events or fat tails. OECD The Organisation for Economic Co-operation and Development was created in 1961 and has acted as a club for developed nations, compiling reports on individual economies and serving as a hub for research on policy options and economic data. For more, see this Explainer. Offshore haven A jurisdiction which imposes little or no tax on transactions or profits and thus is chosen by financial and multinational companies as a hub for some of their activities. Rich individuals also hold money offshore, to reduce their tax bills. The IMF has estimated that governments worldwide lose around $500bn to $600bn a year through the use of offshore havens. For more, see this Explainer. Oligopoly When a few firms control a market. This can lead to agreements (tacit or explicit) to fix prices or exclude new entrants. Adam Smith famously wrote: "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices." See cartel. OPEC The Organisation of Petroleum Exporting Countries is a producers' cartel which attempts to influence both the supply and the price of oil. It was most effective in the 1970s, quadrupling the oil price and contributing to the stagflation of the era. Its influence waned after that era as new producers like Norway emerged and America developed its shale oil reserves. But OPEC's decisions (these days taken after consultation with Russia and other producers, in a forum known as OPEC+) still matter. Opportunity cost The cost of something may not just be its price but the alternative; what was given up to get it. So the opportunity cost of spending the afternoon at a bar is the wages you might have earned had you stayed at work. Money spent on a fancy meal could have been spent on a training course to enhance your skills. Optimal currency area A theoretical assessment of the geopolitical regions where it would be most efficient, in economic terms, to share a currency. The criteria, developed by Robert Mundell (winner of a Nobel prize), include the existence of highly integrated economies, with flexible labour markets, and the potential for fiscal transfers between nations. Option A derivative contract that gives the right, but not the obligation, to undertake a transaction at a set price for a set period. A call option is the right to buy and a put option the right to sell. In return, the option holder pays a premium to the person who grants the option. See also share options. Output The result of economic activity. GDP is the total output of a nation's economy. Output gap The extent to which an economy is operating above potential. In theory, the economy will overheat, driving inflation, only if the output gap is positive, meaning that businesses are chasing scarce workers and resources. But assessing the level of potential output is very difficult, so estimates of the output gap are imprecise. Over-the-counter markets Forums where financial instruments are traded, but are not a recognised exchange (like the New York Stock Exchange). Trillions of dollars' worth of currencies are traded this way every day. Overheating If an economy is growing too fast, companies may face bottlenecks in acquiring resources or hiring labour. This will lead to higher costs and wages, and thus rising inflation. Overshooting When financial markets take a trend too far. For example, when a currency depreciates, investors may lose confidence and sell, driving the currency to an undervalued level. Investors may also overreact when central banks start to tighten monetary policy, driving up rate expectations further than the authorities intend. But overshooting is not always irrational or mistaken. Rudi Dornbusch, a German economist, showed that exchange rates naturally overshoot under certain conditions. Pareto distribution Vilfredo Pareto, an Italian economist, noticed that 80% of Italian land was owned by 20% of the population. This distribution, also known as a power law, crops up in a wide variety of circumstances; one study found that 80% of health-care expenses were linked to just 20% of patients. Pareto efficiency Another idea named after Vilfredo Pareto. It describes a situation in which resources are distributed so that it is not possible to make anyone better off without making someone else worse off. In theory, if Pareto efficiency is not achieved, this is a case of market failure since it is possible to improve the allocation of resources. Passive management The purchase of a portfolio that replicates the broad market in an asset class (usually equities). Passive management emerged in the 1970s when it was noticed that many active managers failed to beat the index after fees (this is inevitable, because the index does not reflect costs). Pension funds Institutional investors that run portfolios on behalf of current and future retirees. Final-salary (or defined-benefit) funds offer a pension that is linked to employees' salaries; these are increasingly confined to the public sector. In the private sector, younger employees are only offered defined-contribution pensions, where the retirement income is dependent on market performance. Perfect competition A model that describes a market where buyers and sellers are numerous and well-informed and thus there is no scope for monopoly, monopsony or oligopoly. The model requires a number of idealised assumptions (such as no transaction costs) that do not apply in the real world. Permanent income hypothesis A theory of consumption, developed by Milton Friedman, that suggests people try to spread their spending evenly over their lifetimes. A sudden windfall will not be spent entirely; a significant part will be saved. And those savings will be used to top up spending in the event of a loss of income; for example, losing a job. Thus a person's spending will be less volatile than their income. See also life-cycle hypothesis. Phillips curve This concept, developed by William Phillips, an economist, suggests that inflation and unemployment are inversely related; when inflation is high, unemployment is low and vice versa. Phillips had discovered the link in data from the British economy between 1861 and 1957. In the 1970s, however, both inflation and unemployment were high (see stagflation) and in the 2000s, both were low by historical standards. This suggests the relationship is far from stable. Our Schools Brief explains in more detail. Physics envy See models. Pigouvian tax Named after Arthur Pigou, a 20th-century British economist, a Pigouvian tax is imposed on activities that have negative side-effects, or externalities. Examples might include taxes on pollution, tobacco or the sales of plastic bags. For more detail, read our Schools Brief, and this article on carbon taxes. Platform company A new type of firm that emerged with the internet and links together suppliers and consumers. For example, Airbnb connects homeowners with properties to rent and holidaymakers who need somewhere to stay. Platform companies benefit from network effects: a large number of suppliers attracts consumers and vice versa. Positional goods Products that confer status and are thus both limited in supply and carry premium prices. Examples include properties in highly desirable residential areas, fancy sports cars and upmarket hotels. The existence of positional goods helps explain why rising living standards have not been accompanied by a substantial reduction in working hours; people work hard so they can feel a cut above the rest. For more, see this article. Post-neoclassical endogenous growth theory See endogenous growth theory. Poverty Measures of poverty can be absolute or relative. In the former case, individuals or households have insufficient income to afford the basics of life: food, shelter, heat, clothing. In the latter, poverty is measured against a proportion (say, 50% or 60%) of median income. At the global level, extreme poverty is defined by the World Bank as an income of less than $2.15 a day, in 2017 purchasing-power parity prices, at the time of writing. On this measure, the proportion of the world population in extreme poverty has dropped from more than 35% in 1990 to less than 10%. Poverty trap A term used when people find it impossible to improve their circumstances thanks to institutional barriers. One example is the workings of the tax and benefits system. High effective marginal tax rates—combining taxes on earnings and withdrawal of benefits as incomes rise—may mean that their employment earnings will make them barely any better off. Another is access to the highest level of education and health services, which may prevent people from realising their full potential. Power law See Pareto distribution. Precariat A term given to workers in low-paid jobs, often part-time or on zero-hours contracts, who struggle to make ends meet, and often rely on welfare payments to top up their incomes. Left-leaning politicians blame the existence of the precariat on the promotion of labour market flexibility since the 1980s. See also gig economy. Precautionary motive Holding a proportion of assets in cash, so that the individual can bear the cost of an unexpected event. Keynes suggested there were three reasons to hang on to cash: the other two are the speculative motive and the transactions motive. Price The cost of a good or service to the customer, which should be set by the balance of supply and demand. How this relates to the cost of production depends on the nature of the product or the structure of the market; positional goods may be sold well above their production cost and monopolies can also charge a premium. See also sticky prices. Price elasticity

investment, and asset freezes. They have become a widely used tool of foreign policy, not least after Russia's invasion of Ukraine in 2022. For more about their use, history and effectiveness, read our Briefing and this article. Savings Income that, instead of being consumed, is set aside for future use. Keynes suggested three reasons for this decision: the precautionary motive, speculative motive and transactions motive. Across the economy, a sudden increase in saving leads to a fall in aggregate demand, and thus increases the potential for a recession. But savings are also vital for long-term economic growth since they provide the funds for investment. In the world economy—or in a theoretical economy closed to trade—saving and investment must be equal. Say's law The idea, coined in the 19th century by Jean-Baptiste Say, a French economist, that supply creates its own demand. Say was referring to aggregate demand, rather than that for individual products. In producing a good, a business will have paid wages to workers, bought raw materials from suppliers and so on. These wages and revenues will be used to buy other products. Say's law was used by classical economists to argue that recessions would right themselves without government intervention. For more, see our Schools Brief. Seasonal adjustment Some economic activity varies depending on the time of the year. Retail sales surge in the run-up to Christmas, for example. Statisticians adjust economic data to take account of these variations. Secondary market The forum where existing securities (such as bonds or equity) are traded. Turnover in the secondary market is vast, running at many trillions of dollars a day. When the media report on "nervous markets", it is the secondary market to which they refer. See also primary market. Securities A catch-all term used to describe tradable financial instruments, such as bonds and equities. Securitisation The practice of bundling together certain types of assets so they can be repackaged as interest-bearing securities. The assets in question tend to be those that are not normally tradable: residential mortgages, commercial mortgages, car loans etc. Securitisation was highly popular in the early 2000s, when investors were looking for assets that yielded more than government bonds. But the bundling of subprime mortgages led to the financial crisis of 2007-09. Seigniorage The difference between the face value of money and the cost of producing it. Over history, this has been a nice little earner for governments. However, small coins, such as the American penny, can cost more to make than they are worth. Seniority The order in which creditors are entitled to be repaid in the event of a company going bankrupt. Senior debt must be paid off before junior debt and is thus less risky, carrying a lower yield. Services Economic activities that, unlike manufacturing, do not create a physical product. These make up the greater part of the GDP of most developed economies and include everything from architecture to zookeeping. Shadow banks Financial services companies that are not part of the regulated banking system but are still involved in lending and derivatives trading. The expansion of shadow banks in the early 2000s resulted in the credit expansion that eventually triggered the 