Glossary

HL **abnormal profit** Refers to positive economic profit, arising when total revenue is greater than total economic costs (implicit plus explicit costs); is also known as 'supernormal profit'. See *economic profit*.

HL **absolute advantage** Refers to the ability of a country to produce a good using fewer resources than another country, or, what is the same thing, the ability of a certain amount of resources in a country to produce more than the same resources can produce in another country.

absolute poverty The inability of an individual or a family to afford a basic standard of goods and services, where this standard is absolute and unchanging over time. Absolute poverty is defined in relation to a nationally or internationally determined 'poverty line', which determines the minimum income that can sustain a family in terms of its basic needs.

actual output The quantity of output actually produced by an economy. In the context of the production possibilities model, it may be contrasted with production possibilities: actual output occurs somewhere inside an economy's production possibilities curve (*PPC*) because of the presence of unemployed resources and productive inefficiency. In the context of the *AD-AS* model, it may be contrasted with potential output, given by the position of an economy's long-run aggregate supply (*LRAS*) curve: actual output may be higher or lower than potential output (if there is an inflationary or deflationary gap) or it may be equal to potential output (if the economy is in long-run equilibrium).

***ad valorem* taxes** Taxes calculated as a fixed percentage of the price of the good or service; the amount of tax increases as the price of the good or service increases.

administrative barriers Trade protection measures taking the form of administrative procedures that countries may use to prevent the free flow of imports into a country; these may include customs procedures involving inspections and valuation, controls on packaging, and others. Often considered to be a kind of 'hidden' trade protection as they don't involve obvious trade protection measures such as tariffs and quotas.

aggregate demand The total quantity of goods and services that all buyers in an economy (consumers, firms, the government and foreigners) want to buy over a particular time period, at different possible price levels, *ceteris paribus*.

aggregate demand curve The curve that shows the relationship between total quantity of goods and services that all buyers in an economy want to buy over a particular time period (aggregate demand), measured on the horizontal axis, plotted against the price level, measured on the vertical axis.

aggregate supply The total quantity of goods and services produced in an economy over a particular time period, at different price levels, *ceteris paribus*.

aid See *foreign aid*.

allocation of resources See *resource allocation*.

allocative efficiency An allocation of resources that results in producing the combination and quantity of goods and services mostly preferred by consumers. It is achieved when the economy allocates its resources so that no one can become better off in terms of increasing their benefit from consumption without someone else becoming worse off. HL The condition for allocative efficiency is given by $P = MC$ (price is equal to marginal cost).

anti-dumping An argument that justifies trade protection policies: if a country's trading partner is suspected of practising dumping, then the country should have the right to impose trade protection measures (tariffs or quotas) to limit quantities of the dumped good; see *dumping*.

appreciation (of a currency) Refers to an increase in the value of a currency in the context of a floating (or flexible) exchange rate system or managed exchange rate system (compare with *revaluation*, which refers to an increase in currency value in the context of a fixed exchange rate system).

appropriate technology Technologies that are well-suited to a country's particular economic, geographical, ecological and climate conditions. Often used in connection with labour-abundant developing countries that require labour-intensive (as opposed to capita- intensive) technologies.

HL **asymmetric information** A type of market failure where buyers and sellers do not have equal access to information, usually resulting in an underallocation of resources to the production of goods and services, as parties to a transaction with less access to information try to protect themselves against the consequences of the information asymmetry.

automatic stabilisers Factors that automatically, without any action by government authorities, work toward stabilising the economy by reducing the short term fluctuations of the business cycle. Two important automatic stabilisers are progressive income taxes and unemployment benefits.

HL **average costs** Costs per unit of output, or the cost of each unit of output on average. They are calculated by dividing total cost by the number of units of output produced.

HL **average fixed costs** Fixed cost per unit of output, or the fixed cost of each unit of output on average. They are calculated by dividing fixed cost by the number of units of output produced.

HL **average product** The total quantity of output of a firm per unit of variable input (such as labour); shows how much output each unit of the variable input (for example, each worker) produces on average.

HL **average revenue** Revenue per unit of output sold, calculated by dividing total revenue by the number of units of output produced.

HL **average tax rate** Tax paid divided by total income, expressed as a percentage (i.e. tax paid divided by total income multiplied by 100).

HL **average total costs** Total cost per unit of output, or the total cost of each unit of output on average. They are calculated by dividing total costs by the number of units of output; they are also equal to the sum of average fixed costs and average variable costs.

HL **average variable costs** Variable cost per unit of output, or the variable cost of each unit of output on average. They are calculated by dividing variable cost by the number of units of output.

balance of payments A record (usually for a year) of all transactions between the residents of a country and the residents of all other countries, showing all payments received from other countries (credits), and all payments made to other countries (debits). In the course of a year, the sum of all the credits must be equal to the sum of all the debits.

balance of trade in goods Part of the balance of payments, it is the value of exports of goods minus the value of imports of goods over a specific period of time (usually a year).

balance of trade in services Part of the balance of payments, it is the value of exports of services minus the value of imports of services over a specific period of time (usually a year)

balance on capital account The sum of inflows minus outflows of funds in the capital account of the balance of payments. See *capital account*.

balance on current account The sum of inflows minus outflows of funds in the current account of the balance of payments. See *current account*.

balance on financial account The sum of inflows of funds minus outflows in the financial account of the balance of payments. See *financial account*.

balanced budget Referring usually to the government's budget, it is the situation where government tax revenues are equal to government expenditures over a specific period of time (usually a year).

HL **barriers to entry** Anything that can prevent a firm from entering an industry and beginning production, as a result limiting the degree of competition in the industry.

bilateral trade agreement Any trade agreement (or agreement to lower international trade barriers) involving two trading partners, usually two countries. It may also involve a trade agreement between one country and another group of countries when this groups acts as a single unit (such as the European Union). May be contrasted with *regional trade agreement* and *multilateral trade agreement*.

HL **break-even point** The point of production of a firm where its total revenue is exactly equal to its total costs (economic costs), and it is therefore earning normal profit, or zero economic (supernormal) profit

HL **break-even price** A price at which the firm breaks even, meaning that its total revenues are just equal to its total costs (economic costs); at the break-even price the firm is earning zero economic (supernormal) profit, but it is earning normal profit.

budget deficit Referring usually to the government's budget, it is the situation where government tax revenues are less than government expenditures over a specific period of time (usually a year).

budget surplus Referring usually to the government's budget, it is the situation where government tax revenues are greater than government expenditures over a specific period of time (usually a year).

business confidence A measure of the degree of optimism among firms in an economy about the future performance of firms and the economy; it is measured on the basis of surveys of business managers. Is an important determinant of the investment component of aggregate demand.

business cycle Fluctuations in the growth of real output, or real GDP, consisting of alternating periods of expansion (increasing real output) and contraction (decreasing real output); also known as trade cycles.

cap and trade scheme A scheme in which a government authority (of a single country or a group of countries) sets a limit or 'cap' on the amount of pollutants that can be legally emitted by a firm, set by an amount of pollution permits (known as *tradable permits*) distributed to firms; firms that want to pollute more than their permits allow can buy more permits in a market, while firms that want to pollute less can sell their excess permits.

capital One of the factors of production, which itself has been produced (it does not occur naturally), also known as 'physical capital', including machinery, tools, equipment, buildings, etc. Physical capital is also referred to as a 'capital good' or 'investment good'. Other types of capital include 'human capital', or the skills, abilities, knowledge and levels of good health acquired by people; 'natural capital', or everything that traditionally has been included in the factor of production 'land'; and 'financial capital', or purchases of financial instruments such as stocks and bonds.

capital account In the balance of payments, refers to the inflows minus outflows of funds for (i) capital transfers' (including such things as debt forgiveness and non-life insurance claims), and (ii) the purchase or use of non-produced natural resources (such as mineral rights, forestry rights, fishing rights and airspace); it is a relatively unimportant part of the balance of payments.

capital account balance See *balance on capital account*.

capital expenditures With reference to government expenditures, these include public investments, or the production of physical capital, such as building roads, airports, harbours, school buildings, hospitals, etc.

capital liberalisation Refers to the free movement of financial capital in and out of a country, occurring through the elimination by the government of exchange controls (government restrictions on the quantity of foreign exchange that can be bought by domestic residents of a country).

capital transfers A part of the capital account of the balance of payments, they include inflows minus outflows for such things as debt forgiveness, non-life insurance claims, and investment. See *capital account*.

carbon tax A tax per unit of carbon emissions of fossil fuels, considered by many countries as a policy to deal with the problem of climate change.

HL **cartel** A formal agreement between firms in an industry to undertake concerted actions to limit competition; is formed in connection with *collusive oligopoly*. It may involve fixing the quantity to be produced by each firm, or fixing the price at which output can be sold, and other actions. The objective is to increase the monopoly power of the firms in the cartel. Cartels are illegal in many countries.

central bank A financial institution that is responsible for regulating the country's financial system and commercial banks, and carrying out monetary policy.

ceteris paribus A Latin expression that means 'other things being equal'. Another way of saying this is that all other things are assumed to be constant or unchanging. It is used in economics theories and models to isolate changes in only those variables that are being studied.

circular flow of income model A model showing the flow of resources from consumers (households) to firms, and the flow of products from firms to consumers, as well as money flows consisting of consumers' income arising from the sale of their resources and firms' revenues arising from the sale of their products. It illustrates the equivalence of *expenditure flows, value of output flows*, and *income flows*.

clean technology Technology that is not polluting, associated with environmental sustainability; includes solar power, wind power, hydropower, recycling, and many more.

closed economy An economy that has no international trade (no imports and exports); usually appears in connection with economic theories and models as virtually no economy in the real world is a closed economy. To be contrasted with *open economy*.

HL **collusion** An agreement among firms to fix prices, or divide the market between them, so as to limit competition and maximise profit; usually involves firms in oligopoly.

