apprentices were upaid during the period of their apprenticeship and in some cases a premium had to be paid. Trade unions of skilled workers (craft unions) have often insisted on unnecessarily long periods of apprenticeship in order to make it more difficult to enter these occupations.

Appropriation account. A statement drawn up after the net profit of a private or public limited company has been calculated to show how this profit is to be apportioned between dividend, reserve, pension fund, etc. It has a similar func-

tion for partnerships. Appropriation Act. An Act passed by Parliament giving authority for payments to be made from the Consolidated Fund for the puposes for which it has been

Appropriation-in-aid. In February of each year each government department has to prepare estimates for the next financial year for presentation to Parliament. Any department which earns revenue from sales of goods or services to the public shows this as an appropriation-in-aid, which is deducted from its estimated gross expenditure to show net expenditure, that is, the actual amount required of the

Approved societies. A term first used in the National Insurance Act of 1911 of friendly societies, trade unions and assurance companies permitted to administer the section concerned with health insurance. In the end all types of friendly society came to be approved for this purpose. See Friendly

Aptitude tests. Tests set to discover the potentialities of people for certain kinds of work especially of young people entering industry and commerce from school.

AR. 1. Abbreviation of advice of receipt.

2. Abbreviation of annual return.

3. Abbreviation of Australian registered

(with reference to shares).

Arbitrage. A form of speculation more particularly found in foreign exchange markets, where it is sometimes possible to purchase currency in one centre and immediately sell it at a profit in another. Arbitrage in foreign currencies is possible only because of the ease and speed of telegraphic transfers between commercial centres throughout the world. Thus an operator in London might buy French francs in Amsterdam and sell them a few minutes later in New York. The effect of

arbitrage is to iron out differences in the rates of exchange of currencies in different centres, thereby creating a single world

market in foreign exchange.

Arbitration. In disputes, as, for example, between employers and trade unions, where agreement cannot be reached and a deadlock has occurred, it may be decided to submit the matter to arbitration. In such cases an arbitrator will then be appointed, subject to the approval of both parties to the dispute, the person chosen generally being a judge or a leading barrister who has no direct interest in the matter. Each side appoints a representative to state its case in as favourable a light as possible. After hearing both sides the arbitrator sums up the evidence as in a court of law and after due consideration gives his decision. Unless both parties to the dispute agree in advance to accept the verdict of the arbitrator, whether favourable to them or otherwise, arbitration is pointless. During wartime, when loss of production as a result of strikes cannot be tolerated, arbitration in industrial disputes is made obligatory. A weakness of arbitration, especially in the case of wage claims, is that arbitrators are generally inclined to compromise by granting employees less than they are asking for but more than employers are prepared to offer. This leads trade unions to put in claims for much greater increases than they expect to obtain in the hope of gaining what they really want. In Great Britain arbitration in industrial disputes was first placed on a legal footing by the Conciliation Act of 1896. This Act was supplemented by the Industrial Courts Act of 1919. See ACAS; Industrial courts.

Arbitration, Rules of. The procedure which a court of arbitration must follow is defined in the acts of 1889-1934, the aim being to devise a procedure somewhat similar to that of a court of justice, with counsel representing each side in the dispute. In support of this aim it is usual to appoint as arbitrator a person highly qualified in law.

The average degree of Arc elasticity. elasticity between two points on either a demand curve or a supply curve.

ARCRU. A unit of account based on twelve Arab currencies, agreed in June 1974.

Arithmetic mean. The ordinary average, calculated by dividing the total of the items concerned by the number of such items. See also Geometric mean; Mode;

Arithmetic progression. A series of numbers, the difference between each being equal, as, for example, the series 5, 7, 9, 11, 13, 15, .... Malthus used it in contrast to geometric progression (q.v.). to indicate the slower expansion of food production as compared with the increase in population. See also Malthusian theory

ARSA. Designatory initials of an Associate of population. of the Royal Society of Arts.