2007-09 financial crisis. See also subprime mortgages. Share options One of the main ways in which executives at big companies are incentivised. Options give people the right, but not the obligation, to buy shares at a set price. The idea is to reduce the principal-agent problem by aligning the incentives of managers and owners, who want to see the share price rise. Executives have certainly prospered since options became more widely used in the 1980s, thanks to a long bull market in equities. But options have been criticised for encouraging short-termism; managers may be reluctant to make investments that damage the share price. See also options. Shareholder value The idea, especially influential in the 1990s and early 2000s, that businesses should focus only on improving shareholder returns. Supporters argued that it was up to governments to pass laws to promote wider social goals, not companies. Opponents argued that the concept led to short-termism and a callous disregard for workers' rights and the environment. See also stakeholder capitalism. Shares An alternative term for equities. Short-selling The practice of borrowing shares, then selling them, in the hope of buying them back at a lower price and making a profit. Short-sellers tend to be unpopular, on the grounds that they prosper from bad news, and the practice tends to be banned or restricted during crises, the very times when it is most profitable. But short-sellers can play a useful role in sniffing out scandals and acting as a check on overheated markets. Short-termism An excessive focus on immediate returns at the expense of the long-term. This can apply to businesses if they pay too much attention to quarterly profits targets, or to institutional investors if they hold their position for a few weeks, rather than a few years. See share options. Skill-biased technological change (SBTC) An explanation for the rise in income inequality in the developed world. The rising use of new technology has led to a wage premium for those who can use it efficiently and depressed the wages of lower-skilled workers. Socialism A term that is hard to define. Socialists believe in some forms of collective ownership but not the near-complete abolition of the private sector imposed under communism. They will attempt to redistribute wealth through taxes on the rich and welfare for the poor, but not to eliminate all income differentials. Sovereign risk The risk that a government will default on a bond or a loan. Sovereign-wealth funds Investment pools accumulated by national governments, often from the proceeds of energy wealth. Among the largest are those of China, Norway, Abu Dhabi and Kuwait. These funds give countries a chance to diversify their assets, and thus to protect themselves against an economic downturn or a decline in a key industry. Special drawing right (SDR) Reserve asset created by the International Monetary Fund and defined in terms of a basket of five currencies (American dollar, euro, yen, yuan and British pound). New assets can be created at times of crisis, as they were in 2009, during the financial crisis, and in 2021, during the pandemic. The SDRs were distributed to countries, based on their shares in the IMF, thereby boosting their foreign exchange reserves and improving global liquidity. Specialisation Another term for the division of labour, and a key insight of Adam Smith, who used the example of a pin factory. By breaking up a production process into a series of tasks, workers could learn to do the tasks quickly and efficiently. Productivity would be far higher than if each worker attempted to handle the entire production process on their own. At the level of the whole economy, specialisation is the means of exploiting comparative advantage and hence the gains from free trade. Speculation The line between speculation and conventional investment is a fine one. Generally speaking, speculation will be short-term in nature, will involve leverage and will have no fundamental relationship to the business or personal interests of the speculator. Although speculators are often condemned, many businesses would struggle to hedge their risks without a speculator to take the other side of the position. Speculative motive One of three reasons suggested by Keynes for holding cash. An investor might hope that asset prices will fall and thus hangs on to cash in the expectation of buying the assets more cheaply. See also precautionary motive and transactions motive. Spot price The price that has to be paid for something if it is bought immediately. Most commonly used in the commodity markets, and a contrast with the futures price. Spread A common term in financial markets to describe the difference between two prices or interest rates. When an investor seeks to trade a share, the dealer will offer a spread between the price at which they buy and sell. Riskier companies pay a higher rate to borrow than high-quality companies, or the American government, and the difference in yields is known as the spread over the less-risky bond. Stagflation A combination of high inflation and high unemployment. The Phillips curve suggests this should be rare, as high unemployment is associated with a shortage of demand, and high inflation with demand outstripping supply. But it happened in the 1970s after the supply shock of the OPEC oil embargo, and also became a threat in the wake of the covid-19 pandemic (see this Explainer). Stagnation A prolonged period of little or no economic growth. Stakeholder capitalism The idea that businesses should serve a wider community than just their shareholders, including their workers, suppliers and society at large. Proponents argue that this is better for the economy in the long run than a focus on short-term profit; indeed, they believe that companies that ignore their other stakeholders will eventually run into trouble. See also shareholder value. State capitalism See authoritarian capitalism Sticky prices Retail prices can be slow to respond to changes in supply and demand, as car drivers often note when oil prices fall and the price of petrol fails to follow. This can lead to market disequilibrium as consumers wait until prices have adjusted before purchasing. Sticky prices may be caused by the costs of making price changes and asymmetric information between producers and consumers, among other factors. Stock exchange A formal market where shares, or equities, are traded. The word stock is commonly used as an alternative for shares in American English. Most developed countries have at least one stock exchange, and each exchange will have listing requirements for companies that want to have their shares traded. Trading was once conducted via open outcry in a single location but is now done mostly electronically. Stockmarket A term used broadly to describe all the trading in shares or equities. Strategic industry An industry that a government deems to be of special importance to the economy and hence deserving of special treatment, such as tax breaks, subsidies or protection from foreign competition (see industrial policy). Some sectors, such as defence, may seem obvious choices but the list is long (even, notoriously, extending to dairy products: see article). Self-sufficiency, national security, the promotion of research and development or the fostering of an infant industry may be the justification; protectionism may be the outcome (see article). Structural adjustment A programme of economic change designed to improve long-term growth. The IMF and World Bank may demand a programme of structural adjustment in return for a loan. And many a leader in The Economist has recommended structural reform. Structural unemployment Joblessness that results, not from a shortage of demand, but from the structure of the economy. Examples include a focus on industries that have been overtaken by foreign competitors or have been rendered obsolete by technological change. Believers in supply-side economics would also argue that structural employment can be caused by overregulation and a lack of labour market flexibility. For more, see this Explainer. Subprime mortgages Home loans made to those with poor credit ratings. In the 2000s, some of these borrowers were dubbed "ninjas" as they had no income, job or assets. The loans were then bundled together as part of the securitisation process and sold to institutional investors and shadow banks. When house prices started to fall, many subprime borrowers defaulted, contributing to the 2007-09 financial crisis. Subsidy Money paid by a government, usually to one of two groups. The first is consumers, to encourage them to buy a product (such as insulation) or to keep prices down (as in 2022 when energy prices surged). The second is businesses, either to keep them from going bust (and save existing jobs) or to set up in a certain area (and create new jobs). Many economists dislike subsidies, since they distort market signals, unless they correct externalities. Substitution effect When the price of a product rises, consumers may replace it with an alternative; chicken instead of beef, for example. Statisticians need to adjust for this when compiling inflation indices. In demand theory, the change in demand for a good in response to a change in its price can be broken down into the substitution effect (the party due to the change in its price relative to other goods) and the income effect (the part due to the change in real income). Sunk costs Expenses that cannot be recouped. Examples include the building of a prototype or the cost of obtaining planning permission for a new development. The danger is that businesses develop "sunk cost syndrome", continuing with a project, regardless of its prospects, rather than admit it was a failure and take the loss. See also loss aversion. Supply Those goods and services that are available to meet demand. Supply and demand curves One of the earliest illustrations learned by students of economics. Supply increases as the price rises, and demand increases when the price falls (with the exception of some luxuries, known as Veblen goods, and very basic Giffen goods). The two are displayed on a graph (usually as straight lines, rather than curves) and the point where they meet is the equilibrium price. Supply shock A disruption to economic activity caused by a sudden interruption to supply of important products, or a sharp rise in price. In the modern era, supply shocks are often associated with energy: the oil embargo imposed by OPEC in the 1970s, for example, or Russia's restrictions on gas supplies after its invasion of Ukraine in 2022. The covid-19 pandemic, which caused many businesses to close, was another supply shock. Supply shocks usually result in both higher inflation and lower output, and are thus difficult for policymakers to tackle. Supply-side economics A school of thought that argues growth is best boosted to ways of stimulating output by improving productivity. This can be done by tax cuts for the wealthy (to encourage entrepreneurship), reducing regulations on business and promoting labour market flexibility (making it easier to hire and fire workers). The approach was championed by free-market economists in the 1970s as a counter to Keynesian economics, which tended to focus on shortfalls in demand. Swaps Derivative agreements whereby two counterparties agree to exchange cashflows. For example, one party may agree to pay a fixed interest rate, and the other a variable rate, linked to some benchmark. When payment is due, the two cashflows will be netted out, so only one party will pay the other. As with other derivatives, swaps can be used for hedging (against rising interest rates, for example) or for speculation. See also credit default swaps. Systematic risk Risk that cannot be diversified away. An investor could buy 100 shares and thereby reduce the danger that the collapse of a single company could damage their portfolio. But the systematic risk of a collapse in the stockmarket would remain. Systemic risk The risk of damage to the entire financial system from the collapse of an individual institution from a group of them. Regulators have had to reconsider this subject in the aftermath of the financial crisis of 2007-09 when some companies were deemed "too big to fail". Large commercial banks definitely fall into the category but the collapse of AIG, an insurance company, indicated that the potential for systemic risk was widespread. See also macroprudential regulation. Tangible assets Literally, things that can be touched such as buildings and machinery. See also intangible assets. Tariff A tax imposed on imports. Tariffs are designed to support domestic producers but they result in higher prices for consumers. The Economist was founded in 1843 to campaign against a tariff on grain, known as the Corn Laws. Tariff-rate quota Tariff-rate quotas (or tariff quotas) allow the import of a specified