HL **collusive oligopoly** Refers to the type of oligopoly where firms agree to restrict output or fix the price, in order to limit competition, increase monopoly power and increase profits. See also *cartel*.

commercial bank A financial institution (which may be private or public) whose main functions are to hold deposits for their customers (consumers and firms), to make loans to their customers, to transfer funds by cheque (check) from one bank to another, and to buy government bonds.

common access resources Resources that are not owned by anyone, do not have a price, and are available for anyone to use without payment (for example, lakes, rivers, fish in the open seas, open grazing land, the ozone layer and many more); their depletion or degradation leads to environmental unsustainability.

common market A type of trading bloc in which countries that have formed a customs union proceed further to eliminate any remaining tariffs in trade between them; they continue to have a common external policy (as in a *customs union*), and in addition agree to eliminate all restrictions on movements of any factors of production within them; factors affected are mainly labour and capital, which are free to cross all borders and move, travel and find employment freely within all member countries. The best-known common market is the European Economic Community (EEC, the precursor of the present European Union).

community surplus See *social surplus*.

HL **comparative advantage** Arises when a country has a lower relative cost, or opportunity cost, in the production of a good than another country. Forms the basis of the *theory of comparative advantage*.

competitive market A market composed of many buyers and sellers acting independently, none of whom has any ability to influence the price of the product (i.e. no *market power*).

competitive supply In the case of two goods, refers to production of one or the other by a firm; in other words the two goods compete with each other for the same resources (for example, if a farmer can produce wheat or corn, producing more of one means producing less of the other).

competition Occurs when there are many buyers and sellers acting independently, so that no one has the ability to influence the price at which the product is sold in the market.

complements (complementary goods) Two or more goods that tend to be used together. If two goods are complements, an increase in the price of one will lead to a decrease in the demand of the other.

composite indicator A summary measure of more than one indicator, often used to measure economic development; for example the *Human Development Index* (*HDI*), that measures income, education and health indicators.

HL **concentration ratio** A measure of how much an industry's production is concentrated among the industry's largest firms; it measures the percentage of output produced by the largest firms in an industry, and is used to provide an indication of the degree of competition or degree of monopoly power in an industry. The higher the ratio, the greater the degree of monopoly power.

concessional loan Loans that are offered as part of *foreign aid*, made on concessional terms, i.e. that they are offered at interest rates that are lower than commercial rates, with longer repayment periods.

conditional assistance Refers to development assistance provided by bilateral or multilateral development organisations, which is extended to countries on condition that they satisfy certain requirements, usually requiring that they adopt particular policies.

HL **constant returns to scale** Refers to the situation where the output of a firm changes in the same proportion as all its inputs; given a percentage increase in all inputs, output increases by the same percentage. May be contrasted with *increasing returns to scale* and *decreasing returns to scale*.

consumer confidence A measure of the degree of optimism of consumers about their future income and the future of the economy; it is measured on the basis of surveys consumers. Is an important determinant of the consumption component of aggregate demand.

consumer price index A measure of the cost of living for the typical household; it compares the value of a basket of goods and services in one year with the value of the same basket in a base year. Inflation (and deflation) are measured as a percentage change in the value of the basket from one year to another.

consumer surplus Refers to the difference between the highest prices consumers are willing to pay for a good and the price actually paid. In a diagram, it is shown by the area under the demand curve and above the price paid by consumers.

consumption Spending by households (consumers) on goods and services (excludes spending on housing).

contractionary fiscal policy Refers to fiscal policy usually pursued in an inflation, involving a decrease in government spending or an increase in taxes (or both). May be contrasted with *expansionary fiscal policy*. See also *fiscal policy*.

contractionary monetary policy Refers to monetary policy usually pursued in an inflation, involving an increase in interest rates, intended to lower investment and consumption spending; also known as 'tight monetary policy'. May be contrasted with *expansionery monetary policy*. See also *monetary policy*.

core rate of inflation A rate of inflation based on a consumer price index that excludes goods with highly volatile (unstable) prices, notably food and energy prices.

corporate indebtedness The degree to which corporations have debts (see *indebtedness*).

HL **corporate social responsibility** The practice of some corporations to avoid socially undesirable activities, such as polluting activities, employing children, or employing workers under unhealthy conditions; as well as undertaking socially desirable activities, such as support for human rights and donations to charities.

cost-push inflation A type of inflation caused by a fall in aggregate supply, in turn resulting from increases in costs of production (for example, wages or prices of other inputs), shown in the *AD-AS* model as leftward shifts of the *AS* curve.

HL **costs of production** The total opportunity costs incurred by firms in order to acquire resources for use in production; include explicit costs (for purchased resources) and implicit costs (for self-owned resources).

credit items In the balance of payments, refer to payments received from other countries, entering the balance of payments accounts with a plus sign; they represent an inflow of foreign exchange into a country.

cross-price elasticity of demand (XED) A measure of the responsiveness of the demand for one good to a change in the price of another good; measured by the percentage change in the quantity of one good demanded divided by the percentage change in the price of another good. If XED$>$0 the two goods are substitutes; if XED$<$0, the two goods are complements.

crowding-out Refers to the possible impacts on real GDP of increased government spending (expansionary fiscal policy) financed by borrowing; if increased government borrowing results in a higher rate of interest, this could reduce private investment spending, thus reversing the impacts of the government's expansionary fiscal policy.

current account In the balance of payments, this includes the balance of trade (recording exports minus imports of goods) plus the balance on services (recording exports of services minus imports of services), plus inflows minus outflows of income and current transfers. The most important part of the current account in most countries is the balance of trade.

current account balance See *balance on current account*.

current account deficit Occurs when the current account balance has a negative value, meaning that debits are larger than credits (there is an excess of debits).

current account surplus Occurs when the current account balance has a positive value, meaning that credits are larger than debits (there is an excess of credits).

current expenditures In the government budget, refers to government spending on day-to-day items that are recurring (i.e. repeat themselves) and items that are used up or 'consumed' as a good or service is provided. Include wages and salaries (for all government employees); spending for supplies and equipment for the day-to-day operation of government activities (for example, school supplies and medical supplies for public schools and public health care services); provision of subsidies; and interest payments on government loans.

current transfers An item in the current account of the balance of payments, refers to inflows and outflows of funds for items including gifts, foreign aid, and pensions.

customs union A type of trading bloc, consisting of a group of countries that fulfil the requirements of a free trade area (elimination of trade barriers between members) and in addition adopt a common policy towards all non-member countries; members of a customs union also act as a group in all trade negotiations and agreements with non-members. It achieves a higher degree of economic integration than a free trade area, but lower than a common market.

cyclical unemployment A type of unemployment that occurs during the downturns of the business cycle, when the economy is in a recessionary gap; the downturn is seen as arising from declining or low aggregate demand, and therefore is also known as 'demand-deficient' unemployment.

debit items In the balance of payments, refer to payments made to other countries, entering the balance of payments accounts with a minus sign; they represent an outflow of foreign exchange from a country.

deciles Division of a population into ten equal groups with respect to the distribution of a variable, such as income; for example, the lowest income decile refers to 10% of the population with the lowest income.

HL **decreasing returns to scale** Refers to the situation where the output of a firm changes less than in proportion to a change in all its inputs; given a percentage increase in all inputs, output increases by a smaller percentage. May be contrasted with *constant returns to scale* and *increasing returns to scale*.

deficit In general, this is the deficiency of something compared with something else. (i) In the balance of payments, a 'deficit' in an account occurs when the credits (inflows of money from abroad) are smaller than the debits (outflows of money to other countries); for example, a deficit in the balance of trade means that the value of exports (credits) is smaller than the value of imports (debits). (ii) In the case of the government budget, a 'deficit' occurs when government revenues are smaller than government expenditures.

deflation A continuing (or sustained) decrease in the general price level.

deflationary gap See *recessionary gap*.

demand Indicates the various quantities of a good that consumers (or a consumer) are willing and able to buy at different possible prices during a particular time period, *ceteris paribus* (all other things being equal).

demand-deficient unemployment See *cyclical unemployment*.

demand curve A curve showing the relationship between the quantities of a good consumers (or a consumer) are willing and able to buy during a particular time period, and their respective prices, *ceteris paribus* (all other things being equal).

demand management Policies that focus on the demand side of the economy, attempting to influence aggregate demand to achieve the goals of price stability, full employment and economic growth.

demand-pull inflation A type of inflation caused by an increase in aggregate demand, shown in the *AD-AS* model as a rightward shift in the *AD* curve.

demand-side policies Policies that attempt to change aggregate demand (shift the aggregate demand curve in the *AD-AS* model) in order to achieve the goals of price stability, full employment and economic growth, and minimise the severity of the business cycle. In the event of an inflationary or recessionary (deflationary) gap, they try to bring aggregate demand to the full employment level of real GDP, or potential GDP. They can also impact on economic growth by contributing to increases in potential GDP. Consists of fiscal and monetary policies. To be contrasted with *supply-side policies*.

demerit goods Goods that are considered to be undesirable for consumers and are overprovided by the market. Reasons for overprovision may be that the goods have negative externalities, or consumer ignorance about the harmful effects.

depreciation (of a currency) Refers to a decrease in the value of a currency in the context of a floating (or flexible) exchange rate system or managed exchange rate system (to be compared with *devaluation*, which is a decrease in currency value in a fixed exchange rate system). (Note that depreciation also refers to capital goods that become worn out and are discarded.)

deregulation Policies involving the elimination or reduction of government regulation of private sector activities, based on the argument that government regulation stifles competition and increases inefficiency.

HL **deterioration in the terms of trade** A decrease in the value of the terms of trade index. See *terms of trade*.

determinants of aggregate demand Factors that cause shifts of the aggregate demand curve; include factors that influence consumption spending (C), investment spending (I), government spending (G) and net exports (Xn).

determinants of demand See *non-price determinants of demand*.

determinants of supply See *non-price determinants of supply*.

devaluation (of a currency) Refers to a decrease in the value of a currency in the context of a fixed exchange rate system (to be compared with *depreciation*, which is a decrease in currency value in the context of a floating (or flexible) or managed exchange rate system).

development aid Foreign aid intended to help economically less development countries; may involve *project aid*, *programme aid*, technical assistance or debt relief.

direct investment In the balance of payments, refers to inflows or outflows of funds for the purpose of foreign direct investment. See *foreign direct investment*.

direct taxes Taxes paid directly to the government tax authorities by the taxpayer, including personal income taxes, corporate income taxes and wealth taxes.