Articled clerk. A condition of entry to some professions as, for example, those of chartered accountant and solicitor, is a period of service as articled clerk to a practising member of the profession. During the period of his "articles" the clerk may receive only a nominal salary or none at all. Sometimes a premium has to be paid before articles are entered into. In some cases the period of service as an articled clerk may be reduced for people who have attended a university and taken

Articles of association A set of rules to govern the internal working of the company. They cover such things as the issue and transfer of the company's shares, the procedure to be followed in calling general meetings, shareholders' voting rights, and many other matters. Articles of association require to be registered with the Registrar of Companies. Unless this is done the Registrar will assume that the company has adopted the articles set out in Table A of the Companies Act 1948.

Articles of partnership. A written agreement setting out the terms of a partnership (q.v.). See also Deed of partnership. Artificial intelligence. A term sometimes used to describe the capabilities of the most advanced types of computers.

Artisans and Labourers Act 1868. An Act which enabled local authorities to condemn property not regarded as fit for human habitation and, if it could not be repaired, to demolish it - the first attempt

at slum clearance. Artisans' Dwellings Act 1875. An Act passed giving powers to local authorities to

deal with slums. Arts Council of Great Britain. Since its establisment by the state in 1946 it has gradually become the main source of finance for the arts in Great Britain. In

1946 the total grant was only £250 000, but by 1980 it had increased to over £63

As. A Roman copper coin, it remained the unit of account even when silver coins were struck.

"A" shares. See Non-voting shares.

Asian Development Bank. Established in 1966 on the recommendation of the United Nations Economic Commission for Asia and the Far East. A total of 32 countries participated in its formation including a number of countries outside the region such as the United States, Great Britain, and Switzerland. The main purpose of the bank is to provide financial aid to the developing countries of Asia.

ASLEF. Abbreviation of Associated Society of Locomotive Engineers and Foot-

Assaying. Determining and certifying the proportion of precious metal in an alloy. In the Middle Ages this was the duty of the goldsmiths' gilds. There are now four assay offices in Great Britain at London, Birmingham, Sheffield and Edinburgh. Each office is under the control of a local board of guardians, not all of whom nowadays are goldsmiths or silversmiths. Each office has its own hallmark. Formerly there were assay offices at Chester, Exeter, Glasgow, Newcastle-upon-Tyne, Norwich and York.

Assembly line. A system of production where the article under construction is passed through the workshop by a conveyor belt along a line of workers, each of whom performs a single operation to it when it reaches him, a technique highly developed in the motorcar industry. It enables division of labour by process to be carried to its greatest possible extent.

Assented. A term used in connection with stocks and bonds, dealt in on the stock exchange, the holder of which has agreed voluntarily to some change in the terms or conditions of issue. The term is more particularly used of stocks which have been issued by foreign governments which for some reason - the effects of war or revolution or simply bad faith - find it impossible to meet their obligations as defined in the terms of the original issue. In such cases when a holder is confronted by a choice of receiving less than the amount to which he feels himself entitled or of receiving nothing at all he will generally "assent" to the new terms offered.

Assessed taxes. A term used of taxes imposed in the eighteenth century on carriages, racehorses, menservants, windows, etc., these taxes being assessed by surveyors of taxes.

Assessment. 1. A statement showing a person's liability for tax and how it has been calculated. 2. For the purpose of local rates property is assessed at what is called its rateable value. See Rates.

Assessor. In insurance the assessor estimates the extent of the loss suffered by the insured person when a claim against the insurer has been made.

Asset. When the balance sheet of a private or public limited company is drawn up everything it owns at the time that has a money value is listed as an asset. Its fixed assets will include such tangible things as factory buildings, machinery, etc., and intangible items like goodwill. Current assets will include stock, bills receivable, and cash.

Assets of a bank. The most important assets of a commercial bank in order of declining liquidity are: (a) coin, notes, and balances at the Bank of England; (b) money at call and short notice; (c) bills discounted; (d) special deposits (if any) at the Bank of England; (e) investments; (f) advances to customers. All these items are of economic importance. In addition there are the bank's premises. Items (a) to (c) are known as the more liquid assets, and items (e) and (f) as the less liquid assets. See Liquidity rules, bank.