quantity of a good at a lower tariff, or free of tariffs. Amounts above the quota incur tariffs at a higher rate. Tariff-rate quotas are part of countries' trade commitments under the GATT and the World Trade Organisation. Tax avoidance Doing everything legally possible to reduce your tax bill. In a world of free capital movement and competing tax jurisdictions, multinational companies find it very easy to avoid taxes. See this Explainer on offshore havens; and also tax evasion. Tax competition When two different jurisdictions try to attract businesses and individuals by reducing their tax rates. In theory, this can prevent governments from making excessive tax demands on their populations. But this depends on how mobile taxpayers are. Under the Bretton Woods system, capital controls made it hard to move money between countries; tax rates on companies and rich individuals were generally higher. Now, some critics argue, a combination of free capital movement and tax havens means that the corporate sector and the wealthy do not pay enough tax. Tax evasion Paying less tax than is legally required. Tax evasion is punished with fines and sometimes imprisonment but that requires the evaders to be caught. Contrast with tax avoidance. Tax haven A jurisdiction that imposes little or no tax on corporations and wealthy individuals. The haven benefits by attracting deposits to its banks and by generating business for local lawyers and accountants. Tax incidence A term for where the burden of tax actually falls, as opposed to liability in law. Tax a company and the cost will be passed on to its shareholders (via lower dividends), its customers (via higher prices) or its workers (via lower wages). The chain can be complicated; sales taxes may be paid by consumers but if the result is lower demand, that may hit the profits of retailers. Sometimes referred to as the "effective" incidence of a tax, in contrast to its "formal" incidence. For more on the distinction, see this article. Tax neutrality The principle that governments should set tax rules so that economic decisions are made on their own merits, and not for tax reasons. A combination of the policy priorities of politicians and lobbying by corporations means the principle is rarely observed in practice. Taylor rule A guideline, suggested by John Taylor, an American economist, for how the Federal Reserve should set interest rates. The rule supposes a normal real interest rate of 2%. The Fed will move interest rates up or down depending on the distance between actual inflation and the target rate, and the size of the output gap. In practice central banks prefer to maintain their policy discretion, though they consult rules like Mr Taylor's. For more on the Taylor rule, see this article. Technical progress Innovations such as the steam engine, the internal combustion engine and electrification—as well as many incremental changes—have all boosted productivity and thus driven long-term economic growth. Some of these discoveries are down to individual genius but endogenous growth theory suggests governments can help to generate technical progress with the right policies: see this article. Terms of trade The average price of a country's exports, relative to that of its imports. Terms of trade shocks thus come in two main types. Developing countries can be hit by a fall in commodity prices, which reduces the value of their exports and this can worsen their trade balance. And developed economies can be hit by a rise in commodity prices, which increases the cost of imports and hits their trade balance. Time value of money The idea that money received now is worth more than money received in the future. In assessing the worth of an investment, any future income must be discounted at some rate in order to come up with a net present value. The choice of that discount rate (see this article) is crucial; the higher it is, the lower the net present value. Tobin tax A levy, proposed by James Tobin, an American economist and winner of a Nobel prize, on all currency transactions as a way of reducing volatility and discouraging speculation in the foreign exchange market. The Tobin tax has not yet been imposed, given the difficulty of getting international agreement. For more detail, read this Explainer. Total factor productivity (TFP) Output relative to inputs, measured (eg, by America's official statisticians) by dividing an index of output by a combined index of labour and capital. Growth in TFP is thus productivity growth that cannot be accounted for by extra inputs, but comes from greater efficiency or the adoption of new technology. Total return The sum of all returns from an investment, including income and capital gain. Trade bloc A group of nations that have agreed terms to reduce tariffs, or other trade barriers, among them. The European Union is the most obvious example. See also free-trade area. Trade unions Workers' associations that campaign for better employment rights and wages. In the developed world, their heyday was in the three decades after the second world war, when union membership was high and manufacturing jobs were plentiful. But globalisation and the decline of manufacturing employment after 1980 weakened union membership, leaving their greatest strength in the public sector. For more, see this article. Trade-weighted exchange rate A weighted average of a country's exchange rate with its main trading partners. The weights reflect the proportion of trade done with each partner. Trends in this rate are a useful guide to the country's competitive position. Tragedy of the commons If individuals have access to a public resource, they will exploit it, without considering the common good. So small farmers will let their animals graze on the common (since it is free) until all the vegetation is destroyed; over the centuries, humans have overfished the oceans. Avoiding this problem either requires regulation or market pricing to discourage overuse. Transactions motive One of three reasons for holding cash suggested by Keynes and the simplest: people need cash to buy stuff. See also precautionary motive and speculative motive. Transfer In economics, a transfer is a payment of money without any goods or services being exchanged in return. Governments make transfers in the form of welfare benefits but individuals make transfers, both to charities and to friends and family members. See also remittances. Transfer pricing This occurs when goods or services are exchanged, across national borders, but within a multinational company. This creates the scope for a subsidiary within a high-tax jurisdiction to sell at a low price (or buy at a high price) when dealing with another subsidiary in a low-tax area. As a result, the subsidiary in a low-tax nation makes most of the profit. There are rules against this form of tax avoidance but it undoubtedly occurs: see this article. Treasury bills Short-term government debt with a maturity of less than a year. The term is most commonly used for debt issued by the American government, and the market in these bills is highly liquid. However, other governments (including Britain) also issue Treasury bills. Treasury bonds Medium- and long-term debt issued by the American government. This is one of the most liquid markets in the world and the basis for many financial transactions including repurchase agreements. Trust A necessary condition for much economic activity; suppliers must trust that their customers must pay them and customers must trust that the goods they buy are satisfactory. Surveys have found that higher levels of trust are associated with faster economic growth in the long run. For more detail, see this article. Uncertainty See Knightian uncertainty and risk. Unemployment Being out of work when you want a job. After the Great Depression, many countries adopted policies to try to keep unemployment down and also offered income support to those who were out of a job. See also frictional unemployment, structural unemployment, involuntary unemployment and Nairu. For more on the different types of unemployment, read this Explainer. Unions See Trade unions Universal basic income (UBI) Term used for a variety of schemes to reduce poverty which involve giving all citizens an income that is enough to support them. Depending on the scheme design, the UBI would replace all or part of the benefit system. There are doubts about its potential effectiveness; a UBI might require punitively high marginal tax rates and might create a disincentive to work. USMCA (United States-Mexico-Canada Agreement) See NAFTA. Usury The charging of excessive rates of interest. Many ancient philosophers disliked the concept of interest payments and in the Middle Ages, laws against usury were common. Since lending was inherently risky in that era, this discouraged trade expansion and business formation. In the modern era, some governments still have laws that discourage sky-high rates of interest charged by those known as "loan sharks". Vacancy rate In the property sector, this is a measure of the proportion of rentable, or lettable, properties that are unoccupied. A high vacancy rate is either a sign of economic problems or the aftermath of excessive property building. For employment vacancies, see job vacancies. Value added The difference between the price of a good or service and the cost of producing it. This can be applied at the level of the individual firm (and is the basis for value added tax) or at the sectoral level. Value at risk (VAR) A measure used by financial institutions to estimate the maximum financial loss they might suffer, due to market movements, within a set period. Some institutions that used VAR were caught out in the financial crisis of 2007-09, because their models failed to allow for extreme events, or fat tails. Variable costs That part of a firm's expenditure that changes with the level of output (for example, extra raw materials). See also fixed costs. Veblen goods Luxury goods for which demand increases in line with their price. They are named after Thorstein Veblen, who described the phenomenon of "conspicuous consumption" in the late 19th century. Ownership of these goods confers social status, so their high price makes them more desirable by indicating that the buyer is part of the elite. As the saying goes: "If you have to ask the price, you can't afford it." Velocity of circulation A measure of how quickly money changes hands. A key component in the formula at the heart of the quantity theory of money. Venture capital A branch of the investment management industry that invests in start-ups, or recently formed companies, with the hope that they will achieve long-term success. Inevitably, venture capital investments have a high failure rate but the few successes can be so lucrative that overall returns can still be good. The sector has played a big role in financing the technology firms in Silicon Valley. Visible trade Trade in physical goods, such as raw materials, components and manufactured articles, like cars. See also invisible trade. Volatility A measure of risk in the financial markets. In its simplest terms, it is how much an asset price tends to go up and down. More precisely, it is calculated using the standard deviation of the logarithmic return over a given period. More volatile assets are deemed to be more risky and thus investors demand a higher return for owning them. For more, see this article. Voluntary unemployment A subset of economic inactivity, this term covers those workers who have the time, opportunity and ability to take a job, but choose not to. This may be down to frictional unemployment; they have recently left their jobs and are looking for a post that pays better or suits their skills. See also quit rate. Wage-price spiral A feedback loop in which rising inflation causes workers to demand higher wages and the cost of meeting those wage rises causes businesses to push up their prices. Workers are often the losers, as wages fail to keep up: see this article. Wages The return due to labour. As well as a weekly or monthly payment, workers are often entitled to other benefits such as pensions, health insurance and sick pay. Some workers also receive overtime pay and performance-related bonuses. Although, in theory, wages are a matter of negotiation between employers and employees, some states have minimum wage levels while trade unions may negotiate on the workers' behalf. Washington consensus A term, developed by John Williamson, a British economist, to describe the advice often given to developing countries by bodies such as the International Monetary Fund and the World Bank. The advice usually included deregulation, trade liberalisation, privatisation and fiscal restraint. Critics focused on the "one size fits all" approach of the consensus and the lack of attention to democratic accountability and poverty relief. For more, read this