

Oxford

DICTIONARY OF

ECONOMICS



JOHN BLACK

A Dictionary of **Economics**

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Preface

This dictionary aims to provide for the needs of students of economics at A-level and in the 'mainstream' part of first degree courses, and of lay readers of journals such as *The Economist*. To this end it includes several concepts in mathematics and statistics which are widely used in standard economics texts, and various terms connected with personal finances, including insurance, pensions, and investment on the stock exchange. It is not intended to cater for the full needs of economics researchers or postgraduate students, or the wide range of specialist subjects within economics. It almost entirely excludes 'great names' in economics, except insofar as they have 'laws' or theorems named after them. An asterisk immediately before a word indicates that it has a separate entry (disregarding the distinction between singular and plural).

The author is indebted for general background ideas and concepts to innumerable teachers, colleagues, pupils, and authors whose work he has edited. He is indebted for comments, suggestions and encouragement to Jane Black, Max Corden, Jonathan Levin, Molly Scott Cato, Peter Sinclair, and his commissioning editor Angus Phillips. He is indebted for office facilities and secretarial help to the Departments of Economics at the University of Exeter and the University of Wales, Aberystwyth. None of these individuals or institutions is responsible for any errors or omissions.

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A

AAA rating See triple A rating.

ability to pay The principle that any *tax should fall on those who can afford to pay. Paying for *public goods or *income redistribution requires taxes: taking account of ability to pay means that these should increase with the income or assets of taxpayers, and as some minimum consumption is needed for subsistence, taxes should be progressive rather than proportional. Ability to pay is opposed to the *benefit principle, which suggests that only those who benefit from any given public expenditure should be taxed to pay for it. The main objections to the ability to pay criterion are that it is hard to measure ability to pay reliably, and that taxing income reduces the incentive to work. However, collection of taxes from those who cannot afford to pay is unpopular, expensive, and sometimes impossible. Given the scale of taxes necessary to run a modern society, use of the ability to pay criterion for taxation seems inevitable.

absolute advantage The use of less resources per unit of output than other producers. With only one type of resource, such as hours of work, a producer with lower inputs has an absolute advantage. In a world with many factors of production absolute advantage is often hard to measure. In any case, absolute advantage gives no advice on what to do with resources, which are best employed where their *comparative advantage is greatest.

absolute value See modulus.

absorption The total of expenditure on real goods and services, for consumption, investment, and by the government. Absorption is the use of output: it excludes exports and includes imports. This is contrasted with *production, which includes exports and excludes imports. The absorption approach to *devaluation looks at its effects on various forms of expenditure, and points out that devaluation can only improve the balance of payments on current account if production increases relative to absorption.

abstinence Refraining from or at least postponing consumption which could have been afforded. Where the funds not being spent arise from current income, abstinence is thus the same as *saving; but the term also covers refraining from running down past savings or spending windfall gains.

ACAS See Advisory, Conciliation and Arbitration Service.

accelerated depreciation The right to *write off capital goods for tax purposes faster than the rate at which they would normally be depreciated. This is intended to encourage *investment, as it enables a company to defer its taxes when it invests. Under accelerated depreciation a firm's profits net of *depreciation, and thus its tax liabilities, are lower than they would have been under normal depreciation. Once the capital goods are written off, profits net of depreciation become higher than they would have been under normal depreciation, and tax bills rise again.

accelerator A model relating *investment to changes in *output. The accelerator model asserts that firms invest more when output is rising and less when it is falling. This seems reasonable: a rise in *demand leads some firms to produce more, and leads them and other firms to expect that demand will rise further. The rise in output raises the ratio of output to *capacity, and the expectation of further rises in demand makes firms believe it would be profitable to have more capital equipment. Accelerator-type models do help empirically to explain variations in both *fixed investment and *investment in stocks and work in progress.

accelerator-multiplier model See multiplier-accelerator model.

acceptance Adding one's signature to a *bill of exchange, thereby accepting *liability to pay the bill at *maturity if the original signatory fails to do so. Acceptance of a bill of exchange by an institution of high financial standing, such as a *merchant bank, makes the bill safer to hold and thus easier to sell. The acceptor is taking a *risk, and makes a charge for this.