Assignat. A bond issued during the French Revolution. There was a gross overissue of these bonds, which were used to supplement coins, and a steep rise in prices occurred, the value of the bonds eventually declining almost to nothing. In 1796 they were exchanged at a rate of 300 francs in assignats for one franc in gold.

Assignment. The making over of property such as an insurance policy, copyright, patent rights, trade marks, by one person to another.

Associated companies. Two or more companies with interlocking directorates, that is with some directors who are members of two or more boards to enable the companies to pursue a common policy. It is thus an alternative to a complete amalgamation or the setting up of a holding company.

"Association Clause". The clause in the

memorandum of association of a limited company which states that the subscribers wish to form a company and are prepared to take up the number of shares stated against their names.

against their names.

Association for Consumer Research. An organisation established to protect the interests of consumers. See Consumers' associations; Consumer protection; Research Institute for Consumers' Affairs.

Association of British Chambers of Commerce (ABCC). An organisation to which over a hundred chambers of commerce in Great Britain, together with a few British chambers of commerce in foreign countries, are affiliated. See Chamber of commerce.

Assumptions. In every science theory is built up by logical reasoning from certain assumptions. In the case of a social science such as economics these assumptions refer to the behaviour of individuals. For example, it is assumed that in his economic activity everyone behaves in a perfectly rational manner, whereas in actual life this is not always so. Without this assumption, however, it would be impossible to build up any theory of economics at all. Another assumption is that producers always seek to maximise their profit, whereas at times some of them are influenced by other considerations. Again, in order to isolate the economic aspect of a problem it may be necessary to assume that "all other things remain equal", whereas in actual life this is never so.

Assurance. At one time this term was restricted to the provision of cover against some eventuality which must occur at some time in the future such as, for example, the death of a person, the only uncertainty in this case being the date of the occurrence of the event. Insurance on the other hand provides cover against eventualities such as fire and burglary, which may never occur. Consequently, it is usual to speak of life assurance but of fire insurance. It is increasingly common, however, for the term "insurance" to be used as a general term covering all kinds of both assurance and insurance. See Insurance.

ATIT. Designatory initials of an associate of the Institute of Taxation.

Atkin Committee on Women in Industry.
Appointed in September 1918, this Committee published its report in the following April. It was mainly concerned with

reviewing the rates of pay of men and women in different occupations. Although in May 1920 the House of Commons accepted a resolution in favour of equal pay in the Civil Service, this was not implemented for nearly 40 years. See Equal pay.

Atlantic Charter. An agreement between President Roosevelt of the United States and Winston Churchill, the British Prime Minister, signed on a warship in the Atlantic in August 1941 during the Second World War. Only one of the eight clauses – the fifth – concerned economic matters. It stated that it was their desire to bring about the fullest collaboration between all nations with the object of securing for all improved labour standards, economic advancement, and social security.

Atlantic International Bank. A bank consortium formed in 1969 in London, it comprises four US banks and four European banks.

Atomic energy Authority (AEA). A public corporation set up in 1954 to take charge of the entire production of nuclear power for industrial and commercial purposes in the United Kingdom. A number of nuclear stations for the production of electricity have been built and a number of others have been planned.

"At sight". A term used on a bill of exchange to indicate that it is payable on its being presented. In contrast to other bills of exchange it does not require to be accepted. Such a bill is known as a "sight" bill. Legally a cheque is a bill of exchange of this kind.

Attendance money. Also known as "fall-back" pay, it is a payment made to workers such as dockers, who, after the decasualisation of dock work, became entitled to such payment for turning up at the docks when no work was required of them.

Attestation. Before a will is valid there must be a formal witnessing of the signature of the testator by two persons who have no interest in the will. This is known as attestation.