article. Wealth effect The impact of a change in wealth on consumption. A sudden collapse in the stockmarket or in house prices will make people feel poorer and thus they will spend less. Conversely rapidly rising asset prices may make consumers more confident and prompt them to increase their spending. Wealth tax An idea that appeals to many on the left, given the wealth disparities in many countries. Inheritance taxes are a form of wealth tax and played their part in reducing disparities in the first half of the 20th century, by eating into the landed wealth of European aristocracies. More ambitious politicians hope to impose annual levies on the assets of the wealthy. However, the rich are good at tax avoidance and the revenues raised from such taxes tend to be low as a proportion of GDP. And many economists think that taxes on capital distort the economy by encouraging consumption rather than saving and investment. Welfare A term used, particularly in America, for social benefits to help people who are unemployed, sick, retired or have low incomes. Before the 20th century, welfare benefits were low and designed to discourage the "undeserving poor" from applying. But the Great Depression demonstrated the need for social benefits and developed economies built "welfare states" after the second world war. In 2019 welfare spending averaged around 20% of GDP across the OECD. Welfare-to-work programmes Schemes that encourage people to take up jobs and employers to give them work. These may include training, education or tax credits that reduce the impact of the loss of benefits to workers, and tax incentives for companies. Windfall gains A sudden, unexpected, gain in wealth such as an inheritance or a lottery win. If the permanent income hypothesis were correct, people would save the bulk of these gains. But not everyone does. Windfall taxes Levies imposed on companies that make large profits after an economic change. The most recent examples have been taxes on energy companies when their profits surged after Russia's invasion of Ukraine in 2022. Economists are dubious about the merits of these taxes as they may discourage future investment; companies may need the occasional windfall to compensate them for the losses they incur in difficult times. For the case against, see this article. Winner-takes-all markets When enormous rewards go to a few. Lots of people can sing or play football but the big money goes to those good enough to sell out concerts or play for top-flight clubs. By the same token, the best accountants, lawyers or fund managers will attract very high fees as clients will seek them out. Withholding tax A levy that is collected before the recipient gets their money. Such taxes are often applied to interest and dividend income. Taxes are also deducted before most workers get their wages. Working from home (WFH) A phenomenon that took off during the covid-19 pandemic when many offices were closed. Although employees in many sectors (retailing, manufacturing) could not work from home, office workers were able to use technology, such as video conferencing, to carry on. The evidence did not suggest a great impact on productivity but as the pandemic eased, hybrid working (with some days at home and some in the office) became quite common where it was possible. For more, see our Special Report. World Bank An institution set up, like the International Monetary Fund, as part of the Bretton Woods agreement. The World Bank's main activity has been to provide loans and advice to developing countries, but it also conducts research into issues such as poverty and migration. For more about the bank, read this Explainer. World Economic Forum A research and conference group that holds an annual meeting in Davos, Switzerland, that attracts the great and the good. The conference has given rise to the stereotype of "Davos man" who is entitled and spouts the latest received wisdom. The forum has fuelled a thousand conspiracy theories. World Trade Organisation (WTO) A body set up, under the auspices of the General Agreement on Tariffs and Trade, to replace that regime and rule on trade disputes. China's admission to the WTO in December 2001 was followed by a rapid expansion of its exports, but not by the political liberalisation that some hoped would occur. The WTO is disliked by some campaigners—and some governments—because its decisions impinge on national sovereignty. Yield The income from a security, expressed as a proportion of its market price. A bond carries an interest rate or coupon based on its par value (conventionally expressed as 100). But as the price falls or rises, the yield moves in inverse proportion. A coupon of $5 is a higher yield on a price of 80 than on a price of 120. The gross redemption yield reflects any capital gain or loss (since the bond will eventually be repaid at 100) as well as the income. For equities, the yield is the dividend as a proportion of the share price. Yield curve A graph that shows the yield of securities with different maturities. Normally, longer-dated securities carry higher yields than those with shorter maturities to compensate investors for locking their money away (see time value of money). Occasionally the yield curve inverts, with shorter-dated securities yielding more; this is often the result of central banks tightening policy by raising interest rates and can be a harbinger of recession. Zero coupon bond A bond on which no interest payments are made. Instead it is issued at a discount to its repayment value and the bondholder makes a capital gain if they hold it to maturity. In some jurisdictions, this may have tax advantages if capital gains are treated less harshly than interest income. Zero lower bound Central banks adjust interest rates in their attempts to stimulate or slow down the economy. There is no upper limit to rates but economists debated whether rates could be cut below zero; that is, could depositors be penalised for keeping their money in a bank. However, central banks showed, in the aftermath of the 2007-09 financial crisis, that it was possible to introduce negative interest rates albeit for commercial banks, rather than for individuals. For more, read this article. Zero-hours contracts A form of employment in the gig economy that offers maximum flexibility to employers and little security to workers. Employees are summoned for work only when they are needed and cannot therefore be sure of their likely income, their availability for other jobs or child-care commitments. Zero-sum game The view that economic advance by one party can only be at the expense of another. This philosophy underlies protectionism, which seeks to exclude the products of other countries. But most economists believe that open trade is mutually beneficial. See comparative advantage; and see this article. Why are some countries rich and some countries poor? Why do women earn less than men? How can data help us understand the world? Why do we ignore information that could help us make better decisions? What causes recessions? Economics can help us answer these questions. Below, we've provided links to short articles that illustrate what economics is and how it connects to our everyday lives. Economics can be defined in a few different ways. It's the study of scarcity, the study of how people use resources and respond to incentives, or the study of decision-making. It often involves topics like wealth and finance, but it's not all about money. Economics is a broad discipline that helps us understand historical trends, interpret today's headlines, and make predictions about the coming years. Economics ranges from the very small to the very large. The study of individual decisions is called microeconomics. The study of the economy as a whole is called macroeconomics. A microeconomist might focus on families' medical debt, whereas a macroeconomist might focus on sovereign debt. What do economists do? Economists have all kinds of jobs, such as professors, government advisors, consultants, and private sector employees. Using theoretical models or empirical data, they evaluate programs, study human behavior, and explain social phenomena. And, their contributions inform everything from public policy to household decisions. Economics intersects many disciplines. Its applications include health, gender, the environment, education, and immigration. You can check out the field's classification system (called JEL codes) for more topics that economists study. Why should I care about economics? Economics affects everyone's lives. Learning about economic concepts can help you to understand the news, make financial decisions, shape public policy, and see the world in a new way. If you are a student, you might be wondering about how much economists earn or how to apply to graduate school in economics. We have resources on everything from learning more about economics to preparing for a career in economics. If you are a journalist, you might want research summaries and complimentary access to our journal publications — both reliable sources of current economic information. If you are an educator, you might be looking for ways to make economics more exciting in the classroom, get complimentary journal access for high school students, or incorporate real-world examples of economics concepts into lesson plans. Or, you might just want to learn more; our Research Highlights series (including the AEA Research Highlights Podcast) is a great place to start. No matter why you are interested in economics, the American Economic Association is here to help. We are dedicated to helping the public discover the field of economics. Browse our resources pages to learn more, and make sure to follow us on Facebook (AEAjournals), X (@AEAjournals) and Bluesky (@AEAjournals). Featured videos Economists at the 2020 AEA Annual Meeting said there are a number of misperceptions about what they do, but there's one false assumption that they tend to hear all the time. Much more than finance, banking, business and government, a degree in economics is useful to all individuals and can lead to many interesting career choices. These four diverse individuals offer their insights on how a background in economics can be a tool for solving very human problems. Research Highlights Economists can study a wide variety of topics. The following articles highlight some of the ways economists use data to explore everything from the impact of climate change to popular financial advice. View more AEA Research Highlights. Diagram illustrating the flow of money, goods, and services in a modern industrial economy.Encyclopædia Britannica, Inc.economics, social science that seeks to analyze and describe the production, distribution, and consumption of wealth. In the 19th century economics was the hobby of gentlemen of leisure and the vocation of a few academics; economists wrote about economic policy but were rarely consulted by legislators before decisions were made. Today there is hardly a government, international agency, or large commercial bank that does not have its own staff of economists. Many of the world's economists devote their time to teaching economics in colleges and universities around the world, but most work in various research or advisory capacities, either for themselves (in economics consulting firms), in industry, or in government. Still others are employed in accounting, commerce, marketing, and business administration; although they are trained as economists, their occupational expertise falls within other fields. Indeed, this can be considered "the age of economists," and the demand for their services seems insatiable. Supply responds to that demand, and in the United States alone some 400 institutions of higher learning grant about 900 new Ph.D.'s in economics each year.