acceptance schedule, job See job acceptance schedule.

accepting house A financial firm that is willing to accept *bills of exchange, that is, to guarantee that they will be paid on the due date. An accepting house uses its financial reputation to earn a fee for acceptance, and its specialized knowledge of financial markets to avoid taking too many risks of accepting bills where it is actually going to have to honour its *guarantee. The principal London accepting houses form the Accepting Houses Committee.

access, market See market access.

accommodatory monetary policy A policy of allowing the supply of money to expand in line with the demand for it. If the *demand for money rises because of sustainable real growth in the economy, accommodatory monetary policy is desirable, and failure to expand the *money supply obstructs real growth. If, however, the cause of rising demand for money is a temporary, unsustainable surge in real activity, *inflation in prices and wages, or both, accommodatory monetary policy allows these excesses to continue too long. When obvious *excess demand or high inflation eventually forces a shift to a more restrictive monetary policy, this will have to be severe and may cause a serious *slump. Real world authorities find it very hard to assess exactly how accommodatory their monetary policies should be.

account(s) A statement about activities over some period. Accountability is the obligation to produce such a statement: the directors of companies are accountable to their shareholders, and in the UK ministers are accountable to Parliament for the activities of their departments. Accounts take various forms:

1. A statement of the relations between two parties: a *bank account records the deposits, borrowing, and withdrawals of a customer. Firms keep accounts of the goods and services provided to customers: goods provided on account are supplied on credit, and an account rendered is a demand for payment for goods and services supplied.

2. A systematic summary in money terms of the activities of a business over some period, usually a year. The two main statements in such accounts are the

*profit-and-loss account and the *balance-sheet. A profit-and-loss account shows receipts and payments, and the profit or loss made during an accounting period. A balance-sheet lists the *assets and *liabilities of a firm on specified dates, at the start and end of an accounting period. Accountants are producers and *auditors of accounts: they are often required to be professionally qualified, where the accounts have to be credible to creditors, law courts, and the tax authorities. Firms' accounts have to be certified as accurate by professional auditors, but even so have sometimes been discovered to be highly misleading.

3. National income and expenditure accounts are surveys of the economic activities of a nation. They include analysis of the production of goods and services, the distribution of incomes, and the expenditures of investors, consumers, and the government. In the parts of national income accounts relating to transactions with the rest of the world, the *current account records sales and purchases of goods and services, property incomes and transfers, and the *capital account records sales and purchases of assets, including both real *foreign direct investment, inwards and outwards, and financial transactions, sales and purchases of securities abroad, and the making and repayment of international loans.

account, appropriation See appropriation account.

account, bank See bank account.

account, capital See capital account.

account, checking See checking account.

account, current See current account.

account, current (with bank) See current (bank) account.

account, deposit See deposit account.

accounting, cost See cost accounting.

accounting, creative See creative accounting.

accounting, inflation See inflation accounting.

accounting, management See management accounting.

accounting period The period of time, normally a year, to which a set of company accounts refers.

account, merchandise See merchandise account.

account, profit-and-loss See profit-and-loss account.

accounts, consolidated See consolidated accounts.

accounts payable The part of a firm's *liabilities, as shown in its *balance-sheet, consisting of bills received from suppliers on which payment is due but has not yet actually been made.

accounts receivable The part of a firm's *assets, as shown in its *balance-sheet, consisting of bills sent to customers on which payment is due but has not yet actually been received.

account, unit of See unit of account.

accumulation, capital See capital accumulation.

acid rain Rainfall of abnormally high acidity. It results from atmospheric pollution by emissions of sulphur dioxide (SO_2), nitrogen oxides (NO_x), and chloride (Cl), mainly as the result of combustion of coal and oil. Wet deposition occurs at considerable distances downwind of the sources of pollution, so that the problem is international. Acid rain causes problems for human health, damage to buildings through corrosion, and environmental damage, including for example killing fish in Scandinavian lakes and causing die-back in German forests. In all cases the actual scale of damage is uncertain. The sources of acid rain can be reduced by methods including flue gas desulphurization for power-plants, and switching to low sulphur coal.

acquisition (company) *Company expansion through the purchase of other businesses. If these are unincorporated, terms are agreed with the owners. If the other business is a company, its *shares are bought. Where some, but not all, of the shares of another company are bought, special rules govern the treatment of existing shareholders who do not wish to sell their holdings.