HL **diseconomies of scale** Increases in the average costs of production that occur as a firm increases its output by varying all its inputs (i.e. in the long run). Diseconomies of scale are responsible for the upward-sloping part of the long-run average total cost curve: as a firm increases its size, costs per unit of output increase.

disinflation Refers to a fall in the rate of inflation; it involves a positive rate of inflation and should be contrasted with *deflation*.

disposable income The income of consumers that is left over after the payment of income taxes.

distribution of income Concerned with how much of an economy's total income different individuals or different groups in the population receive, and involves answering the 'for whom' basic economic question.

diversification Generally refers to change involving greater variety, and is used to refer to increasing the variety of goods and services produced and/or exported by a country; it is the opposite of *specialisation*.

dual economy Arises when there are two different and opposing sets of circumstances that exist simultaneously, often found in economically less developed countries, such as for example, wealthy, highly educated groups co-existing with poor, illiterate groups, a formal and informal urban sector, and a low-productivity agricultural sector and a high-productivity urban industrial sector.

dumping The practice of selling a good in international markets at a price that is below the cost of producing it (usually by providing export subsidies); while it is illegal according to international trade rules, many countries practise it anyway. Forms the basis of the anti-dumping argument in favour of trade protection. See also *anti-dumping*.

easy monetary policy See *expansionary monetary policy*.

HL **economic costs** The sum of explicit costs and implicit costs, or the total opportunity costs incurred by a firm for its use of resources, whether purchased or self-owned. When economists refer to 'costs' they are actually referring to 'economic costs'.

economic development Broad-based rises in the standard of living and well-being of a population, particularly in economically less developed countries. It involves increasing income levels and reducing poverty, reducing income inequalities and unemployment, and increasing provision of and access to basic goods and services such as food and shelter, sanitation, education and health care services.

economic efficiency A condition that arises when allocative efficiency is achieved. See *allocative efficiency*.

economic growth Increases in total real output produced by an economy (real GDP) over time; may also refer to increases in real output (real GDP) *per capita* (or per person).

economic integration Refers to economic interdependence between countries, usually achieved by agreement between countries to reduce or eliminate trade and other barriers between them. There are various degrees of integration, depending on the type of agreement and the degree to which barriers between countries are removed; see *trading bloc*, *free trade area*, *customs union*, *common market*, *monetary union*.

HL **economic profit** Is a firm's total revenue minus total economic costs (explicit plus implicit). If economic profit is positive, the firm is earning supernormal (abnormal) profit; if it is zero, the firm is earning normal profit; if it is negative, the firm is making a loss.

economically less developed countries According to the World Bank's classification system, includes countries that have a per capital GNI below a particular level (which changes from year to year); some common characteristics include low levels of GDP per capita, high levels of poverty, large agricultural sectors and large urban informal sectors (though it is dangerous to generalise about these characteristics).

economically more developed countries According to the World Bank's classification system, includes countries that have a per capital GNI above a particular level (which changes from year to year); they generally have relatively high levels of GDP per capita, relatively low levels of poverty, small agricultural sectors, and large industrial and services sectors (though it is dangerous to generalise about these characteristics).

economics The study of choices leading to the best possible use of scarce resources in order to best satisfy unlimited human needs and wants.

HL **economies of scale** Decreases in the average costs of production that occur as a firm increases its output by varying all its inputs (i.e. in the long run). Economies of scale explain the downward-sloping portion of the long-run average total cost curve: as a firm increases its size, the costs per unit of output fall.

elasticity In general, this is a measure of the responsiveness or sensitivity of a variable to changes in any of the variable's determinants. See specific elasticities: *price elasticity of demand*, *cross-price elasticity of demand*, *income elasticity of demand*, *price elasticity of supply*.

empowerment Creation of conditions for equality of opportunities; involves increasing the political, social, and economic power of individuals or groups of individuals.

entrepreneurship One of the factors of production, involving a special human skill that includes the ability to innovate by developing new ways of doing things, to take business risks and to seek new opportunities for opening and running a business. Entrepreneurship organises the other three factors of production (land, labour and capital) and takes on the risks of success or failure of a business.

equilibrium A state of balance such that there is no tendency to change. See also *market equilibrium* and *equilibrium level of output (or of real GDP)*.

equilibrium level of output The level of output (real GDP) where the aggregate demand curve intersects the aggregate supply curve (also known as the 'equilibrium level of income'). Note the distinction between *short-run equilibrium level of output* and *long-run equilibrium level of output*.

equilibrium level of real GDP See *equilibrium level of output*.

equilibrium price The price determined in a market when quantity demanded is equal to quantity supplied, and there is no tendency for the price to change; it is the price that prevails when there is *market equilibrium*.

equilibrium quantity The quantity that is bought and sold when a market is in equilibrium, i.e. when quantity demanded is equal to quantity supplied.

equity The condition of being fair or just; should be contrasted with the term 'equality'. Often used in connection with income distribution, in which case it is usually interpreted to mean income equality (though this is only one possible interpretation of equity).

errors and omissions In the balance of payments, refers to an item that is included to account for possible omissions and errors in items that have been included or excluded, in order to ensure that the balance of payments balances, i.e. that the sum of credits and debits is equal to zero.

excess demand In the context of demand and supply, occurs when the quantity of a good demanded is greater than the quantity supplied, leading to a shortage of the good; see *shortage*.

excess supply In the context of demand and supply, occurs when the quantity of a good demanded is smaller than the quantity supplied, leading to a surplus; see *surplus*.

exchange rate The rate at which one currency can be exchanged for another, or the number of units of foreign currency that correspond to the domestic currency; can be thought of as the 'price' of a currency, which is expressed in terms of another currency.

excise taxes Taxes imposed on spending on particular goods or services (for example, gasoline/petrol); are a type of indirect tax. See *indirect taxes*.

excludable A characteristic of goods according to which it is possible to exclude people from using the good by charging a price for it; if someone is unwilling or unable to pay the price they will be excluded from using it. Most goods are excludable. It is one of the two characteristics of 'private goods'. See also *rivalrous*.

expansionary fiscal policy Refers to fiscal policy usually pursued in a recession, involving an increase in government spending or a decrease in taxes (or both). May be contrasted with contractionary *fiscal policy*. See also *fiscal policy*.

expansionary monetary policy Refers to monetary policy usually pursued in a recession, involving a decrease in interest rates, intended to increase investment and consumption spending; also known as 'easy monetary policy'. May be contrasted with *contractionery monetary policy*. See also *monetary policy*.

expenditure approach A method used to measure the value of aggregate output of an economy, which adds up all spending on final goods and services produced within a country within a given time period. As suggested by the circular flow model, it is equivalent to measurement by the *income approach* and the *output approach*.

expenditure flow In the simple circular flow of income model, it is the flow of spending from households to firms to buy the goods and services produced by the firms; the expenditure flow is equal to the *income flow* and the *value of output flow*.

HL **expenditure-reducing policies** Policies that involve reducing expenditures in the domestic economy so as to bring about a decrease in imports in order to correct a current account deficit; they include contractionary fiscal and monetary policies.

HL **expenditure-switching policies** Policies that involve switching consumption away from imported goods and towards domestically produced goods, in order to correct a current account deficit; include trade protection policies and depreciation.

HL **explicit costs** Costs of production that involve a money payment by a firm to an outsider in order to acquire a factor of production that is not owned by the firm. Is a type of opportunity cost; should be contrasted with *implicit costs*.

export promotion Refers to a growth and trade strategy where a country attempts to achieve economic growth by expanding its exports. As a trade strategy, it looks outward towards foreign markets and is based on stronger links between the domestic and global economies. To be contrasted with *import substitution*.

externality Occurs when the actions of consumers or producers give rise to positive or negative side-effects on other people who are not part of these actions, and whose interests are not taken into consideration. Positive externalities give rise to positive side-effects; negative externalities to negative side-effects.

HL **factor endowments** The factors of production that a country is 'endowed with', or possesses. Differing factor endowments among countries suggests that different countries are better suited to the production of certain kinds of goods and services than others, or, to put it differently, they are more efficient in the production of some things rather than others. Differing factor endowments form the basis of the *theory of comparative advantage*. (Also known as 'resource endowments'.)

factors of production All resources, or inputs (land, labour, capital, entrepreneurship) used to produce goods and services.

financial account In the balance of payments, refers to inflows minus outflows of funds due to foreign direct investment, portfolio investment and changes in reserve assets.

financial account balance See *balance on financial account*.

fiscal policy Manipulations by the government of its own expenditures and taxes in order to influence the level of aggregate demand; it is a type of *demand-side policy* or *demand management*.

HL **fixed costs** Costs that arise from the use of fixed inputs, which do not change as output increases or decreases (hence they are 'fixed'). Fixed costs arise only in the short run, or the period of time when there is at least one fixed input. Examples include rental payments, property taxes and insurance premiums.

fixed exchange rate Refers to an exchange rate that is fixed by the central bank of a country, and is not permitted to change in response to changes in currency supply and demand. Maintaining the value of a currency at its fixed rate requires constant intervention by the central bank or government.

fixed exchange rate system An exchange rate system where exchange rates are fixed by the central bank of each country. See *fixed exchange rate*.

flexible labour market See *labour market flexibility*.

floating exchange rate See *freely floating exchange rate*.

floating exchange rate system See *freely floating exchange rate system*.

foreign aid Consists of concessional financial flows from the developed world to economically less developed countries, and includes *concessional loans* and grants. See also *concessional loan* and *official development assistance*. To be contrasted with *multilateral development assistance*.

foreign debt Refers to external debt, meaning the total amount of debt (public and private) incurred by borrowing from foreign creditors (i.e. lenders). The global problem of debt involves large volumes of public (i.e. government) debt.

foreign direct investment (FDI) Refers to investment by firms based in one country (the home country) in productive activities in another country (the host country). Firms that undertake FDI are called *multinational corporations*.

foreign exchange Refers to foreign national currencies, i.e. for any country, it refers to currencies other than its own.

HL **formal collusion** An agreement between firms (usually in oligopoly) to limit output or fix prices, in order to restrict competition; is likely to involve the formation of a *cartel*. Also known as 'open collusion'.