(Read Milton Friedman's Britannica entry on money.)DefinitionNo one has ever succeeded in neatly defining the scope of economics. Many have agreed with Alfred Marshall, a leading 19th-century English economist, that economics is "a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment, and with the use of the material requisites of wellbeing"—ignoring the fact that sociologists, psychologists, and anthropologists frequently study exactly the same phenomena. In the 20th century, English economist Lionel Robbins defined economics as "the science which studies human behaviour as a relationship between (given) ends and scarce means which have alternative uses." In other words, Robbins said that economics is the science of economizing. While his definition captures one of the striking characteristics of the economist's way of thinking, it is at once too wide (because it would include in economics the game of chess) and too narrow (because it would exclude the study of the national income or the price level). Perhaps the only foolproof definition is that attributed to Canadian-born economist Jacob Viner: economics is what economists do.Learn more about inflation, interest rates, and economic policy.Encyclopædia Britannica, Inc.Difficult as it may be to define economics, it is not difficult to indicate the sorts of questions that concern economists. Among other things, they seek to analyze the forces determining prices—not only the prices of goods and services but the prices of the resources used to produce them. This involves the discovery of two key elements: what governs the way in which human labour, machines, and land are combined in production and how buyers and sellers are brought together in a functioning market. Because prices of the various things must be interrelated, economists therefore ask how such a "price system" or "market mechanism" hangs together and what conditions are necessary for its survival.These questions are representative of microeconomics, the part of economics that deals with the behaviour of individual entities such as consumers, business firms, traders, and farmers. The other major branch of economics is macroeconomics, which focuses attention on aggregates such as the level of income in the whole economy, the volume of total employment, the flow of total investment, and so forth. Here economists are concerned with the forces determining the income of a country or the level of total investment, and they seek to learn why full employment is so rarely attained and what public policies might help a country achieve higher employment or greater price stability.But these examples still do not exhaust the range of problems that economists consider. There is also the important field of development economics, which examines the attitudes and institutions supporting the process of economic development in poor countries as well as those capable of self-sustained economic growth (for example, development economics was at the heart of the Marshall Plan). In this field the economist is concerned with the extent to which the factors affecting economic development can be manipulated by public policy.Cutting across these major divisions in economics are the specialized fields of public finance, money and banking, international trade, labour economics, agricultural economics, industrial organization, and others. Economists are frequently consulted to assess the effects of governmental measures such as taxation, minimum-wage laws, rent controls, tariffs, changes in interest rates, changes in government budgets, and so on.Historical development of economicsThe effective birth of economics as a separate discipline may be traced to the year 1776, when the Scottish philosopher Adam Smith published An Inquiry into the Nature and Causes of the Wealth of Nations. There was, of course, economics before Smith: the Greeks made significant contributions, as did the medieval scholastics, and from the 15th to the 18th century an enormous amount of pamphlet literature discussed and developed the implications of economic nationalism (a body of thought now known as mercantilism). It was Smith, however, who wrote the first full-scale treatise on economics and, by his magisterial influence, founded what later generations were to call the "English school of classical political economy," known today as classical economics.Adam Smith, paste medallion by James Tassie, 1787; in the Scottish National Portrait Gallery, Edinburgh.Courtesy of the Scottish National Portrait Gallery, Edinburgh Economics is the study of how individuals, businesses, governments, and societies allocate resources to meet their needs and desires. It examines how resources like money, labor, and materials are used to produce goods and services, and how these goods and services are distributed among people. This guide covers the definition, fundamental methods, and types of economics, providing a foundation for understanding this dynamic field. Economics is a social science that analyzes how people make decisions to satisfy their wants and needs, given limited resources. It explores the processes behind production, distribution, and consumption and seeks to understand how choices impact wealth, poverty, growth, and the well-being of societies. Key Concepts in Economics: Scarcity: Resources are limited, requiring choices about how they are allocated. Opportunity Cost: The cost of choosing one option over another, representing the potential benefit lost. Supply and Demand: The relationship between the availability of goods (supply) and the desire for them (demand), which determines prices. Incentives: Factors that motivate or influence decision-making. Economics uses a combination of theoretical models, empirical data, and statistical techniques to analyze decisions, behaviors, and trends. Here are the primary methods: Theoretical Modeling Description: Theoretical models simplify economic behavior and market dynamics using assumptions and mathematical equations. These models help economists analyze potential outcomes and predict behavior in different scenarios. Example: The supply and demand model shows how changes in price affect the quantity of goods supplied and demanded. Empirical Analysis Description: Empirical methods use real-world data to test economic theories, measure relationships, and observe trends. Empirical analysis involves collecting data through surveys, historical records, or experiments. Example: Examining historical data to analyze the impact of tax cuts on consumer spending. Statistical and Econometric Analysis Description: Econometrics combines statistics and economic theory to test hypotheses, estimate relationships, and make forecasts. Econometric models quantify economic relationships and help policymakers assess the effectiveness of policies. Example: Using regression analysis to study the relationship between education levels and income. Experimental Economics Description: This method involves controlled experiments to study decision-making in a simulated environment. It provides insights into behavioral patterns and responses to incentives. Example: An experiment observing how people choose to save or spend when given different income levels. Comparative Analysis Description: Comparative analysis examines economic outcomes across different regions, countries, or time periods to understand how specific factors affect economic growth, productivity, and wealth distribution. Example: Comparing economic policies in countries with similar resources to understand factors contributing to different growth rates. Economics is divided into several branches that focus on different aspects of economic activity. The two primary branches are microeconomics and macroeconomics, with other specialized fields emerging within these areas. Definition: Microeconomics studies individual agents within the economy, such as households, firms, and industries. It examines how they make decisions regarding resource allocation, pricing, production, and consumption. Key Concepts in Microeconomics: Consumer Behavior: Analyzes how individuals make purchasing decisions based on preferences, income, and prices. Production and Costs: Studies how firms decide on the quantity of goods to produce and the costs involved. Market Structures: Explores different types of markets, such as monopoly, oligopoly, and perfect competition, and their influence on pricing and output. Example: Analyzing how an increase in the price of coffee affects consumers' purchasing behavior and the revenue of coffee shops. Definition: Macroeconomics looks at the economy as a whole, studying aggregate indicators like GDP, inflation, unemployment, and national income. It analyzes how economic policies impact economic growth, stability, and national welfare. Key Concepts in Macroeconomics: Economic Growth: Examines factors that contribute to the growth of an economy, such as investments, education, and innovation. Inflation and Unemployment: Studies how price levels and employment rates fluctuate in response to economic activity. Fiscal and Monetary Policy: Analyzes government spending, taxation, and central bank actions to control inflation, stimulate growth, and maintain stability. Example: Examining how a central bank's decision to raise interest rates impacts inflation and employment levels. Definition: Development economics focuses on the economies of developing countries, studying how they can achieve sustainable growth, reduce poverty, and improve living standards. Key Concepts in Development Economics: Poverty Alleviation: Analyzes strategies to reduce poverty, including education, health, and infrastructure investment. Income Distribution: Examines how wealth is distributed and the factors leading to income inequality. Human Capital: Studies the role of education, healthcare, and workforce skills in economic development. Example: Evaluating the impact of microfinance programs on small business growth in rural communities. Definition: Behavioral economics combines insights from psychology and economics to study how human behavior deviates from traditional economic assumptions. It examines how cognitive biases, emotions, and social factors influence decision-making. Key Concepts in Behavioral Economics: Loss Aversion: Tendency to prefer avoiding losses over acquiring gains, impacting investment and purchasing decisions. Anchoring: Relying too heavily on the first piece of information (anchor) when making decisions. Social Influence: Examining how people's decisions are affected by the actions and opinions of others. Example: Analyzing how nudges, like changing the default option to "opt-in" for retirement savings, can encourage higher savings rates. Definition: Environmental economics studies the economic impact of environmental policies, resources, and sustainable development. It focuses on issues like pollution, resource depletion, and climate change. Key Concepts in Environmental Economics: Externalities: Costs or benefits from economic activities that affect third parties, such as pollution. Sustainable Resource Management: Balancing resource use with environmental preservation for future generations. Carbon Pricing: Setting a price on carbon emissions to reduce greenhouse gases and combat climate change. Example: Studying the economic benefits of reducing air pollution through cleaner energy sources. Definition: Labor economics examines the dynamics of the labor market, focusing on the supply and demand for labor, wages, employment, and workforce productivity. Key Concepts in Labor Economics: Wage Determination: Studies how wages are influenced by education, experience, and market demand. Employment Trends: Analyzes shifts in employment rates due to technological advances or economic policies. Labor Mobility: Examines how geographic, occupational, and skill mobility affects the labor market. Example: Investigating how automation impacts employment and wage levels in manufacturing industries. Economics influences multiple aspects of everyday life and decision-making across various sectors: Government: Policymakers use economic analysis to set taxes, spending, and regulations that impact economic growth and public welfare. Business: Companies use economics to optimize pricing, forecast demand, and make investment decisions. Healthcare: Economists study healthcare access, costs, and insurance systems to improve patient outcomes and reduce expenses. Environment: Environmental policies are guided by economic analysis to balance resource conservation with economic development. Economics is a diverse and dynamic field that helps society make informed decisions about allocating limited resources. By understanding the methods and types of economics, we gain insights into how markets function, policies shape