ACT See Advance Corporation Tax.

action, anti-dumping See anti-dumping action.

action, industrial See industrial action.

actuarially fair odds See fair odds.

actuary An expert who uses statistical records to predict the future. An actuary uses records of the occurrence of uncertain events, such as death at given ages, or fire, theft, and accidents to cars, to predict how frequently similar events are likely to occur in the future. These predictions take account of observed trends in health or crime, as well as past facts. Actuarial expertise enables *insurance companies to write policies with an expectation of making profits, but not with complete reliability.

adaptive expectations The model of *expectations formation in which expectations adjust gradually towards observed values of the variable concerned. At any given time people hold expectations about the future values of economic variables, such as the rate of *inflation. Under adaptive expectations, if the level observed in the current period equals what was expected, the expectation does not alter. If actual and expected values differ, the expectation for next period is formed using a *weighted average of this period's expectation and this period's actual, for example $\frac{2}{3}$ of the old expectation and $\frac{1}{3}$ of the actual. Under a constant actual, adaptive expectations rapidly come to be almost correct. If the actual oscillates around a stable *mean, under adaptive expectations the expectation will be randomly too high or too low. In either of these cases, while adaptive expectations will not be exactly right, they tend to be so little out that people may well feel satisfied with them. Under an actual with a *trend, however, adaptive expectations lag behind, and are seriously wrong in the same direction in successive periods. This leads people to look for some better way of forming expectations.

adequacy, capital See capital adequacy.

adjustable peg A system where countries stabilize their *exchange rates around *par values they retain the right to change. Under this system a

country undertakes to intervene in the foreign exchange market to keep its currency within some margin, for example 1 per cent, of some given exchange rate parity, the 'peg'. The country retains the right to adjust the parity, however, that is to move the peg. This was more or less the case under the *Bretton Woods system in the 1950s and 1960s. This system provides opportunities for *speculators at times when it appears that the peg is going to have to move, but it has not yet done so.

adjustment costs The costs of making changes in the economic *variables one controls. Any economic agent, whether an individual, a firm, or a government, has a *utility function which determines what the optimal levels of the variables they control would be, if they were free to make a fresh start in setting them. When actual levels differ from these optimal levels, adjustment costs must be considered. If adjustment costs are lump-sum, or increase proportionally or less than in proportion to the changes made in any one period, it will pay to make at once any change that is worth making at all. If adjustment costs increase more than proportionally to the size of the change, however, it pays to adjust only gradually. There are in fact cases where adjustment costs more if done rapidly than if done gradually. In adjusting its labour force, for example, a firm may find that small increases present no recruitment problem, and small decreases can be accommodated by not replacing *natural wastage due to retirements and other voluntary departures, whereas rapid recruitment poses serious selection and training problems, and rapid decline involves *redundancies, which are expensive and damaging to morale.

adjustment, cyclical See cyclical adjustment.

adjustment, partial See partial adjustment.

adjustment, price and quantity The relative timing of price and quantity adjustments. In any market, if supply or demand conditions change, both price and quantity may need to adjust eventually. The timing of price and quantity changes, however, can vary. In some markets, a *market-maker sets the price: for example, in normal retail shops the seller sets a price, and in the short run any change in demand results in changes in the quantity sold. If this leads to an accumulation of *stocks in excess of their normal level, this may in time lead to price cuts. If the market-maker's stocks become inconveniently low, the price may be raised. In other markets, in the short run the quantity is fixed: this happens, for example, in fish markets, where price adjusts to clear the market. If the resulting price is low, this discourages supply as producers make losses; if the market-clearing price is high, the prospect of profits draws in additional supplies.

adjustment programme A package of policy measures designed to cure *balance-of-payments problems. Adoption of a satisfactory adjustment programme is frequently made a condition of assistance from the *International Monetary Fund (IMF). Curing balance-of-payments problems requires decreasing *absorption relative to production. This can be approached via reducing absorption, by cutting government spending and/or increasing taxes. It can also be approached via increasing production by using resources more efficiently; this often involves increased use of the market mechanism and *devaluation of overvalued currencies.