HL **free entry and exit** The condition in which firms face no barriers to entering or exiting an industry, characteristic of the market structures of *perfect competition* and *monopolistic competition*.

free rider problem Occurs when people can enjoy the use of a good without paying for it, and arises from non-excludability: people cannot be excluded from using the good, because it is not possible to charge a price. Is often associated with public goods, which are a type of market failure: due to the free rider problem, private firms fail to produce these goods.

free trade The absence of government intervention of any kind in international trade, so that trade takes place without any restrictions (or barriers) between individuals or firms in different countries.

free trade area A type of trading bloc, consisting of a group of countries that agree to eliminate trade barriers between themselves; it is the most common type of integration area, and involves a lower degree of economic integration than a customs union or common market. Each member country retains the right to pursue its own trade policy towards non-member countries. An example of a free trade area is NAFTA (North American Free Trade Agreement).

freely floating exchange rate An exchange rate determined entirely by market forces, or the forces of supply and demand. There is no government intervention in the foreign exchange market to influence the value of the exchange rate. Also known as 'floating exchange rate' or 'flexible exchange rate'.

freely floating exchange rate system An exchange rate system where exchange rates are determined entirely by market forces; see *freely floating exchange rate*.

frictional unemployment A type of unemployment that occurs when workers are between jobs; workers may leave their job because they have been fired, or because their employer went out of business, or because they are in search of a better job, or they may be waiting to begin a new job; tends to be short term.

full employment (i) In the context of the production possibilities model, refers to maximum use of all resources in the economy to produce the maximum quantity of goods and services that the economy is capable of producing (production possibilities), implying zero unemployment. (ii) In the context of the *AD–AS* model, refers to the natural rate of unemployment, or unemployment that prevails when the economy is producing potential output, or real GDP, determined by the position of the *LRAS* curve (when the economy is in long equilibrium). See also *natural rate of unemployment*). Note that in this context, 'full employment' refers to employment of labour resources.

full employment level of output (real GDP) The level of output (or real GDP) at which unemployment is equal to the natural rate of unemployment; the level of output (real GDP) where there is no deflationary or recessionary gap. Also known as *potential output (potential GDP)*.

HL **game theory** A mathematical technique analyzing the behaviour of decision-makers who are dependent on each other, and who use strategic behaviour as they try to anticipate the behaviour of their rivals. Has become an important tool in microeconomics, often used to analyse the behaviour of oligopolistic firms; is based heavily on the work of American mathematician and economist John Nash.

GDP See *gross domestic product*.

HL **GDP deflator** See *price deflator*.

GDP *per capita* Gross domestic product divided by the number of people in the population; is an indicator of the amount of domestic output per person in the population.

Gini coefficient A summary measure of the information contained in the *Lorenz curve* of an economy, defined as the area between the diagonal and the Lorenz curve, divided by the entire area under the diagonal. The Gini coefficient has a value between 0 and 1; the larger the Gini coefficient, and the closer it is to 1, the greater is the income inequality.

GNI See *gross national income*.

GNI *per capita* Gross national income divided by the number of people in the population; is an indicator of the amount of income in an economy per person in the population.

governance Refers to the way of governing, and the exercise of power in the management of an economy's economic and social resources, in order to achieve particular objectives such as economic growth and development.

government budget A type of plan of a country's tax revenues and government expenditures over a period of time (usually a year).

government debt See *public debt*.

government intervention The practice of government to intervene (interfere) in markets, preventing the free functioning of the market, usually for the purpose of achieving particular economic or social objectives.

government spending Spending undertaken by the government, as part of its fiscal policy or as part of an effort to meet particular economic and social objectives (such as provision of subsidies, provision of public goods, etc.).

grant A type of foreign aid consisting of funds that are in effect gifts (they do not have to be repaid).

green GDP Gross domestic product (GDP) which has been adjusted to take into account environmental destruction and/or health consequences of environmental problems.

gross domestic product (GDP) A measure of the value of aggregate output of an economy, it is the market value of all final goods and services produced within a country during a given time period (usually a year); it is a commonly used measure of the value of aggregate output; to be contrasted with *gross national income (GNI)*.

gross national income (GNI) A measure of the total income received by the residents of a country, equal to the value of all final goods and services produced by the factors of production supplied by the country's residents regardless of where the factors are located; GNI = GDP plus income from abroad minus income sent abroad. Formerly known as gross national product (GNP); may be contrasted with *gross domestic product* (GDP).

gross national product (GNP) See *gross national income*.

growth See *economic growth*.

HL **growth maximisation** A possible goal of firms, that differs from the goal of profit maximisation assumed by standard microeconomic theory, involving the achievement of the highest possible growth, for various reasons such as achieving economies of scale, diversifying, achieving market power, or others.

hidden unemployment Unemployment that is not counted in official unemployment statistics because of such factors as the exclusion of 'discouraged workers', the practice of considering part-time workers as full-time workers, and others.

HL **homogeneous product** A product that is completely standardised and not differentiated; is characteristic of products in perfect competition.

household indebtedness The degree to which households have debts (see *indebtedness*).

human capital The skills, abilities and knowledge acquired by people, as well as good levels of health, all of which make them more productive; considered to be a kind of 'capital' because it provides a stream of future benefits by increasing the amount of output that can be produced in the future.

Human Development Index (HDI) A composite indicator of development which includes indicators that measure three dimensions of development: income per capita, levels of health and educational attainment; is considered to be a better indicator of development than single indicators such as GNI per capita.

humanitarian aid Foreign aid extended in regions where there are emergencies caused by violent conflicts or natural disasters such as floods, earthquakes and tsunamis, intended to save lives, ensure access to basic necessities such as food, water, shelter and health care, and provide assistance with reconstruction.

HL **implicit costs** Costs of production involving sacrificed income arising from the use of self-owned resources by a firm; is a type of opportunity cost; should be contrasted with *explicit costs*.

import quota see *quota*.

import substitution Also known as import-substituting industrialisation, refers to a growth and trade strategy where a country begins to manufacture simple consumer goods oriented towards the domestic market (such as shoes, textiles, beverages, electrical appliances) in order to promote its domestic industry; it presupposes the imposition of protective measures (tariffs, quotas, etc.) that will prevent the entry of imports that compete with domestic producers. To be contrasted with *export promotion*.

HL **improvement in the terms of trade** An increase in the value of the terms of trade index. See *terms of trade*.

incentive-related policies Policies involving reduction of various types of taxes (such as income taxes and business taxes), in the expectation that the tax cuts will change the incentives faced by tax-payers; for example, cuts in income taxes may encourage the desire to work; cuts in business taxes may encourage investment. Are a type of *supply-side policy*.

HL **incidence of taxes** See *tax incidence*.

income In the current account of the balance of payments, refers to inflows of wages, rents, interest and profits earned abroad minus the same income factors that are sent abroad.

income approach A method used to measure the value of aggregate output of an economy, which adds up all income earned by the factors of production in the course of producing all goods and services within a country in a given time period. As suggested by the circular flow model, it is equivalent to measurement by the *expenditure approach* and the *output approach*.

income distribution See *distribution of income*.

income elastic demand Relatively high responsiveness of demand to changes in income; YED (income elasticity of demand) > 1. See *income elasticity of demand*.

income elasticity of demand A measure of the responsiveness of demand to changes in income; measured by the percentage change in quantity demanded divided by the percentage change in price.

income flow In the simple circular flow of income model, refers to the flow of income of households that they receive by selling their factors of production (resources) to firms; the income flow is equal to the *expenditure flow* and the *value of output flow*.

income inelastic demand Relatively low responsiveness of demand to changes in income; YED (income elasticity of demand) < 1. See *income elasticity of demand*.

income redistribution See *redistribution of income*.

HL **increasing returns to scale** Refers to the situation where the output of a firm changes more than in proportion to a change in all its inputs; given a percentage increase in all inputs, output increases by a larger percentage. May be contrasted with *constant returns to scale* and *decreasing returns to scale*.

indebtedness Refers to the level of debt, or the amount of money owed to creditors (lenders); may be on a household, firm, or country level.

indirect taxes Taxes levied on spending to buy goods and services, called indirect because, whereas payment of some or all of the tax by the consumer is involved, they are paid to the government authorities by the suppliers (firms), that is, indirectly.

industrial policies Government policies designed to support the growth of the industrial sector of an economy; may include support for small and medium-sized firms or support for 'infant industries' through tax cuts, grants, low interest loans and other measures, as well as investment in human capital, research and development, or infrastructure development in support of industry.

infant industry A new domestic industry that has not had time to establish itself and achieve efficiencies in production, and may therefore be unable to compete with more 'mature' competitor firms from abroad. The presence of infant industries is considered to be one of the strongest arguments in favour of trade protection policies in developing countries.

inferior good A good the demand for which varies negatively (or indirectly) with income; this means that as income increases, the demand for the good decreases.

inflation A continuing (or sustained) increase in the general price level.

inflation targeting A type of monetary policy carried out by some central banks that focuses on achieving a particular inflation target, rather than focusing on the goals of low and stable rate of inflation and low unemployment; common inflation targets are between 1.5% and 2.5%.

inflationary gap A situation where real GDP is greater than potential GDP, and unemployment is lower than the natural rate of unemployment; it arises when the *AD* curve intersects the *SRAS* curve at a higher level of real GDP than potential GDP.

HL **informal collusion** See *tacit collusion*.

infrastructure Numerous types of physical capital resulting from investments, making major contributions to economic growth and development by lowering costs of production and increasing productivity; include power, telecommunications, piped water supplies, sanitation, roads, major dam and canal works for irrigation and drainage, urban transport, ports and airports.

injections In the circular flow of income model, refer to the entry into income flow of funds corresponding to investment, government spending or exports.

integration See *economic integration*.

interest (i) A payment, per unit of time, for the use of borrowed money (borrowers pay interest, lenders receive interest). (ii) A payment, per unit of time, to owners of capital resources.

interest rate Interest expressed as a percentage; in the case of borrowed money, it is interest as a percentage of the amount borrowed. Changes in interest rates form the basis of *monetary policy*.

International Monetary Fund (IMF) An international financial institution composed of 185 member countries, whose purpose is to make short-term loans to governments on commercial terms (i.e. non-concessional) in order to stabilise exchange rates, alleviate balance of payments difficulties and help countries meet their foreign debt obligations.

interventionist policy Any policy based on government intervention in the market; to be contrasted with *market-oriented policy*. See also *government intervention*.

interventionist supply-side policy Any policy based on government intervention in the market intended to affect the supply-side of the economy, usually to shift the LRAS curve to the right, increase potential output and achieve long term economic growth; see *industrial policy* as an example. May be contrasted with *market-based supply side policy*.

investment Includes spending by firms or the government on capital goods (i.e. buildings, machinery, equipment, etc.) and all spending on new construction (housing and other buildings).