questions the conceptual validity of self-regulating markets.In his writings, Polanyi advances the concept of the Double Movement, which refers to the dialectical process of marketization and push for social protection against that marketization. He argues that market-based societies in modern Europe were not inevitable but historically contingent. Polanyi is remembered best as the originator of substantivism, a cultural version of economics, which emphasizes the way economies are embedded in society and culture. This opinion is counter to mainstream economics but is popular in anthropology, economic history, economic sociology and political science. (Full article...) Image 2The mythological Judgement of Paris required selecting from three incomparable alternatives (the goddesses shown). Decision theory or the theory of rational choice is a branch of probability, economics, and analytic philosophy that uses expected utility and probability to model how individuals would behave rationally under uncertainty. It differs from the cognitive and behavioral sciences in that it is mainly prescriptive and concerned with identifying optimal decisions for a rational agent, rather than describing how people actually make decisions. Despite this, the field is important to the study of real human behavior by social scientists, as it lays the foundations to mathematically model and analyze individuals in fields such as sociology, economics, criminology, cognitive science, moral philosophy and political science. (Full article...) Image 3George, c. 1885–1890Henry George (September 2, 1839 – October 29, 1897) was an American political economist, social philosopher and journalist. His writing was immensely popular in 19th-century America and sparked several reform movements of the Progressive Era. He inspired the economic philosophy known as Georgism, the belief that people should own the value they produce themselves, but that the economic value of land (including natural resources) should belong equally to all members of society. George famously argued that a single tax on land values would create a more productive and just society.His most famous work, Progress and Poverty (1879), sold millions of copies worldwide. The treatise investigates the paradox of increasing inequality and poverty amid economic and technological progress, the business cycle with its cyclic nature of industrialized economies, and the use of rent capture such as land value taxation and other anti-monopoly reforms as a remedy for these and other social problems. Other works by George defended free trade, the secret ballot, free (at marginal cost) public utilities/transportation provided by the capture of their resulting land rent uplift, Pigouvian taxation, and public ownership of other natural monopolies. (Full article...) Image 4Lithography of List by Josef Kriehuber, 1845Daniel Friedrich List (6 August 1789 – 30 November 1846) was a German entrepreneur, diplomat, economist and political theorist who developed the nationalist theory of political economy in both Europe and the United States. He was a forefather of the German historical school of economics and argued for the Zollverein (a pan-German customs union) from a nationalist standpoint. He advocated raising tariffs on imported goods while supporting free trade of domestic goods and stated the cost of a tariff should be seen as an investment in a nation's future productivity. His theories and writing also influenced the American school of economics.List was a political liberal who collaborated with Karl von Rotteck and Carl Theodor Welcker on the Rotteck-Welckersches Staatslexikon [de], an encyclopedia of political science that advocated constitutional liberalism and which influenced the Vormärz. At the time in Europe, liberal and nationalist ideas were almost inseparably linked, and political liberalism was not yet attached to what was later considered "economic liberalism." Emmanuel Todd considers List a forerunner to John Maynard Keynes as a theorist of "moderate or regulated capitalism." (Full article...) Image 5Johann Heinrich von Thünen, age 57Johann Heinrich von Thünen (24 June 1783 – 22 September 1850), sometimes spelled Thuenen, was a prominent nineteenth-century economist and a native of Mecklenburg-Strelitz, now in northern Germany.Even though he never held a professorial position, Thünen had substantial influence on economics. He has been described as one of the founders of agricultural economics and economic geography. He made substantial contributions to economic debates on rent, land use, and wages. (Full article...) Image 6John Bates Clark (January 26, 1847 – March 21, 1938) was an American neoclassical economist. He was one of the pioneers of the marginalist revolution and opponent to the Institutionalist school of economics, and spent most of his career as a professor at Columbia University. He was one of the most prominent American economists of his time. (Full article...) Image 7Socialist economics comprises the economic theories, practices and norms of hypothetical and existing socialist economic systems. A socialist economic system is characterized by social ownership and operation of the means of production that may take the form of autonomous cooperatives or direct public ownership wherein production is carried out directly for use rather than for profit. Socialist systems that utilize markets for allocating capital goods and factors of production among economic units are designated market socialism. When planning is utilized, the economic system is designated as a socialist planned economy. Non-market forms of socialism usually include a system of accounting based on calculation-in-kind to value resources and goods.Socialist economics has been associated with different schools of economic thought. Marxian economics provided a foundation for socialism based on analysis of capitalism while neoclassical economics and evolutionary economics provided comprehensive models of socialism. During the 20th century, proposals and models for both socialist planned and market economies were based heavily on neoclassical economics or a synthesis of neoclassical economics with Marxian or institutional economics. (Full article...) Image 8Production and national income: Macroeconomics takes a big-picture view of the entire economy, including examining the roles of, and relationships between, firms, households and governments, and the different types of markets, such as the financial market and the labour market.Macroeconomics is a branch of economics that deals with the performance, structure, behavior, and decision-making of an economy as a whole. This includes regional, national, and global economies. Macroeconomists study topics such as output/GDP (gross domestic product) and national income, unemployment (including unemployment rates), price indices and inflation, consumption, saving, investment, energy, international trade, and international finance.Macroeconomics and microeconomics are the two most general fields in economics. The focus of macroeconomics is often on a country (or larger entities like the whole world) and how its markets interact to produce large-scale phenomena that economists refer to as aggregate variables. In microeconomics the focus of analysis is often a single market, such as whether changes in supply or demand are to blame for price increases in the oil and automotive sectors. From introductory classes in "principles of economics" through doctoral studies, the macro/micro divide is institutionalized in the field of economics. Most economists identify as either macro- or micro-economists. (Full article...) Image 9Buchanan in 2010James McGill Buchanan Jr. (/bjuːˈkænən/ bew-KAN-ən; October 3, 1919 – January 9, 2013) was an American economist known for his work on public choice theory originally outlined in his most famous work, The Calculus of Consent, co-authored with Gordon Tullock in 1962. He continued to develop the theory, eventually receiving the Nobel Memorial Prize in Economic Sciences in 1986. Buchanan's work initiated research on how politicians' and bureaucrats' self-interest, utility maximization, and other non-wealth-maximizing considerations affect their decision-making. He was a member of the Board of Advisors of The Independent Institute as well as of the Institute of Economic Affairs, a member of the Mont Pelerin Society (MPS) and MPS president from 1984 to 1986, a Distinguished Senior Fellow of the Cato Institute, and professor at George Mason University. (Full article...) Image 10This is a list of important publications in economics, organized by field.Some basic reasons why a particular publication might be regarded as important:Topic creator – A publication that created a new topicBreakthrough – A publication that changed scientific knowledge significantlyInfluence – A publication which has significantly influenced the world or has had a massive impact on the teaching of economics. (Full article...) Image 11Lucas in 1996Robert Emerson Lucas Jr. (September 15, 1937 – May 15, 2023) was an American economist at the University of Chicago. Widely regarded as the central figure in the development of the new classical approach to macroeconomics, he received the Nobel Memorial Prize in Economic Sciences in 1995 "for having developed and applied the hypothesis of rational expectations, and thereby having transformed macroeconomic analysis and deepened our understanding of economic policy". N. Gregory Mankiw characterized him as "the most influential macroeconomist of the last quarter of the 20th century". In 2020, he ranked as the 10th most cited economist in the world. (Full article...) Image 12Behavioral economics is the study of the psychological (e.g. cognitive, behavioral, affective, social) factors involved in the decisions of individuals or institutions, and how these decisions deviate from those implied by traditional economic theory.Behavioral economics is primarily concerned with the bounds of rationality of economic agents. Behavioral models typically integrate insights from psychology, neuroscience and microeconomic theory. (Full article...) Image 13Economic democracy (sometimes called a democratic economy) is a socioeconomic philosophy that proposes to shift ownership and decision-making power from corporate shareholders and corporate managers (such as a board of directors) to a larger group of public stakeholders that includes workers, consumers, suppliers, communities and the broader public. No single definition or approach encompasses economic democracy, but most proponents claim that modern property relations externalize costs, subordinate the general well-being to private profit and deny the polity a democratic voice in economic policy decisions. In addition to these moral concerns, economic democracy makes practical claims, such as that it can compensate for capitalism's inherent effective demand gap.Proponents of economic democracy generally argue that modern capitalism periodically results in economic crises, characterized by deficiency of effective demand; as society is unable to earn enough income to purchase its own production output. Corporate monopoly of common resources typically creates artificial scarcity, resulting in socio-economic imbalances that restrict workers from access to economic opportunity and diminish consumer purchasing power. Economic democracy has been proposed as a component of larger socioeconomic ideologies, as a stand-alone theory and as a variety of reform agendas. For example, as a means to securing full economic rights, it opens a path to full political rights, defined as including the former. Both market and non-market theories of economic democracy have been proposed. As a reform agenda, supporting theories and real-world examples can include decentralization, democratic cooperatives, public banking, fair trade and the regionalization of food production and currency. (Full article...) Image 14Piero Sraffa FBA (5 August 1898 – 3 September 1983) was an influential Italian political economist who served as lecturer of economics at the University of Cambridge. His book Production of Commodities by Means of Commodities is taken as founding the neo-Ricardian school of economics. (Full article...) Image 15Keynes in 1929John Maynard Keynes, 1st Baron Keynes CB, FBA (/kemz/ KAYNZ; 5 June 1883 – 21 April 1946), was an English economist and philosopher whose ideas fundamentally changed the theory and practice of macroeconomics and the economic policies of governments. Originally trained in mathematics, he built on and greatly refined earlier work on the causes of business cycles. One of the most influential economists of the 20th century, he produced writings that are the basis for the school of thought known as Keynesian economics, and its various offshoots. His ideas, reformulated as New Keynesianism, are fundamental to mainstream macroeconomics. He is known as the "father of macroeconomics".During the Great Depression of the 1930s, Keynes spearheaded a revolution in economic thinking, challenging the ideas of neoclassical economics that held that free markets would, in the short to medium term, automatically provide full employment, as long as workers were flexible in their wage demands. He argued that aggregate demand (total spending in the economy) determined the overall level of economic activity, and that inadequate aggregate demand could lead to prolonged periods of high unemployment, and since wages and labour costs are rigid downwards the economy will not automatically rebound to full employment. Keynes advocated the use of fiscal and monetary policies to mitigate the adverse effects of economic recessions and depressions. After the 1929 crisis, Keynes also turned away from a fundamental pillar of neoclassical economics: free trade. He criticized Ricardian comparative advantage theory (the foundation of free trade), considering the theory's initial assumptions unrealistic, and became definitively protectionist. He detailed these ideas in his magnum opus, The General Theory of Employment, Interest and Money, published in early 1936. By the late 