adjustment, seasonal See seasonal adjustment.

adjustment to factor cost See factor cost.

administered price A price set by some form of administrative process, rather than adjusting to clear a market. The levels of and changes in administered prices often require the consent of the government or of some official regulatory body. Administered prices may be maxima, as in the case of *rent controls, or minima, as with *minimum wage laws and some agricultural policies.

administration The situation of a *company in financial difficulties whose affairs are put into the hands of an administrator by court order. The object of administration is to enable the company to survive as a going concern, or if that proves impossible, to get a better price for its assets than immediate *liquidation would produce.

ad valorem tax A tax proportional to the price of the object being taxed. This is contrasted with a *specific tax, at a rate per unit of quantity, independent of the price. Ad valorem taxes are often preferred to specific taxes because specific taxes are considered unfair as they fall proportionally more heavily on poorer consumers who choose cheaper and lower quality goods. Ad valorem taxes are also preferred because their real value is not eroded by *inflation.

Advance Corporation Tax (ACT) The system by which UK companies deduct *basic rate income tax at source when distributing *dividends to their shareholders. With a basic tax rate of 100t per cent, companies must pay the Inland Revenue $\text{£}t/(1 - t)$ for every £1 distributed to shareholders. These payments are treated as a payment on account of the company's own *corporation tax.

advances Bank loans to their customers. These may be *unsecured loans, but are often secured by the bank holding stocks and shares or *life insurance policies owned by the borrower.

advantage, absolute See absolute advantage.

advantage, comparative See comparative advantage.

adverse selection The tendency for any *contract offered to all comers to be most attractive to those most likely to benefit from it. For example, if an insurer offers *health insurance without any medical examination, the expectation is that people with poor health prospects are likely to accept it, while people with better health prospects, who can get better terms from a more selective insurer, will reject the unconditional contract. In trying to be non-selective, adverse selection causes the worst risks to select themselves.

adverse supply shock A sudden reduction in the supply of an input necessary for an economy. This could result from natural disasters such as floods or earthquakes; from human, animal, or plant diseases; or from major political upheavals such as war or revolution. To oil importers, the sudden price increases imposed by the *Organization of Petroleum Exporting Countries (OPEC) in the 1970s appeared as adverse supply shocks. Such a shock reduces the *real income an economy can produce even at full employment of its available resources.

advertising Activity designed to sell products. It seeks to attract the attention of potential customers, inform them of the existence and attributes of a product, and persuade them to start or continue to buy it. It works via the media, that is, newspapers or television; by shop displays, posters, or mailshots; or through the actual design of products themselves and their packaging. While there is a logical distinction between informative and persuasive advertising, psychologically these are extremely difficult to distinguish. Political, charitable and religious bodies, and the government advertise, as well as commercial organizations.

Advisory, Conciliation and Arbitration Service (ACAS) A UK quango providing facilities for conciliation, arbitration, and mediation in *industrial disputes.

AFDC See Aid to Families with Dependent Children.

AFL-CIO See American Federation of Labor and Congress of Industrial Organizations.

after-sales service The provision after goods have been sold of services which make them more useful to customers. This can include advice on and training in the use of the product; routine maintenance, servicing, and repairs in the event of breakdown; provision of materials and spare parts; replacement under *warranty in the event of failure of the goods supplied; and updating if the product is developed further. Customers' expectations of cheap and efficient after-sales service are of great importance in making products competitive, and lack of customer confidence in the quality and price of after-sales services may make products unsaleable. See also competitiveness.

after-tax income The income remaining to an individual or a company after *direct taxes have been paid. It takes no account of liability to *indirect taxes when the income is spent.

age-earnings profile A graph showing the mean earnings of workers at various ages. Such profiles can be drawn up for all workers, or for specified groups of workers, for example manual, female, or professional workers.

agency, bond-rating See bond-rating agency.

agency, credit-rating See credit-rating agency.

agency, debt-collection See debt-collection agency.