HL **J-curve effect** A curve that plots the balance of trade (exports minus imports) on the vertical axis and time on the horizontal axis, showing that a country with a devaluing/depreciating currency may see a worsening in its trade balance (an increase in a trade deficit) in the period immediately following the devaluation or depreciation, while in a later period the trade deficit will begin to shrink provided the Marshall–Lerner condition holds (see *Marshall–Lerner condition*).

joint supply Refers to production of two or more goods that are derived from a single product, so that it is not possible to produce more of one without producing more of the other (for example, butter and skimmed milk are both produced from whole milk, and producing more of one means producing more of the other as well).

Keynesian aggregate supply curve An aggregate supply curve that has a flat (horizontal) section, and upward sloping section and a vertical section.

HL **Keynesian multiplier** The ratio of real GDP divided by a change in any of the components of aggregate spending (consumption *C*, investment *I*, government spending *G*, or net exports *X*−*M*); alternatively it is 1/(1-MPC), where MPC is the marginal propensity to consume. The value of this ratio is usually greater than one because of a multiplied effect of an initial change in a component of aggregate spending on the final value of real output.

HL **kinked demand curve** A model developed to explain price inflexibility of oligopolistic firms that do not collude (do not agree to collaborate in order to limit competition between them).

labour A factor of production, which includes the physical and mental effort that people contribute to the production of goods and services.

labour market flexibility Refers to the operation of market forces (supply and demand) in the labour market; to be contrasted with *labour market rigidities*. May be achieved by reducing or eliminating interference with market forces (for example, reducing or eliminating minimum wages and labour union activities, reducing job security, etc.); see *labour market reforms*.

labour market reforms Reforms intended to make labour markets more competitive and flexible, to make wages respond to the forces of supply and demand, to lower labour costs and increase employment by lowering the natural rate of unemployment; include abolishing or reducing minimum wages, reducing job security and reducing unemployment benefits. Are a type of *supply-side policy*.

labour market rigidities Factors preventing the forces of supply and demand from operating in the labour market, and therefore preventing labour market flexibility; include minimum wage legislation, job security, etc. See *labour market reforms*.

land A factor of production which includes all natural resources: land and agricultural land, as well as everything that is under or above the land, such as minerals, oil reserves, underground water, forests, rivers and lakes. Natural resources are also called 'gifts of nature' or 'natural capital'.

law of demand A law stating that there is a negative causal relationship between the price of a good and quantity of the good demanded, over a particular time period, *ceteris paribus*: as the price of the good increases, the quantity of the good demanded falls (and vice versa).

HL **law of diminishing returns** A law that states that as more and more units of a variable input (such as labour) are added to one or more fixed inputs (such as land), the marginal product of the variable input at first increases, but there comes a point when the marginal product of the variable input begins to decrease. This relationship presupposes that the fixed input(s) remain fixed, and that the technology of production is also fixed (unchanging).

law of supply A law stating that there is a positive causal relationship between the price of a good and quantity of the good supplied, over a particular time period, *ceteris paribus*: as the price of the good increases, the quantity of the good supplied also increases (and vice versa).

leakages In the circular flow of income model, refer to the withdrawal from the income flow of funds corresponding to savings, taxes or imports; also known as 'withdrawals'.

HL **long run** (i) In microeconomics, it is a time period in which all inputs can be changed; there are no fixed inputs.
(ii) In macroeconomics, it is the period of time when prices of resources (especially wages) change along with changes in the price level.

long-run aggregate supply (LRAS) curve A curve showing the relationship between real GDP produced and the price level when wages (and other resource prices) change to reflect changes in the price level, *ceteris paribus*. The *LRAS* curve is vertical at the full employment level of GDP, or potential GDP, indicating that in the long run the economy produces potential GDP, which is independent of the price level.

HL **long run average total costs** The lowest possible average costs that can be attained by a firm for any level of output when all the firm's inputs are variable, i.e. in the long run.

HL **long-run average total cost curve** A curve that shows the lowest possible average cost that can be attained by a firm for any level of output when all of the firm's inputs are variable.

long-run equilibrium level of output The level of output (real GDP) that results when the economy is in long run equilibrium, occurring when the aggregate demand and short-run aggregate supply curves intersect at a point on the long run aggregate supply curve; occurs where the vertical LRAS curve intersects the horizontal axis, known as *potential output*.

HL **long-run Phillips curve** See *Phillips curve*.

long term growth trend In the business cycle diagram, refers to the line that runs through the business cycle curve, representing average growth over long periods of time; shows how output grows over time when cyclical fluctuations are ironed out. The output represented by the long-term growth trend is known as *potential output*.

Lorenz curve A curve illustrating the degree of equality (or inequality) of income distribution in an economy. It plots the cumulative percentage of income received by cumulative shares of the population. Perfect income equality would be represented by a straight line. The closer the Lorenz curve is to the straight line, the greater the equality in income distribution.

HL **loss** Refers to the difference between economic costs and total revenue of a firm when economic costs are greater than revenues; it is negative economic profit. See *economic profit*.

luxuries Goods that are not necessary or essential; they have a *price elastic demand* (PED>1) and *income elastic demand* (YED>1). To be contrasted with *necessities*.

macroeconomic objectives Objectives of policy makers in the macroeconomy; include full employment, low rate of inflation, economic growth, an equitable distribution of income and external balance (balance of trade and avoidance of balance of payments problems).

macroeconomics The branch of economics that examines the economy as a whole by use of aggregates, which are wholes or collections of many individual units, such as the sum of consumer behaviours and the sum of firm behaviours, total income and output of the entire economy as well as total employment and the general price level.

managed exchange rates Exchange rates that are for the most part free to float to their market levels (i.e. their equilibrium levels) over long periods of time; however, central banks periodically intervene in order to stabilise them over the short term.

managed exchange rate system The exchange rate system in use since 1973, also known as the 'managed float'; see *managed exchange rates*.

managed float See *managed exchange rates*.

marginal benefit The extra or additional benefit received from consuming one more unit of a good.

marginal cost The extra or additional cost of producing one more unit of output.

marginal private benefits (MPB) The extra benefit received by consumers when they consume one more unit of a good.

marginal private costs (MPC) The extra costs to producers of producing one more unit of a good.

HL **marginal product** The extra or additional output that results from one additional unit of a variable input (such as labour).

HL **marginal propensity to consume (MPC)** The fraction of additional income spent on domestically produced goods and services. Determines the size of the Keynesian multiplier; the larger the MPC, the larger the multiplier.

HL **marginal propensity to import (MPI)** The fraction of additional income spent on imports. The larger the MPI, the smaller the Keynesian multiplier.

HL **marginal propensity to save (MPS)** The fraction of additional income that is saved. The larger the MPS, the smaller the Keynesian multiplier.

HL **marginal propensity to tax (MPT)** The fraction of additional income that is paid as taxes. The larger the MPT, the smaller the Keynesian multiplier.

HL **marginal revenue** The additional revenue arising from the sale of an additional unit of output.

marginal social benefits (MSB) The extra benefits to society of consuming one more unit of a good; are equal to marginal private benefits (MPB) when there are no consumption externalities.

marginal social costs (MSC) The extra costs to society of producing one more unit of a good; are equal to marginal private costs (MPC) when there are no production externalities.

HL **marginal tax rate** The tax rate paid on additional income; refers to the tax rate that applies to the highest tax bracket of an individual's personal income.

market Any kind of arrangement where buyers and sellers of a particular good, service or resource are linked together to carry out an exchange.

market demand Refers to the sum of all individual consumer demands for a good or service.

market equilibrium Occurs where quantity demanded is equal to quantity supplied, and there is no tendency for the price or quantity to change.

market failure Occurs when the market fails to allocate resources efficiently, or to provide the quantity and combination of goods and services mostly wanted by society. Market failure results in allocative inefficiency, where too much or too little of goods or services are produced and consumed from the point of view of what is socially most desirable.

HL **market power** Refers to the control that a seller may have over the price of the product it sells; the greater the market power, the greater is the seller's control over price. Also known as 'monopoly power'.

HL **market structure** The characteristics of a market organisation that determine the behaviour of firms within an industry.

market supply Refers to the sum of all individual firm supplies of a good or service.

market-based supply-side policy Any policy based on promoting well-functioning, competitive markets in order to influence the supply-side of the economy, usually to shift the LRAS curve to the right, increase potential output and achieve long term economic growth; include labour market reforms, competition policies and incentive-related policies. May be contrasted with *interventionist supply side policy*.

market-oriented policy A policy in which government intervention is limited, economic decisions are made mainly by the private decision-makers (firms and consumers) and the market has significant freedom to determine resource allocation; to be contrasted with *interventionist policy*.

HL **Marshall–Lerner condition** A condition stating when depreciation or devaluation of a country's currency will lead to an improvement in that country's balance of trade: the sum of the price elasticities of demand for imports and exports must be greater than 1 for the trade balance to improve (for a trade deficit to become smaller). This usually holds over the longer term, but not in the shorter term (see *J-curve*).

maximum price A legal price set by the government, which is below the market equilibrium price; this does not allow the price to rise to its equilibrium level determined by a free market; also known as a *price ceiling*.

merit goods Goods that are held to be desirable for consumers, but which are underprovided by the market. Reasons for underprovision may be that the good has positive externalities, or consumers with low incomes cannot afford it (and so do not demand it), or consumer ignorance about the benefits of the good.

micro-credit A programme to provide credit (loans) in small amounts to people who do not ordinarily have access to credit. 'Micro' is the Greek word for 'small', and refers to the small amounts of the loans, the very small size of businesses or activities that are financed by the loans (very small businesses are known as 'micro-enterprises') and the short repayment periods involved.

microeconomics The branch of economics that examines the behaviour of individual decision-making units, consumers and firms; is concerned with consumer and firm behaviour and how their interactions in markets determine prices in goods markets and resource markets.