1930s, leading Western economies had begun adopting Keynes's policy recommendations. Almost all capitalist governments had done so by the end of the two decades following Keynes's death in 1946. As a leader of the British delegation, Keynes participated in the design of the international economic institutions established after the end of World War II but was overruled by the American delegation on several aspects. (Full article...) Image 16Gesell in 1895Johann Silvio Gesell (German: [gəˈzɛl]; 17 March 1862 – 11 March 1930) was a German-Argentine economist, entrepreneur, and social reformer. He was the founder of Freiwirtschaft (German for "free economy"), an economic model for market socialism. In 1900, he founded the magazine Money and Land Reform (German: Die Geld- und Bodenreform), but it soon closed for financial reasons. During his time in Oranienburg, Gesell started the magazine Der Physiokrat together with George Heinrich Blumenthal. In 1914, it closed due to censorship. In 1916, he published his most famous work, The Natural Economic Order.Gesell is mainly known for his monetary theory. In particular, he noticed the asymmetry between the durability and hoardability of money versus the fragility of goods and services which depreciate due to entropy and the passage of time. He believed that people who are able to save or hoard money have an unfair economic advantage over people who are dependent on producing and selling decayable goods and services for their livelihoods. Gesell theorized that the unfair premium enjoyed by hoarders expressed itself in interest rates and spawned recessions, an argument that later influenced John Maynard Keynes's theory of liquidity preference. To resolve this problem, Gesell proposed a new form of money that depreciates over time (German: Freigeld). (Full article...) Image 17The neoclassical synthesis (NCS), or neoclassical–Keynesian synthesis is an academic movement and paradigm in economics that worked towards reconciling the macroeconomic thought of John Maynard Keynes in his book The General Theory of Employment, Interest and Money (1936) with neoclassical economics.The neoclassical synthesis is a macroeconomic theory that emerged in the mid-20th century, combining the ideas of neoclassical economics with Keynesian economics. The synthesis was an attempt to reconcile the apparent differences between the two schools of thought and create a more comprehensive theory of macroeconomics. (Full article...) Image 18Michał Kalecki (Polish: [ˈmixaw kaˈlɛt͡ʂkʲi]; 22 June 1899 – 18 April 1970) was a Polish Marxian economist. Over the course of his life, Kalecki worked at the London School of Economics, University of Cambridge, University of Oxford, and Warsaw School of Economics, and was an economic advisor to the governments of Poland, France, Cuba, Israel, Mexico, and India. He also served as the deputy director of the United Nations Economic Department in New York City.Kalecki has been called "one of the most distinguished economists of the 20th century" and "likely the most original one". It is often claimed that he developed many of the same ideas as John Maynard Keynes before Keynes but remains much less known to the English-speaking world. He offered a synthesis that integrated class analysis of Marxism and the new literature on oligopoly theory, and his work had a significant influence on both the neo-Marxian (Monopoly Capital) and post-Keynesian schools of economic thought. He was one of the first macroeconomists to apply mathematical models and statistical data to economic questions. Being also a political economist and a person of left-wing convictions, Kalecki emphasized the social aspects and consequences of economic policies. (Full article...) Image 19von Neumann in the 1940sJohn von Neumann (/vɒn ˈnɔɪmən/ von NOY-mən; Hungarian: Neumann János Lajos [ˈnɒjmɒn ˈjaːnoʃ ˈlɒjoʃ]; December 28, 1903 – February 8, 1957) was a Hungarian and American mathematician, physicist, computer scientist and engineer. Von Neumann had perhaps the widest coverage of any mathematician of his time, integrating pure and applied sciences and making major contributions to many fields, including mathematics, physics, economics, computing, and statistics. He was a pioneer in building the mathematical framework of quantum physics, in the development of functional analysis, and in game theory, introducing or codifying concepts including cellular automata, the universal constructor and the digital computer. His analysis of the structure of self-replication preceded the discovery of the structure of DNA.During World War II, von Neumann worked on the Manhattan Project. He developed the mathematical models behind the explosive lenses used in the implosion-type nuclear weapon. Before and after the war, he consulted for many organizations including the Office of Scientific Research and Development, the Army's Ballistic Research Laboratory, the Armed Forces Special Weapons Project and the Oak Ridge National Laboratory. At the peak of his influence in the 1950s, he chaired a number of Defense Department committees including the Strategic Missile Evaluation Committee and the ICBM Scientific Advisory Committee. He was also a member of the influential Atomic Energy Commission in charge of all atomic energy development in the country. He played a key role alongside Bernard Schriever and Trevor Gardner in the design and development of the United States' first ICBM programs. At that time he was considered the nation's foremost expert on nuclear weaponry and the leading defense scientist at the U.S. Department of Defense. (Full article...) Image 20Institutional economics focuses on understanding the role of the evolutionary process and the role of institutions in shaping economic behavior. Its original focus lay in Thorstein Veblen's instinct-oriented dichotomy between technology on the one side and the "ceremonial" sphere of society on the other. Its name and core elements trace back to a 1919 American Economic Review article by Walton H. Hamilton. Institutional economics emphasizes a broader study of institutions and views markets as a result of the complex interaction of these various institutions (e.g. individuals, firms, states, social norms). The earlier tradition continues today as a leading heterodox approach to economics."Traditional" institutionalism rejects the reduction of institutions to simply tastes, technology, and nature (see naturalistic fallacy). Tastes, along with expectations of the future, habits, and motivations, not only determine the nature of institutions but are limited and shaped by them. If people live and work in institutions on a regular basis, it shapes their world views. Fundamentally, this traditional institutionalism (and its modern counterpart institutionalist political economy) emphasizes the legal foundations of an economy (see John R. Commons) and the evolutionary, habituated, and volitional processes by which institutions are erected and then changed (see John Dewey, Thorstein Veblen, and Daniel Bromley). Institutional economics focuses on learning, bounded rationality, and evolution (rather than assuming stable preferences, rationality and equilibrium). It was a central part of American economics in the first part of the 20th century, including such famous but diverse economists as Thorstein Veblen, Wesley Mitchell, and John R. Commons. Some institutionalists see Karl Marx as belonging to the institutionalist tradition, because he described capitalism as a historically bounded social system; other institutionalist economists[who?] disagree with Marx's definition of capitalism, instead seeing defining features such as markets, money and the private ownership of production as indeed evolving over time, but as a result of the purposive actions of individuals. (Full article...) Image 21Modern Monetary Theory or Modern Money Theory (MMT) is a heterodox macroeconomic theory that describes the nature of money within a fiat, floating exchange rate system. MMT synthesizes ideas from the state theory of money of Georg Friedrich Knapp (also known as chartalism) and the credit theory of money of Alfred Mitchell-Innes, the functional finance proposals of Abba Lerner, Hyman Minsky's views on the banking system and Wynne Godley's sectoral balances approach. Economists Warren Mosler, L. Randall Wray, Stephanie Kelton, Bill Mitchell and Pavlina R. Tcherneva are largely responsible for reviving the idea of chartalism as an explanation of money creation.MMT maintains that the level of taxation relative to government spending (the government's deficit spending or budget surplus) is in reality a policy tool that regulates inflation and unemployment, and not a means of funding the government's activities by itself. MMT states that the government is the monopoly issuer of the currency and therefore must spend currency into existence before any tax revenue could be collected. The government spends currency into existence and taxpayers use that currency to pay their obligations to the state. This means that taxes cannot fund public spending, as the government cannot collect money back in taxes until after it is already in circulation. In this currency system, the government is never constrained in its ability to pay, rather the limits are the real resources available for purchase in the currency. (Full article...) Image 22Arrow in 1996Kenneth Joseph Arrow (August 23, 1921 – February 21, 2017) was an American economist, mathematician and political theorist. He received the John Bates Clark Medal in 1957, and the Nobel Memorial Prize in Economic Sciences in 1972, along with John Hicks.In economics, Arrow was a major figure in postwar neoclassical economic theory. Four of his students (Roger Myerson, Eric Maskin, John Harsanyi, and Michael Spence) went on to become Nobel laureates themselves. His contributions to social choice theory, notably his "impossibility theorem", and his work on general equilibrium analysis are significant. His work in many other areas of economics, including endogenous growth theory and the economics of information, was also foundational. (Full article...) Image 23Mutualism is an anarchist school of thought and economic theory that advocates for workers' control of the means of production, a free market made up of individual artisans, sole proprietorships and workers' cooperatives, and occupation and use property rights. As proponents of the labour theory of value and labour theory of property, mutualists oppose all forms of economic rent, profit and non-nominal interest, which they see as relying on the exploitation of labour. Mutualists seek to construct an economy without capital accumulation or concentration of land ownership. They also encourage the establishment of workers' self-management, which they propose could be supported through the issuance of mutual credit by mutual banks, with the aim of creating a federal society.Mutualism has its roots in the utopian socialism of Robert Owen and Charles Fourier. It first developed a practical expression in Josiah Warren's community experiments in the United States, which he established according to the principles of equitable commerce based on a system of labor notes. Mutualism was first formulated into a comprehensive economic theory by the French anarchist Pierre-Joseph Proudhon, who proposed the abolition of unequal exchange and the establishment of a new economic system based on reciprocity. In order to establish such a system, he proposed the creation of a "People's Bank" that could issue mutual credit to workers and eventually replace the state; although his own attempts to establish such a system were foiled by the 1851 French coup d'état. (Full article...) Image 24Experimental economics is the application of experimental methods to study economic questions. Data collected in experiments are used to estimate effect size, test the validity of economic theories, and illuminate market mechanisms. Economic experiments usually use cash to motivate subjects, in order to mimic real-world incentives. Experiments are used to help understand how and why markets and other exchange systems function as they do. Experimental economics have also expanded to understand institutions and the law (experimental law and economics).A fundamental aspect of the subject is design of experiments. Experiments may be conducted in the field or in laboratory settings, whether of individual or group behavior. (Full article...) Image 25Rothbard in the 1970sMurray Newton Rothbard (/ˈrɒθbɑːrd/; March 2, 1926 – January 7, 1995) was an American economist of the Austrian School, economic historian, political theorist, and activist. Rothbard was a central figure in the 20th-century American libertarian movement, particularly its right-wing strands, and was a founder and leading theoretician of anarcho-capitalism. He wrote over twenty books on political theory, history, economics, and other