Attorney, power of. See Power of attorney. Auction. When a commodity is sold by auction bids are made by prospective buyers, the commodity being sold to the highest bidder. This is the usual method of sale on organised commodity markets or produce exchanges, such as those for wool, tea and fish, where the commodity can-

not easily be graded. Prior to the sale the seller, usually a broker acting on behalf of an import merchant, arranges for the commodity to be made available for inspection and sampling by prospective buyers who, because of the high degree of skill required, generally employ their own specialist buyers, brokers, or agents. The buyers' bids are thus influenced by their own personal estimate of the quality of the commodity offered for sale. Commodities that can be fairly accurately graded, such as wheat and cotton, are more usually sold by private treaty (q.v.). Auctions are less common at the retail stage, though rare collectors' items, such as works of art and antiques, old stamps and coins, are frequently sold by auction. Valuable paintings, jewellery, and antiques are sold at the well-known London auctions of firms such as Sotheby's or Christie's. Houses are sold either by auction or by private treaty. In a Dutch auction (q.v.) the reverse procedure is adopted, the commodity being offered for sale at successively lower prices.

Audit. The examination of a firm's books of accounts by a person qualified to do so to check whether they have been properly kept. Under the Companies Acts this is compulsory for public companies.

AUEW. Abbreviation of Amalgamated Union of Engineering Workers, with over a million members, the second largest industrial union in Great Britain.

Ausgleich. The name given to the treaty of 1867 which set out the economic relations between Austria and Hungary – at that time associated together in the dual monarchy.

Austrian School. The concept of marginal utility had its origin in Austria, and writers on economics who helped to develop this concept are regarded as belonging to this school of thought. The leaders of this movement were the Austrian Karl Menger, Stanley Jevons of Manchester University, and Leon Walras in France, all of whom were writing during the later years of the nineteenth century. See Marginal utility.

Autarky. Economic self-sufficiency. The term acquired prominence after the First World War when many of the new countries of Central Europe attempted as far as possible to make themselves economically independent of their neighbours.

Authorised banks. Those banks empowered

by the Exchange Control Act 1947 to deal in foreign exchange.

Authorised capital. When a new company is formed its application for registration is accompanied by a statement indicating the amount of capital with which it proposes to be registered. This is known as its nominal, registered, or authorised capital. The actual amount of capital issued may be less than this, and so the company, if it should so wish, will be able to increase its capital at a later date up to the full amount authorised without further application to the Registrar of Companies. Authorised clerk. An employee of a stockbroker who is entitled to enter a stock exchange and act on behalf of his employer. Automatic saving. When a person's income after payment of tax is so large that he can reasonably spend only part of it, the unspent portion is regarded as being "automatically" saved since it has inwolved no sacrifice on the part of the saver. Much of the saving of the well-to-do in Eingland before 1914, when direct taxation of high incomes was very low, was of this kind. Since then income tax became increasingly progressive, the highest rate of tax on investment income down to 1978-79 being 98 per cent. This, together with steeply progressive capital transfer tax, has resulted in there being now very little, if any, automatic saving today.

Automatic selling. The sale of goods by means of coin-operated vending machines. Such automatic machines have been in use for a long time for the sale of sweets and cigarettes, but in recent years their use has been extended to a much wider range of products, especially food and drink.

Automatic termination of cover. A practice first adopted by Lloyd's underwriters in 1959 to terminate a policy of marine insurance immediately on the oubreak of war, whether declared or not. Previously marine insurance policies could be cancelled only after 48 hours' notice.

Automation. The early years of the Industrial Revolution were characterised by outstanding technical progress. Periodically since then there have been periods of rapid technical progress. The present day is such a period. To recent developments the term "automation" has been applied. Automation implies more than the invention of new machines. The development and application of the computer has introduced new features to

automation such as machines with automatic control over their performance, machines linked together in such a way that one process automatically follows another, and the use of electronic computers which enable masses of calculations to be carried out very rapidly. The effect of automation is ultimately likely to be an expansion of production greater than anything that has as yet been known. It also increases the demand for skilled workers but reduces the demand for the unskilled. In time it may reduce the total volume of labour employed in industry, thereby releasing labour for the expanding service occupations and reducing the length of the working week.