Millennium Development Goals (MDGs) Eight development goals adopted by the Millennium Declaration of 2000, consisting of 18 targets to be achieved by the year 2015; among the eight goals, four include eradicating extreme poverty and hunger, achieving universal primary education, reducing child mortality, promoting gender equality.

minimum price A legal price set by the government which is above the market equilibrium price; this does not allow the price to fall to its equilibrium level determined by a free market; also known as a *price floor*.

minimum wage A minimum price of labour (the 'wage') set by governments in the labour market, in order to ensure that low-skilled workers can earn a wage high enough to secure them with access to basic goods and services. It is a type of *price floor*.

monetarist/new classical model Actually includes two different models of the macroeconomy (the monetarist and the new classical); both are based on the following principles: the importance of the price mechanism in coordinating economic activities, the concept of competitive market equilibrium, and thinking about the economy as a harmonious system that automatically tends toward full employment.

monetary policy Policy carried out by the central bank, aiming to change interest rates in order to influence aggregate demand; it is a type of *demand-side policy*, or *demand management*.

monetary union A high form of economic integration, involving the adoption by a group of countries of a single currency, such as some of the countries of the European Union ('euro zone' countries) that have adopted the euro. Monetary integration in addition involves the adoption of a common monetary policy carried out by a single central bank, which is necessitated by the use of a single currency.

money Anything that is acceptable as payment for goods and services; more precisely, money consists of currency (coins and paper money) and checking accounts.

HL **monopolistic competition** One of the four market structures, with the following characteristics: a large number of firms; substantial control over market price; product differentiation; no barriers to entry. Examples include the shoe, clothing, detergent, computer, publishing, furniture and restaurant industries.

HL **monopoly** One of the four market structures, with the following characteristics: a single or dominant large firm in the industry; significant control over price; produces and sells a unique product with no close substitutes; high barriers to entry into the industry. Examples include telephone, water and electricity companies in areas where they operate as a single supplier.

HL **monopoly power** Occurs whenever a firm has the ability to control the price of the product it sells (also known as 'market power').

multilateral development assistance Lending to developing countries for the purpose of assisting their development on non-concessional terms (market rates of interest and repayment periods) by multilateral organisations, i.e. organisations composed of many countries, including development banks such as the World Bank, and the International Monetary Fund; to be contrasted with *foreign aid*.

multilateral trade agreement A trade agreement (or agreement to lower international trade barriers) between many countries; at the present time these are mainly carried out within the framework of the *World Trade Organization* (WTO), and involve agreements between WTO member countries. May be contrasted with *bilateral trade agreement* and *regional trade agreement*.

multinational corporation (MNC) A firm involved in foreign direct investment (FDI); it is a firm that is based in one country (the home country) and that undertakes productive investments in another country (the host country).

HL **multiplier** See *Keynesian multiplier*.

national income The total income of an economy, often used interchangeably with the value of aggregate output, particularly in the context of macroeconomic models (such as the *AD-AS* model).

national income statistics Statistical data used to measure an economy's national income and output as well as other measures of economic performance.

HL **nationalisation** A transfer in ownership of a firm away from the private sector and toward government ownership; a nationalised firm is a government-owned firm.

natural capital Refers to an expanded meaning of the factor of production *land*, including everything that is included in land plus additional natural resources occurring naturally in the environment such as the air, biodiversity, soil quality, the ozone layer and the global climate. Is considered to be a type of 'capital' because it provides a stream of future benefits as it is necessary for humankind's ability to live, survive and produce in the future.

HL **natural monopoly** A single firm (a monopoly) that can produce for the entire market at a lower average cost than two or more smaller firms. This happens when the market demand for the monopolist's product is within the range of falling long-run average cost, where there are economies of scale.

HL **natural rate of unemployment** Unemployment that occurs when the economy is producing at its potential or full employment level of output (real GDP), and is equal to the sum of structural, frictional plus seasonal unemployment.

necessities Goods that are necessary or essential: they have a *price inelastic demand* (PED<1) and *income inelastic demand* (YED<1). To be contrasted with *luxuries*.

negative causal relationship A relationship between two variables in which an increase in the value of one causes a decrease in the value of the other, i.e. the two variables change in opposite directions; also known as an indirect relationship.

negative externality A type of externality where the side-effects on third parties are negative or harmful, also known as 'spillover costs'. To be contrasted with *positive externality*; see also *externality*.

negative externality of consumption A negative externality caused by consumption activities, leading to a situation where marginal social benefits are less than marginal private benefits (MSB<MPB); see also *externality* and *negative externality*.

negative externality of production A negative externality caused by production activities, leading to a situation where marginal social costs are greater than marginal private costs (MSC>MPC); see also *externality* and *negative externality*.

net exports Refers to the value of exports minus the value of imports.

nominal GDP Gross domestic product measured in terms of current (or nominal) prices, which are prices prevailing at the time of measurement. Does not account for changes in the price level; to be distinguished from *real GDP*.

nominal value Value that is in money terms, measured in terms of prices that prevail at the time of measurement, and that does not account for changes in the price level; to be distinguished from *real* values.

HL **non-collusive oligopoly** A type of oligopoly where firms do not make agreements among themselves (i.e. do not collude) in order to fix prices or collaborate in some way. See the *kinked demand curve*, one of the better-known models of non-collusive oligopoly.

non-excludable A characteristic of some goods where it is not possible to exclude someone from using a good, because it is not possible to charge a price; it is one of the two characteristics of public goods (to be contrasted with *excludable*). See also *non-rivalrous*.

non-governmental organisations (NGOs) Non-profit organisations that provide a very wide range of services and humanitarian functions; in developing countries they provide foreign aid, all of which takes the form of grants (there are no loans involved). They are involved with an enormous range of activities, including emergency assistance, promotion of sustainable development, poverty alleviation, protection of child health, provision of technical assistance, and many more.

HL **non-price competition** Occurs when firms compete with each other on the basis of methods other than price (such as product differentiation, advertising and branding). Non-price competition occurs in oligopoly and monopolistic competition.

non-price determinants of demand The variables (other than price) that can influence demand, and that determine the position of a demand curve; a change in any determinant of demand causes a shift of the demand curve, which is referred to as a 'change in demand'.

non-price determinants of supply The variables (other than price) that can influence supply, and that determine the position of a supply curve; a change in any determinant of supply causes a shift of the supply curve, which is referred to as a 'change in supply'.

non-price rationing The apportioning or distributing of goods among interested users/buyers through means other than price, often necessary when there are price ceilings (maximum prices); may include waiting in line (queues) and underground markets; to be contrasted with 'price rationing', which involves distributing goods among users by means of market-determined prices.

non-produced, non-financial assets A part of the capital account of the balance of payments, which includes a variety of items such as mineral rights, forestry rights, fishing rights and airspace.

non-rivalrous A characteristic of some goods where the consumption of the good by one person does not reduce consumption by someone else; it is one of the two characteristics of public goods (to be contrasted with *rivalrous*). See also *non-excludable*.

normal good A good the demand for which varies positively (or directly) with income; this means that as income increases, demand for the good increases.

HL **normal profit** The minimum amount of revenue that a firm must receive so that it keeps the business running (as opposed to shutting down); also defined as the amount of revenue needed to cover implicit costs, including entrepreneurship. (This presupposes that total revenue is also enough to cover explicit costs.) Normal profit is included among the economic costs of the firm, and is earned when economic profit is zero.

normative economics The body of economics based on normative statements, which involve beliefs, or value judgements about what ought to be. Normative statements cannot be true or false; they can only be assessed relative to beliefs and value judgements. Normative economics forms the basis of economic policies; to be contrasted with *positive economics*.

Official Development Assistance (ODA) The most important part of foreign aid, referring to foreign aid that is offered by countries or by international organisations composed of a number of countries (it does not include aid offered by non-governmental organisations).

HL **oligopoly** One of the four market structures, with the following characteristics: small number of large firms in the industry; firms have significant control over price; firms are interdependent; products may be differentiated or homogeneous; there are high barriers to entry. Examples include the car industry, airlines, electrical appliances (differentiated products) and the steel, aluminium, copper, cement industries (homogeneous products).

HL **open collusion** See *formal collusion*.

open economy An economy that has international trade: (imports and exports) usually appears in connection with economic theories and models as virtually all economies in the real world are open economies (though to varying degrees). To be contrasted with *closed economy*.

opportunity cost The value of the next best alternative that must be given up or sacrificed in order to obtain something else.

output approach A method used to measure the value of aggregate output of an economy, which calculates the value of all final goods and services produced in the country within a given time period. As suggested by the circular flow model, it is equivalent to measurement by the *expenditure approach* and the *income approach*.

overallocation of resources Occurs when too many resources are allocated to the production of a good relative to what is socially most desirable, resulting in its overproduction.

overvalued currency A currency whose value is higher than its free-market value; may occur if the exchange rate is fixed (or pegged), or in a managed exchange rate system, but not in a freely floating exchange rate system. To be contrasted with *undervalued currency*.

parallel market See *underground market*.

per capita Per person, or per head. For example, GDP *per capita* is total GDP divided by the number of people in the population.

HL **perfect competition** One of the four market structures, with the following characteristics: a large number of small firms; no control over price; all firms sell a homogeneous product; no barriers to entry, perfect information and perfect resource mobility. Examples include agricultural commodity markets and the foreign exchange market.

perfectly elastic demand Refers to a price elasticity of demand value of infinity, and arises in the case of a horizontal demand curve; see *price elasticity of demand*.

perfectly elastic supply Refers to a price elasticity of supply value of infinity, and arises in the case of a horizontal supply curve; see *price elasticity of supply*.

perfectly inelastic demand Refers to a price elasticity of demand value of zero, and arises in the case of a vertical demand curve; see *price elasticity of demand*.

perfectly inelastic supply Refers to a price elasticity of supply value of zero, and arises in the case of a vertical supply curve; see *price elasticity of supply*.

personal income taxes Taxes paid by households or individuals in households on all forms of income, including wages, rental income, interest income, and dividends (income from ownership of shares in a company); is the most important source of government tax revenues in many countries (especially economically more developed countries).