subjects.Rothbard argued that all services provided by the "monopoly system of the corporate state" could be provided more efficiently by the private sector and wrote that the state is "the organization of robbery systematized and writ large". He called fractional-reserve banking a form of fraud and opposed central banking. He categorically opposed all military, political, and economic interventionism in the affairs of other nations. (Full article...) ... that developmental economist Michael Lipton showed that poor farmers were more resource efficient than rich farmers? ... that in the 1916 Declaration of Sainte-Adresse Britain, France and Russia committed to securing the political and economic independence of Belgium after the First World War? ... that the 1983 Spanish floods were the most economically damaging in Spain until the 2024 Spanish floods? ... that in the essay "Toward European Unity" George Orwell presumed that one of the greatest obstacles to a federal Europe would be economic pressure by the United States? ... that the Canadian journalist Bernard Descôteaux is credited with the economic revival of the independent newspaper Le Devoir? ... that anti-Korean sentiment, due to South Korea's economic growth, motivated Djuna to write the sci-fi novel Counterweight? Do you have a question about Economics that you can't find the answer to? Consider asking it at the Wikipedia reference desk. For editor resources and to collaborate with other editors on improving Wikipedia's Economics-related articles, see WikiProject Economics. Image 1An environmental scientist sampling water Image 2The Marxist critique of political economy comes from the work of German philosopher Karl Marx. Image 3São Paulo Stock Exchange in Brazil, an electronic trading network that brings together buyers and sellers through an electronic trading platform Image 4The U.S. unemployment rate from 1990 to 2022 (from Economics) Image 5Economists study trade, production, and consumption decisions, including those that occur in a traditional marketplace Image 6List of countries by gross domestic product (PPP) per capita in April 2022 (from Economics) Image 7The publication of Adam Smith's The Wealth of Nations in 1776 is considered to be the first formalisation of economic thought. Image 8A map showing the main trade routes for goods within late medieval Europe (from Economics) Image 9An example production–possibility frontier with illustrative points marked (from Economics) Image 10A basic illustration of a business cycle (from Economics) Image 11Pollution can be a simple example of market failure; if costs of production are not borne by producers but are by the environment, accident victims or others, then prices are distorted. Image 12A 1638 painting of a French seaport during the heyday of mercantilism Image 13John Maynard Keynes, a key economics theorist (from Economics) Image 14The supply and demand model describes how prices vary as a result of a balance between product availability and demand. The graph depicts an increase in demand from D1 to D2 and the resulting increase in price and quantity required to reach a new equilibrium point on the supply curve (S). 8 July 2025 – German economic crisis German vehicle manufacturer Daimler Truck announces it will cut around 5,000 jobs in the country by 2030 in an effort to save €1 billion following a drop in sales. (DW) Category puzzle Select [►] to view subcategories Economics Subfields of economics Economics profession and organizations Economists Economics occupations Works about economics Economics lists Cameralism Economics catchphrases Economic concepts Economics consulting Economics curves Economic data Economics effects Eponyms in economics History of economic thought Economics laws Economics models Economics neologisms Paradoxes in economics Philosophy of economics Economic puzzles Economic taxonomy Economic theories Economics and time Economics and finance stubs The following Wikimedia Foundation sister projects provide more on this subject: CommonsFree media repository WikibooksFree textbooks and manuals WikidataFree knowledge base WikinewsFree-content news WikiquoteCollection of quotations WikisourceFree-content library WikiversityFree learning tools WiktionaryDictionary and thesaurus What are portals?List of portalsSub-pages of Portal:Economics Purge server cache Retrieved from " We are thrilled that you are interested in studying economics. Wherever your starting point, you are here to learn and expand on your aptitudes and we welcome you to our community that includes around 1,000 economics students. Read more about why you should study economics, including: EXPLORE OUR UNDERGRADUATE PROGRAM The Department of Economics offers a major, combined MA/BA, minor, and opportunities for interdisciplinary study with other Northwestern programs. Explore these options: In This ArticleThe Origins of Economics The 18th-century Scottish moral philosopher, Adam Smith, is credited as the first economist and a pioneer in political economy and economic thinking. Smith’s book, An Inquiry into the Nature and Causes of the Wealth of Nations (1776), in which Smith describes the invisible hand and the workings of free markets, is one of the first modern books to treat economics comprehensively. In the 19th century, the classical economic theory put forward by Smith and people like John Baptiste Say, David Ricardo, and John Stuart Mill was critiqued, most famously by Karl Marx. While most classical economists were advocates of modern economies and believed in economic progress, Marx argued capitalism was an inherently exploitative and unstable economic system. In the later part of the 19th century, a group of economists, including Alfred Marshall, Carl Menger, and Vilfredo Pareto, developed what came to be known as neoclassical economics. Many of the modern economics concepts and models used today—supply and demand, utility maximization, and Pareto efficiency—were developed during this period. The two most famous economists of the 20th century were John Maynard Keynes and Milton Friedman, who had opposing ideas about the nature of markets and the role of government in the economy. Ideas and theories influenced by these figures and others around them were gradually incorporated into neoclassical economics. Over the 20th century, economics also grew as a discipline, making room for new areas of study like game theory and behavioral economics. What Is Economics? Economics is the study of the economy and how individuals, households, companies, and nations secure and improve their material living standards. Because resources—such as time and raw materials—are scarce, economists frame problems around allocating scarce resources in producing, allocating, and consuming goods and services. Economics has two main fields: Microeconomics is the branch of economics that studies individual economic agents, industries, or markets. Macroeconomics is the branch of economics that studies how the economy operates as a whole Understanding Microeconomics In microeconomics, you’ll study the economy through a zoomed-in lens. You’ll ask how individual groups of people behave and respond to situations. You’ll also learn how markets and industries operate. Some of the main topics covered in microeconomics are: Financial decision-making of households The production and profit-maximizing decisions of firms Supply and demand Game theory and the economics of information and uncertainty Welfare Economics The effects of government policies such as price floors and ceilings Market structures such as perfect competition, monopoly, monopsony, and oligopoly Understanding Macroeconomics In macroeconomics, you’ll study the economy, either at the national or global level. You’ll explore the overall health of economies and consider what causes or prevents economies from growth in both the short and long run. Some of the main topics covered in macroeconomics are: Long-run economic growth and development Short-run economic fluctuations (or business cycles) Economic recessions and depressions Money and interest rates Poverty and inequality Financial crises International trade Unemployment Inflation Monetary policy and fiscal policy What Do Economists Do? Economists wear many hats. Some work in academia at colleges and universities; some work as advisors or employees for the government or think tanks and non-profits. Others work in the private sector as consultants, analysts, advisors, and researchers. Regardless of where they work, economists rely on two things in their work: theory and data. Because economics intersects many other disciplines, economists study and report on various topics. Economists tackle a handful of issues like: Finance Healthcare Education Climate change Crime Immigration Labor markets Innovation To see a complete list of the topics economists study, check out the American Economic Association (AEA)’s JEL classification system. Economic Indicators Economists rely on economic indicators for the economy's pulse. Because these indicators tell us about the aggregate economy, they are sometimes called macroeconomic indicators. Here is a list of the most important economic indicators. Gross Domestic Product (GDP) Gross domestic product (GDP) is a measure of total economic output produced in an economy over a given period, typically a quarter (three months) or a year. We measure GDP as the market value of all final goods and services produced within a country’s borders. We can measure GDP using the current value of a currency (nominal GDP) or in currency adjusted for inflation (real GDP). GDP Growth GDP growth is the growth rate of GDP from one period to the next. Over the past few decades, the U.S. has averaged an annual GDP growth rate of around 3%. Fast-growing developing countries can sometimes experience yearly GDP growth rates above 10%. GDP per Capita GDP per capita is GDP divided by a country’s population. It measures the average amount of economic output available per person in an economy. Estimates of GDP per capita in the U.S. are currently between $60,000 and $70,000. Unemployment Rate The unemployment rate is the percentage of the labor force—people available and willing to work—who are unemployed. A high unemployment rate indicates the economy is running inefficiently—too many people available to work are not being employed. Inflation Rate Over time, the overall price level in an economy can increase or, in some cases, decrease. Inflation is the term economists use to describe an overall increase in prices. Some inflation is expected and healthy for an economy, but when prices rise too quickly, the economy overheats, and people struggle to keep up with rising costs. This is why it’s critical for economists to keep track of inflation. The inflation rate is the rate at which prices rise from one period to the next. An inflation rate too high is a sign of economic instability. Consumer Price Index (CPI) The consumer price index is the most widely used tool economists use to measure inflation in the U.S. It tracks the prices consumers pay for a basket of goods and services, such as food, gas, and rent. Economists can estimate the inflation rate by comparing the cost of the basket from one period to the next. Data for the CPI are collected nationwide each month in 75 different urban areas. Why Study Economics? Many reasons exist for why people study economics. Here are a few: 1. Developing a better understanding of the world Virtually every problem facing the world today, from poverty to pandemics, to geopolitical conflict and climate change, has an economic component. Understanding economics will help you better understand these problems and the policies to address them. 2. Gaining practical skills can help you in your career If you pursue an economics degree, you will gain knowledge and skills that many employers highly value. You’ll understand how businesses and markets operate, and you’ll develop skills in critical thinking, theoretical modeling, and data analysis. 3. Positioning yourself to make better personal decisions Economics impacts our day-to-day lives as well. Even if you’re not interested in pursuing a career related to the subject, it’s worth taking a few economics courses in college to learn the basics. Once you graduate, you’ll face dilemmas like where to live, which job to take, how to manage student loans, and whether to take on other forms of debt. You’ll want to know how to invest your savings to provide for your family and save for retirement. These decisions will all be easier to navigate if you know at least a bit of economics. Explore Outlier's Award-Winning For-Credit CoursesOutlier (from the co-founder of MasterClass) has brought together some of the world's best instructors, game designers, and filmmakers to create the future of online college.Check out these related courses:

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