Autoteller. An improved form of cash dispenser (q.v.). Not only does it dispense Bank of England notes but it also accepts customers' deposits. Now referred to as ATMs by bankers. See also Cashpoint. Auxiliary capital. An alternative term for

instrumental capital (q.v.).

Average. 1. There are five types of average for statistical purposes - arithmetic mean, geometric mean, median, harmonic mean and mode (qq.v.). 2. A stock exchange term. If, after an investor has bought (say) 100 shares in a company at £1.20 per share, the price of the shares on the market falls to £1.00 he may decide to purchase a further 100 shares at this lower price. If he does so, he is said to be averaging, since the average price at which he has bought his 200 shares will now be £1.10. Thus a "bull", who eventually expects the price to rise, will buy more after a fall in price in order to reduce the average price he has paid. On the other hand a "bear" who eventually expects the price to fall will sell more, if he can, in order to increase the average price of his sale. 3. A term used in marine insurance. See General average; Particular average.

Average cost. The total cost of production of a commodity incurred by a firm during a period divided by the number of its units of output. See Cost.

Average cost/marginal cost relationship.

Consider the cost schedule of a firm as shown opposite. This shows that when average cost is falling marginal cost, although rising, is always less than average cost. When, however, average cost is rising marginal cost is greater than average cost. Average cost and marginal cost are equal when average cost is at a minimum.

Output (units)	Total cost (£)	Average cost (£)	Marginal cost (£)
20	250	12.5	-
30	320	10.7	7
40	400	10.0	8
50	500	10.0	10
60	630	10.5	13
70	790	11.3	16

Average revenue. The total receipts accruing to a firm during a period divided by the number of units of output. It the entire output has been sold at the same price, then clearly average revenue is equal to the price.

BA. 1. Abbreviation of Bachelor of Arts. At a number of English universities the BA degree can be taken with Honours in Economics. 2. Abbreviation of British Airways.

BACIE. Abbreviation of British Association for Commercial and Industrial Education.

"Back Door". A term used of Bank of England transactions involving the purchase of Treasury bills by the bank from the discount market. Such operations take place through the bank's own broker in the market at the prevailing market rate of discount as a means of assisting discount houses in temporary difficulties when bank rate is very high and "front door" transactions in consequence very expensive.

**Backing.** Support for a country's note issue. It may consist of gold or securities. That part of a note issue which is not backed by gold is known as the fiduciary issue (q, v).

Backing a bill. A term used in connection with bills of exchange. When a person backs a bill by endorsing it he is guaranteeing that it will be met.

Back-to-back credit. An alternative name for countervailing credit (q, v)

Backwardation. A payment made by a speculator on the stock exchange who is unable to deliver stock to the buyer on the required date.

Backward integration. The expansion of a business which takes the form of acquiring control over firms supplying it with its raw materials.

Bad debt. A debt that it is difficult or impossible to collect. See Factoring

**Bad money.** 1. A debased coinage. 2. An alternative term for hot money (q, v).

"Bad money drives out good" A tendency often designated as Gresham's Law (q.v.). Baht. The standard unit of the currency of Thailand, it is subdivided into 100 satang. Bailment. A legal term referring to the temperature of the currency of

Bailment. A legal term referring to the temporary transfer of property, including cash, from the owner (or bailor) to some other person, often an employee (the bailee), to be used for a specific perpose. **Balanced bond.** An investment bond, usually single premium, more generally known as a managed bond (q.v.)

Balance of payments. International trade and other financial dealings between countries make it necessary for them to make payments to one another. The balance of payments shows the relationship between one country's total payments to all other countries and its total receipts from them. It is thus a sort of statement of income and expenditure on international account. Payments and receipts on international account are of three kinds: (a) the visible balance of trade; (b) invisible items; and (c) capital transfers. The chief payments and receipts arise from trade in goods, payment having to be made for imports and being received from the sale of exports. Together these items account for more than 60 per cent of all Great Britain's payments and receipts. This is the balance of trade, also known as the visible balance.