agency, export-credit See export-credit agency.

agency, regulatory See regulatory agency.

agent See principal-agent problem.

agglomeration economies The *external economies available to individuals or firms in large concentrations of population and economic activity. These arise because larger markets allow wider choice and a greater range of specialist services. Agglomeration economies are believed to explain the tendency of conurbations to contain an increasing share of the population of many countries. Beyond some point further agglomeration gives rise to diseconomies due to congestion and pollution.

aggregate demand The total of intended or *ex ante attempts to spend on final goods and services produced in a country. In a *closed economy aggregate demand is the sum of consumption, investment, and government spending on goods and services. In an *open economy it is this plus export demand and minus imports. A rise in aggregate demand is a necessary condition for an increase in real output. It is not a sufficient condition, however, unless an economy has spare *capacity to produce the goods and services demanded. If the goods demanded are available only as imports, these rise; if the extra goods are not available at all, inflationary pressure is created.

aggregate demand schedule A diagram showing for each level of *national income the total level of aggregate demand in an economy that would result from it. *Internal balance in the economy requires that aggregate demand is equal to national output.

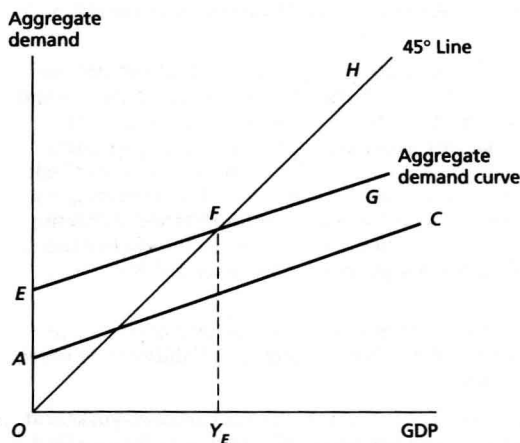


FIGURE 1: Aggregate Demand Schedule

The horizontal axis shows real GDP; the vertical axis shows aggregate real domestic expenditure. *AC* shows consumption for each level of GDP. *EFG* shows total domestic spending for each level of GDP. In a closed economy this is Consumption + Gross Investment + Government Spending on real goods and services; in an open economy it is these plus Exports minus Imports. *OFH* is a 'forty-five degree line', showing where real GDP produces domestic spending equal to itself. The line is so-called because its slope is 45°, provided the same scale is used on both axes. Equilibrium GDP is at Y_E , where *EFG* cuts the 45° line.

aggregate supply The total amount of real goods and services that the enterprises in an economy are willing to provide at any given ratio of prices to wages. This can be increased by rising *productivity due to increases in the volume of productive equipment or improvements in the quality of the labour force. Whether actual output equals aggregate supply depends on two conditions. First, there must be sufficient aggregate demand to match the

supply: if there is not, output is demand-constrained. Second, there must be a sufficient supply of labour to satisfy firms' demand for it: if *real wages are low, aggregate supply by firms may require more employment than the labour supply forthcoming at these wages, in which case output is constrained by labour shortages. In an economy where firms are not perfectly competitive, the concept of aggregate supply is dubiously applicable. *See also* demand-determined output.

aggregation The relation between the behaviour of totals and that of their components. Suppose, for example, that for each of N individuals $i = 1, 2, \dots, N$, i 's consumption, C_i , is given by $C_i = a_i + b_i Y_{di}$, where Y_{di} is i 's *disposable income. Can these *consumption functions be aggregated to give a function of the form $C = a + bY_d$, where C and Y_d are national aggregates? If all the b_i were equal, it would not matter if the a_i differed, as they could simply be added. If the b_i vary, however, a precise aggregate relation can only be derived from the individual consumption functions if we know how marginal changes in income will be distributed among the N individuals. If this is not known, any aggregate consumption function will only hold approximately. Similar problems arise with most economic aggregates.

AGM *See* annual general meeting.

agreement, commodity *See* commodity agreement.

agreement, free-trade *See* free-trade agreement.