HL **Phillips curve** A curve showing the relationship between unemployment and inflation. The short-run Phillips curve shows a negative relationship between the rate of inflation and the unemployment rate (as the rate of inflation increases, unemployment falls) suggesting that in the short run policy-makers can choose between the competing alternatives of low inflation or low unemployment by selecting appropriate demand-side policies. The long-run Phillips curve is a vertical line at the natural rate of unemployment, indicating that there is no negative relationship between inflation and unemployment, and suggesting that policy-makers do not have a choice between the two competing alternatives. In the long run, the only impact of an increase in aggregate demand is to increase the rate of inflation, while the level of real output is unaffected and the unemployment rate remains unchanged at the natural rate of unemployment.

physical capital One of the factors of production, which is itself produced (it doesn't occur naturally), used to produce goods and services; includes machinery, tools, factories, buildings, road systems, airports, telephone supply lines, etc. Also referred to as 'capital', or 'capital good' or 'investment good'.

portfolio investment Financial investment, including investment in stocks and bonds. Appears as an item in the financial account of the balance of payments.

positive causal relationship A relationship between two variables in which an increase in the value of one causes an increase in the value of the other, i.e. the two variables change in the same direction; also known as a direct relationship.

positive economics The body of economics based on positive statements, which are about things that are, were or will be. Positive statements may be true or false. They form the basis of theories and models that try to explain economic events. To be contrasted with *normative economics*.

positive externality A type of externality where the side-effects on third parties are positive or beneficial, also known as 'spillover benefits'; to be contrasted with *negative externality*; see also *externality*.

positive externality of consumption A positive externality caused by consumption activities, leading to a situation where marginal social benefits are greater than marginal private benefits (MSB>MPB); see also *externality* and *positive externality*.

positive externality of production A positive externality caused by production activities, leading to a situation where marginal social costs are less than marginal private costs (MSC<MPC); see also *externality* and *positive externality*.

potential output (potential GDP) The level of output (real GDP) that can be produced when there is 'full employment', meaning that unemployment is equal to the natural rate of unemployment; also known as the *full employment level of output*.

poverty The inability of an individual or family to afford an adequate standard of goods and services; this standard may be absolute or relative; see *absolute poverty* and *relative poverty*.

poverty cycle Arises when low incomes result in low (or zero) savings, permitting only low (or zero) investments in physical, human and natural capital, and therefore low productivity of labour and of land, which in turn gives rise to low, if any, growth in income (sometimes growth may be negative), and hence low incomes once again. A poverty cycle may occur in a family, a community, a part of an economy, or in an economy as a whole. An important feature of the poverty cycle is that poverty is transmitted from generation to generation.

poverty trap See *poverty cycle*.

preferential trade agreement An agreement between two or more countries to lower trade barriers between them on particular products, resulting in easier access to the markets of other members for the selected products, compared with the access of countries that are not members.

price ceiling A maximum price set by the government for a particular good, meaning that the price that can be legally charged by the sellers of the good cannot be higher than the legal maximum price. Results in a *shortage* of the product.

HL **price competition** Occurs when a firm lowers its price to attract customers away from rival firms, thus increasing sales at the expense of other firms. May occur in the case of monopolistic competition or oligopoly, but not in perfect competition (or monopoly).

price control Setting of minimum or maximum prices by the government (or private organisations) so that prices are unable to adjust to their equilibrium level determined by demand and supply. Price controls result in shortages or surpluses.

HL **price deflator** A price index used to calculate real GDP from nominal GDP; better known as the 'GDP deflator'.

HL **price discrimination** The practice of charging a different price for the same product when the price difference is not justified by differences in costs of production.

price elastic demand Relatively high responsiveness of demand to changes in price; PED (price elasticity of demand) > 1. See *price elasticity of demand*.

price elastic supply Relatively high responsiveness of supply to changes in price; PES (price elasticity of supply) > 1. See *price elasticity of supply*.

price elasticity of demand (PED) A measure of the responsiveness of the quantity of a good demanded to changes in its price, given by the percentage change in quantity demanded divided by the percentage change in price. In general, if there is a large responsiveness of quantity demanded (PED > 1), demand is referred to as being elastic; if there is a small responsiveness (PED < 1), demand is inelastic.

price elasticity of supply (PES) A measure of the responsiveness of the quantity of a good supplied to changes in its price, given by the percentage change in quantity supplied divided by the percentage change in price. In general, if there is a large responsiveness of quantity supplied (PES > 1), supply is referred to as being elastic; if there is a small responsiveness (PES < 1), supply is inelastic.

price floor A minimum price set by the government for a particular good, meaning that the price that can be legally charged by the sellers of the good cannot be lower than the legal minimum price. Results in a *surplus* of the product.

price inelastic demand Relatively low responsiveness of demand to changes in price; PED (price elasticity of demand) < 1. See *price elasticity of demand*.

price inelastic supply Relatively low responsiveness of supply to changes in price; PES (price elasticity of supply) < 1. See *price elasticity supply*.

HL **price leadership** A type of tacit (or informal) collusion among oligopolistic firms, where a dominant firm in the industry (which may be the largest, or the one with lowest costs) sets a price and also initiates any price changes; the remaining firms in the industry become price-takers, accepting the price that has been established by the leader. Under price leadership price changes tend to be infrequent, and are undertaken by the leader only when major demand or cost changes occur.

price support Minimum prices (or price floors) set by the government for agricultural products; see *minimum price*.

HL **price taker** A firm that accepts a price at which it sells its product. Usually refers to firms in perfect competition, which being small and numerous have no control over price, and therefore accept the price determined in the market; may also be used to refer to firms in oligopoly that practice tacit collusion and accept a price set by a price leader (see *price leadership*).

price war Competitive price-cutting by firms; usually in oligopoly. As each one tries to capture market shares from rival firms; results in lower profits for firms.

prices as incentives The ability of prices, and changes in prices, to convey information to consumers and producers that motivates them to respond by offering them incentives to behave in their best-self-interest; compare with *prices as signals*, which together with prices as incentives lead to an efficient allocation of resources (assuming no market failures).

prices as signals The ability of prices, and changes in prices, to communicate information to consumers and producers, on the basis of which they make economic decisions.

primary commodity Any product that is produced in the *primary sector*, which includes agriculture, forestry, fishing and the extractive industries; also known as 'commodity'.

primary products All products produced in the primary sector of an economy; also known as commodities; see *primary sector*.

primary sector A part of an economy that is dominated by agriculture, also including fishing, forestry and all extractive activities (such as mining).

HL **prisoner's dilemma** A problem in game theory showing that in some situations, although it is in the best interests of decision-makers to co-operate, when each actor acts in his/her best interests there results an outcome where they are all worse off. Is often used to illustrate the *strategic interdependence* of oligopolistic firms.

private good A good that is both *rivalrous* and *excludable*. To be contrasted with *public good*.

privatisation A transfer of ownership from the public sector (the government) to the private sector, i.e. private owners.

producer price index (PPI) Consists of several indices of prices received by producers of goods at various stages in the production process (such as a PPI for inputs, a PPI for intermediate goods, and a PPI for final goods); considered to be predictors of changes in the consumer price index (CPI) because they measure price changes at an earlier stage in the production process.

producer surplus Refers to the difference between the price received by firms for selling their good and the lowest price they are willing to accept to produce the good. In a diagram, it is shown as the area under the price received by producers and above the supply curve.

HL **product differentiation** Occurs when each firm in an industry tries to make its product different from those of its competitors; usually in order to create some monopoly power; products can be differentiated by physical differences, quality differences, location, services, and product image.

production possibilities All possible combinations of the maximum amounts of two goods that can produced by an economy, given fixed and unchanging resources and technology, when there is full employment of resources and productive efficiency.

production possibilities curve (PPC) A curve showing *production possibilities*.

production possibilities frontier (PPF) See *production possibilities curve*.

productive efficiency Occurs when firms produce at the lowest possible cost; is one of the conditions for producing on the production possibilities curve (PPC). HL The condition for productive efficiency is that production takes place where ATC is minimum.

productivity Refers to the quantity of output produced for each hour of work of the working population; for an economy as a whole it can be measured as real GDP divided by the total number of hours worked. Increases in productivity are a major factor leading to economic growth.

profit A payment, per unit of time, to owners of entrepreneurship/management (a factor of production). *See economic profit* and *normal profit*.

HL **profit maximisation** The goal of firms, according to the standard theory of the firm. It involves making profit as large as possible, and is achieved by producing the level of output where the difference between total revenue and total costs is the largest, or where marginal cost is equal to marginal revenue.

programme aid Foreign aid involving financial support to sectors, such as education, health care, agriculture, urban development, the financial sector (credit, banking, insurance), the environment, or others.

progressive taxation Taxation where, as income increases, the fraction of income paid as taxes increases; there is an increasing tax rate.

project aid Foreign aid involving support for specific projects, such as building schools, clinics, hospitals, irrigation systems, other agricultural infrastructure, or others.

proportional taxation Taxation where, as income increases, the fraction of income paid as taxes remains constant; there is a constant tax rate.

protection of trade See *trade protection*.

public debt Refers to the government's accumulation of budget deficits minus budget surpluses; is the total amount owed by the government to all creditors (lenders); also known as 'government debt'.

public good A good that is *non-rivalrous* (its consumption by one person does not reduce consumption by someone else) and *non-excludable* (it is not possible to exclude someone from using the good). Since it is not possible to exclude someone from using the good even though they do not pay for it, firms do not have an incentive to produce it. Public goods are therefore provided by the government. This is a type of market failure.

purchasing power parity (PPP) exchange rates Special exchange rates between currencies that makes the buying power of each currency equal to the buying power of US$1, and therefore equal to each other. The use of PPP exchange rates to convert GDP (or GNI or any other output or income variable) eliminates the influence of price level differences across countries and is very important for making cross-country comparisons.

quintiles Division of a population into five equal groups with respect to the distribution of a variable, such as income; for example, the lowest income quintile refers to 20% of the population with the lowest income.

quota A type of trade protection that involves setting a legal limit to the quantity of a good that can be imported over a particular time period (typically a year). (More generally, a 'quota' is a limited or fixed number of things.)

rate of interest See *interest rate*.

rational economic decision-making The assumption in economics that all economic decision-makers act in their best self-interest, trying to maximise the satisfaction or benefit they receive from their economic decisions; for example consumers try to maximise the satisfaction of consumption, firms maximise profit, workers try to secure the highest wage possible, etc.

real GDP Gross domestic product (GDP) measured in constant prices, i.e. prices that prevail in one particular year, called a 'base year'; this is useful for making comparisons of changes in GDP over time that have taken into account the influence of changing prices.

real value Value that has eliminated the influence of changes in the price level.

reallocation of resources Refers to reassigning resources to particular uses, so that the allocation of resources changes and becomes a new allocation.

recession An economic contraction, where there is falling real GDP (negative growth) and increasing unemployment of resources which last six months or more.

recessionary gap A situation where real GDP is less than potential GDP, and unemployment is greater than the natural rate of unemployment; it arises when the *AD* curve intersects the *SRAS* curve at a lower level of real GDP than potential GDP. Also known as 'deflationary gap'.

redistribution of income Refers to changing the distribution of income, giving rise to a new distribution.

regional trade agreement A trade agreement (or agreement to lower international trade barriers) between several countries that are located within a geographical region (such as NAFTA, or North American Free Trade Agreement). May be contrasted with *bilateral trade agreement and multilateral trade agreement*.

regressive taxation Taxation where, as income increases, the fraction of income paid as taxes decreases; there is a decreasing tax rate.

relative poverty The inability of an individual or a family to afford an adequate standard of goods and services, where the adequate standard is relative and changes over time; this standard is defined as what is 'typical' in a society, taken to be a particular percentage (often 50%) of society's median income. As incomes increase and the median income rises, the standard also rises.

rent A payment, per unit of time, to owners of land resources who supply their land to the production process.

reserve assets Refers to foreign currency reserves that the central bank maintains and can buy or sell to influence the value of the country's currency exchange rate; in the balance of payments appears as an item in the *financial account*. Also known as 'official reserves'.

resources Factors of production, used by firms as inputs in the production process; see *factors of production*.

resource allocation Assigning available resources, or factors or production, to specific uses chosen among many possible and competing alternatives; involves answering the 'what to produce' and 'how to produce' basic economic questions.