Services provided by one country for another also give rise to payments and receipts, and the relation between these provides the invisible balance. For a long time Great Britain has relied on a credit invisible balance to offset a debit trade balance. Invisible items in the balance of payments include receipts and payments for shipping, civil aviation, financial services, and income from investment abroad. Banking and insurance, are important credit items. Investments abroad are still an important source of income to Great Britain, although offset to an increasing extent by foreign investments in this country. Foreign travel, whether for business or pleasure, is another invisible item, and this has become a credit item. When both visible and invisible items are taken together this gives the balance of payments on current account.

The balance of payments is also affected by capital movements. Income from foreign investments is clearly a receipt, but when the investment was originally made it was a payment. Capital transfers take

BALANCE SHEET OF A BANK

place for purposes of investment or when one country makes a loan to another or capital may be transferred from one centre to another for greater safety, such capital being known as "hot money" (q.v.) or refugee capital. This can have a disturbing effect on a country's balance of payments. As a result of the huge increase in the price of oil during 1973-6 huge deficits occurred in the British balance of payments, covered mainly by borrowing from abroad.

Information on the balance of trade is published monthly. Twice each year White Papers are published, and annually a Pink Book, showing the current British balance of payments. The following table shows how the debit in the balance of trade is generally offset on current account by a credit in the invisible balance. A debit balance of payments is often described as being unfavourable or adverse or passive, a credit balance being considered as favourable or active. Since, however, every payment to one country is a receipt to another all countries clearly cannot achieve favourable balances every year. In one sense each country's balance of payments must balance each year, for a debit or credit balance must be covered in some way. In the case of a debit balance the deficit may be covered in any one of the following ways: (a) by borrowing; (b) by assistance from the International

	Balance		Balance of pay- ments (£
	of trade	Invisible items (£	
Date	(visible items) (£		
	1950	-133	+433
1954	-186	+ 364	+178
1956	- 55	+ 292	+237
1958	+120	+ 335	+455
1960	- 406	+141	- 265
1962	-102	+214	+112
1964	-519	+124	- 395
1966	- 73	+116	+ 43
1968	-634	+324	-310
1970	+ 3	+ 576	+ 579
1972	+114	+677	+791
1974	-5,234	+1,566	-3,668
1976	-3,571	+2,166	-1,405
1978	- 39	+437	+ 398
1981	-	+3,539	W-100
1982	- 100	+3,309	tolores -

Monetary Fund; (c) by selling investments abroad; (d) by importing on credit; (e) by gifts from abroad; (f) by exporting gold in the days when currencies were linked to that metal. A credit balance can be used to increase investment abroad or to add to a country's gold or foreign currency reserves.

Balance of trade. Known also as the visible balance, this is the relationship between a country's payments for imports of goods and its receipts from the export of goods. On account of its generally having a favourable invisible balance, Great Britain has for a long time been able to run a deficit in its trade balance, except for the years 1956, 1958 and 1971. This debit balance is known as the trade gap. See Balance of payments.

Balance sheet. A statement showing the assets and liabilities of a business at a certain date.

Balance sheet of a bank. The chief items in the balance sheet of a bank are: Liabilities:

Deposits: (a) on current account;

(b) on deposit account.

Assets: Coin, notes, and balance with the

Money at call and short notice; Bills discounted:

(a) Treasury bills; (b) other bills;

Special deposits;

Investments;

Advances to customers.

Bank of England;

The structure of a bank's balance sheet is of considerable economic importance. The most profitable activity of a commerccial bank is lending to customers, but every time a bank increases its lending it increases the possibility of withdrawals in cash. British banks, therefore, maintained two liquidity rules:(a) a ratio of 8 per cent between the cash they hold (coin, notes, and balance with the Bank of England) and their total deposits-the cash ratio; and (b) a ratio of 28 per cent between their more liquid and their total assets. In 1971 the Bank of England recommended that 12½ per cent of a bank's assets should comprise its three more liquid assets together with its holding of government stocks within one year of maturity and a proportion of eligible commercial bills. See Bank advances; Money at call; Special deposits.