Agricultural Adjustment Act The US act of 1933 providing for price support for agricultural products to maintain farm incomes. This formed part of the *New Deal. The Commodity Credit Corporation (CCC) was created to carry out this policy.

agricultural protection The use of *tariffs and trade controls on agricultural products to raise their prices in a country and thus to increase its farmers' incomes. This may be desired to slow down the tendency for the share of agriculture in total income and employment to decrease. It may also aim at increasing self-sufficiency in foodstuffs and agricultural raw materials in the interests of national security. Agriculture is protected in most industrial countries, particularly the European Union (EU) and Japan. Agricultural protection in advanced countries hinders economic growth in *less developed countries (LDCs), most of which are net exporters of agricultural products.

aid Economic assistance from one country to another, the recipient typically being a *less developed country (LDC). Aid is usually intended either to provide humanitarian relief in emergencies, to promote economic development, or to finance military expenditure. Aid may take the form of outright gifts of money, which may be tied to purchases from the donor, or untied and available for expenditure anywhere. It may take the form of *soft loans, on terms easier than those available to the borrower in world capital markets. Aid may also be given in kind, including food, plant and equipment, military supplies, or technical assistance. Bilateral aid is given directly by a donor to a recipient country; multilateral aid is channelled through an international organization, without direct contact between donors and particular recipients. How much actual good is done by aid varies widely from case to case, and is often the subject of considerable controversy.

aid, grant in *See* grant in aid.

aid, tied *See* tied aid.

Aid to Families with Dependent Children (AFDC) A US federal welfare programme, originally set up in 1936, enabling states to use federal grants to provide financial support for poor children. AFDC now accounts for a major part of the overall cost of the US social security programme.

aid, untied *See* untied aid.

allocation, resource *See* efficient resource allocation.

allocative efficiency *See* efficiency.

allowance, family *See* family allowance.

allowances, capital *See* capital allowances.

allowance, tax *See* tax allowance.

All-Share Index, Financial Times *See* Financial Times Actuaries All-Share Index.

alpha stocks The most actively traded securities in the *Stock Exchange Automated Quotations System (SEAQ). About 100 securities came into this category when it was in official use by the London Stock Exchange. These were shares of companies with high turnover and high *market capitalization. Alpha stocks had numerous *market-makers, and immediate publication of transactions in them was required. They were contrasted with beta, gamma, and delta stocks which were those of smaller companies, and less intensively traded.

amalgamation *See* merger.

American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) The main US labour federation. The cumbersome name results from the amalgamation in 1955 of two associations, the AFL representing mainly craft unions, and the CIO representing mainly industrial unions. The AFL-CIO operates mainly at the political level: wage and other industrial bargaining is carried on by its member unions. It is the US equivalent of the UK's *Trades Union Congress (TUC).

American Loan Economic assistance by the United States to aid Britain's recovery after the Second World War. Under the terms of the Washington Agreement in 1945, the USA wrote off \$25 billion of Lend-Lease aid to the Commonwealth, and provided the UK with a long-term loan of \$3³/₄ billion.

amortization The building up over a period of a fund to replace a productive asset at the end of its useful life, or to repay a loan. In the case of a loan, the amount required for amortization depends on the interest rate which can be earned on the accumulated fund. In the case of replacement of physical assets, the amount needed depends not only on the interest rate, but also on the expected lifetime of the asset and on the rate of inflation, which affects the expected cost of replacement.

amplitude of oscillation The difference between the maximum and minimum points of a regular oscillation. If $f(t)$ fluctuates over time with a maximum of a and a minimum of b , its amplitude is $(a - b)$.

analysis of variance A statistical technique based on decomposing the overall *variance of some characteristic of a population into parts correlated with other characteristics, and *residual variation. In particular, analysis of variance is used to test whether sections of a population appear to differ significantly in some property. For example, if y_i is the personal income of individual i , analysis of variance can be used to test whether there are significant regional differences in mean income. The overall variance of the population is analysed into the part due to differences within regions, and the part due to differences between regional means. The larger the proportion of total variance due to differences between group means, the higher the probability that the groups are really different; whereas the higher the proportion of overall variance due to within-group variance, the more likely it is that apparent differences between group means arise from sampling error.

anchor, nominal See nominal anchor.

animal spirits The term used by John Maynard *Keynes to convey the idea that major investment projects are usually undertaken not on the basis of careful calculation of the profits they are expected to make, but on the strength of 'hunches' of *entrepreneurs that, beneath the uncertainties that would make a rational and cautious person delay a decision, there is an opportunity to be grasped by whoever has the courage to try.

announcement effect The effect of an announcement of a change in policy, even before it is actually put into effect. For example, a promise by the government to reduce taxes next year may lead to an immediate increase in consumer spending, or an immediate rise in interest rates. Policy announcements can produce such effects only if the policy-maker has some credibility.

annual general meeting (AGM) A meeting of the voting *shareholders of a company, or the members of an association, at which the officers report on the last year's activities, and accounts are submitted for approval. AGMs normally elect the chief officers and directors of companies, and the chief officers and committee members of associations. In the UK, company AGMs appoint the company's *auditors. Companies are required by law to hold AGMs, and associations are usually required to do so by their constitutions.

annual report and accounts An annual report on a company's or other organization's activities during the last *financial year, and *accounts covering this period. The annual report is normally presented by the chairman at the annual general meeting of shareholders or members, and the accounts are presented by the treasurer. These form a major source of information on companies and other organizations. Copies of the annual report and accounts are usually sent to shareholders and members, either in full or in summary form.

annuity A contract by which a financial institution such as an *insurance company agrees to provide a regular income for life. The name annuity arises from annual payments, but the payments can in fact be of any agreed frequency. The recipient will be a named person; it is also possible to contract for full or reduced payments for life to a surviving spouse or other dependents. The payments may be fixed in money terms, or *index-linked.

Annuities enable the recipients to spend their capital as well as their income without the danger of running out of funds before they die.

ante, ex See ex ante.

anti-dumping action The procedure by which complaints of *dumping are investigated and the case for the imposition of anti-dumping duties is assessed. Anti-dumping actions are processed by importing countries. A tariff commission or similar body investigates whether dumping has occurred, and whether it is causing injury to the domestic industry. Given the lack of any agreed definition of dumping, and the probable lack of impartiality in national tribunals judging cases between domestic complainants and foreign suppliers, the threat of anti-dumping actions has an all-round protectionist effect. There is a strong case for establishing an agreed international body to adjudicate all anti-dumping actions.

anti-dumping duty A tariff imposed to protect domestic producers of a good against competition from *dumping of imports. Such duties are imposed only after the investigation of complaints by domestic producers. As it is difficult to define dumping, and there is no internationally agreed procedure for deciding when it has occurred, the threat of anti-dumping duties is a general obstacle to the expansion of international trade.

anti-monopoly policy See monopoly policy.

anti-pollution measures Policies to reduce or eliminate *pollution. These include taxes; quantitative restriction or prohibition of activities causing pollution; *zoning regulations to locate polluting activities where they will do the least harm; and support for research into the effects of pollution and the discovery of methods of production with fewer harmful *by-products. Education of industrial firms and the general public can both increase voluntary avoidance of pollution, and generate political support for compulsory methods of reducing it, either by taxation or controls. *Incentives to avoid pollution can also be given by imposing legal liabilities on polluters either to compensate particular victims, or to pay for the general costs of cleaning-up operations.

antitrust The US term for policies designed to restrict monopoly and promote competition. The Antitrust Division of the US Department of Justice and the *Federal Trade Commission are the main agencies for antitrust policy. The name comes from the US use of the term 'trusts' to describe large firms formed by amalgamation. US antitrust measures frequently work by making practices such as *price discrimination illegal. The very name embodies an anti-monopoly position. This can be contrasted with UK terminology, where a body such as the *Monopolies and Mergers Commission (MMC) is given discretion to judge whether any particular monopoly or merger is harmful.

appreciation, capital See capital appreciation.

appreciation, currency A rise in the price of a country's currency in terms of foreign currency. This makes foreign goods cheaper relative to home-produced goods, which tends to increase imports, and it makes home-produced goods dearer abroad, which tends to decrease exports. Currency appreciation is thus generally bad for a country's *balance of trade. Lower import prices, however, tend to reduce *inflation.