HL **returns to scale** Refers to the relationship between inputs and output, and in particular by how much output changes if all inputs change (increase or decrease) by the same proportion; see *constant, increasing* and *decreasing returns to scale*.

revaluation (of a currency) Refers to an increase in the value of a currency in the context of a fixed exchange rate system (compare with appreciation, which is an increase in currency value in the contest of a floating or managed exchange rate system).

HL **revenue maximisation** The objective of some firms to maximise revenue (rather than profit, as assumed by the standard theory of the firm). The revenue-maximising firm produces the level of output where its marginal revenue is equal to zero (as that is where total revenue is maximum).

rivalrous A characteristic of a good according to which its consumption by one person reduces its availability for someone else; most goods are rivalrous. It is one of the two characteristics of 'private goods'. See also *excludable*.

HL **satisficing** A goal of firms to achieve satisfactory results, rather than pursue a single maximising objective, such as to maximise profits or revenues; based on the argument that large, modern firms have numerous objectives which may partly overlap or conflict, thus forcing them to compromise and reconcile conflicts, rather than pursue optimal results.

scarcity The condition in which available resources (land, labour, capital, entrepreneurship) are limited; they are not enough to produce everything that human beings need and want.

seasonal unemployment A type of unemployment that occurs when the demand for labour in certain industries changes on a seasonal basis because of variations in needs; for example, farm workers are hired during peak harvesting seasons and let off for the rest of the year.

HL **short run** (i) In microeconomics, it is a time period during which at least one input is fixed and cannot be changed by the firm. (ii) In macroeconomics, it is the period of time during which the prices of resources, particularly the price of labour (wages) do not change (they are constant).

short-run aggregate supply (SRAS) curve A curve showing the relationship between the price level and the quantity of real GDP produced by firms when resource prices do not change.

short-run equilibrium level of output In the monetarist/new classical model, it is the level of output (real GDP) determined by the intersection of the aggregate demand and short run aggregate supply curves; in the Keynesian model, it is the level of output determined by the intersection of the aggregate demand and Keynesian aggregate supply curves. In both models, equilibrium may occur where there is (i) a recessionary (deflationary) gap, (ii) an inflationary gap, or (iii) full employment output.

HL **short-run Phillips curve** See *Phillips curve*.

shortage In the context of demand and supply, is the amount by which quantity demanded is greater than quantity supplied.

HL **shut-down price** The price at which a firm that is making losses and will stop producing in the short run. In perfect competition, it is given by price = minimum average variable cost. (If price is greater than average variable cost, the firm will go on producing in the short run even if it is making a loss.)

HL **slope** In the case of a straight line, refers to the change in the dependent variable divided by the change in the independent variable between any two points on the line. According to mathematical convention, where the dependent variable is plotted on the vertical axis, the slope is the 'rise over run' (i.e. the vertical change divided by the horizontal change), however in microeconomics where quantity, the dependent variable, is plotted on the horizontal axis, the slope is the 'run over rise' (the horizontal change divided by the vertical change).

social optimum Refers to a situation that is the best from the social point of view, determined by the achievement of allocative efficiency (or economic efficiency); occurs when marginal social benefits are equal to marginal social costs (MSB=MSC).

social safety net A system of government transfers of cash or goods to vulnerable groups, undertaken to ensure that these groups do not fall below a socially acceptable minimum standard of living; see also *transfer payments*.

social sciences Academic disciplines that study human society and social relationships, concerned with discovering general principles describing how societies function and are organised; include anthropology, economics, political science, psychology, sociology and others.

social scientific method The same as the scientific method, it is a method of investigation used in sciences and social sciences allowing the accumulation of scientific and social scientific knowledge; involves making a hypothesis based on observations, testing the hypothesis, and rejecting or accepting the hypothesis based on empirical (real-world) evidence.

social surplus The sum of consumer and producer surplus; it is maximum in a competitive market with no market failures. See *consumer surplus* and *producer surplus*.

social welfare See *welfare*.

spare capacity Refers to physical capital that firms have available but do not use; arises in a recession when there is unemployment of resources.

HL **specialisation** Occurs when a firm or a country concentrates production on one or a few goods and services. In international trade theory, specialisation forms the basis for the gains from trade, arising when countries specialise according to their comparative advantage, and when firms specialise in production of goods and services that offer them economies of scale. Specialisation of labour occurs when workers perform one or a few tasks, and is one factor leading to economies of scale.

specific tax A tax calculated as an absolute amount per unit of the good or service sold.

speculation (currency) Buying and selling of something in the hope of making a profit. 'Currency speculation' involves buying and selling currencies based on expectations of changes in the value of a currency (exchange rates) in order to make a profit in the future.

HL **stagflation** Arising from a combination of the works 'stagnation' and 'inflation', refers to the simultaneous appearance of inflation and recession (and therefore also unemployment).

HL **strategic interdependence** Characteristic of oligopolies, refers to the mutual interdependence of firms and their strategic behaviour (planning their actions based on guesses about what their rivals will do), in view of the expectation that what happens to the profits of one firm depends on the strategies adopted by the other firms.

structural unemployment A type of unemployment that occurs as a result of technological changes and changing patterns of demand (causing changes in demand for labour skills), as well as changes in the geographical location of jobs, and labour market rigidities.

subsidy An amount of money paid by the government to firms for a variety of reasons: to prevent an industry from failing, to support producers' incomes, or as a form of protection against imports (due to the lower costs and lower prices that arise from the subsidy). A subsidy given to a firm results in a higher level of output and lower price for consumers. May also be paid to consumers as financial assistance or for income redistribution.

substitute goods Two or more goods that satisfy a similar need, so that one good can be used in place of another. If two goods are substitutes, an increase in the price of one leads to an increase in the demand for the other.

HL **supernormal profit** Refers to positive economic profit, arising when total revenue is greater than total economic costs (implicit plus explicit costs); is also known as 'abnormal profit'. See *economic profit*.

supply Indicates the various quantities of a good that firms (or a firm) are willing and able to produce and sell at different possible prices during a particular time period, *ceteris paribus* (all other things being equal).

supply curve A curve showing the relationship between the quantities of a good that firms (or a firm) are willing and able to produce and sell during a particular time period and their respective prices, *ceteris paribus* (all other things being equal).

supply of money The amount of money in circulation, determined by the central bank of a country; in combination with the demand for money, the supply of money determines the equilibrium rate of interest. (In practice central banks have difficulties in accurately controlling the supply of money.)

supply shock Events that have a sudden and strong impact on short-run aggregate supply (SRAS), leading to SRAS curve shifts; for example, a war or violent conflict that destroys physical capital and disrupts the economy, favourable or unfavourable weather conditions, etc.

supply-side policies A variety of policies that focus on aggregate supply, namely factors aiming to shift the long-run aggregate supply (*LRAS*) curve to the right, in order to achieve long-term economic growth. They do not attempt to stabilise the economy (i.e. to reduce the severity of the business cycle). There are two major categories of supply-side policies: market-based and interventionist. To be contrasted with *demand-side policies*.

surplus In general, this is the excess of something over something else to which it is being compared. (i) In the context of demand and supply, it is the extra supply that results when quantity supplied is greater than quantity demanded. (ii) In the case of consumer and producer surplus, it is the extra benefit consumers get by paying less for a good than the amount they are willing to pay, or the extra benefit producers get by receiving a higher price for the good they are selling than the price they are willing to receive. (iii) In the case of the government budget, a surplus occurs when government revenues are greater than government expenditures. (iv) In the balance of payments, a surplus in an account occurs when the credits (inflows of money from abroad) are larger than the debits (outflows of money to other countries).

sustainability Refers to maintaining the ability of the environment and the economy to continue to produce and satisfy needs and wants into the future; depends crucially on the preservation of the environment over time. Related to the concept of sustainable development, meaning 'Development which meets the needs of the present without compromising the ability of future generations to meet their own needs' (according to the Brundtland Commission), which is the idea that the use of natural resources in the present should not leave behind fewer or lower quality resources for use by future generations.

HL **tacit collusion** Refers to cooperation that is implicit or understood between cooperating oligopolistic firms, without a formal agreement, with the objectives to coordinate prices, avoid competitive price-cutting, limit competition, reduce uncertainties and increase profits; may take the form of *price leadership*.

tariffs Taxes on imported goods; they are the most common form of trade restriction. Tariffs may serve two purposes: to protect a domestic industry from foreign competition (a protective tariff); or to raise revenue for the government (a revenue tariff). Whatever the purpose, the impacts on the economy are the same.

HL **tax incidence** Refers to the burden of a tax, or those who are the ultimate payers of the tax.

HL **technical efficiency** See *productive efficiency*.

HL **terms of trade** Relates the prices a country receives for its exports to the prices paid for its imports, and is given by the ratio of index of average export prices to index of average import prices times 100. An increase in the value of this ratio indicates a terms of trade improvement, meaning that a country can now buy more imports for the same amount of exports; a decrease in the value of this ratio indicates a terms of trade deterioration, meaning that a country can now buy fewer imports for the same amount of exports.

HL **theory of absolute advantage** According to this theory, if countries specialise in and export the goods in which they have an absolute advantage (can produce with fewer resources), there results an improvement in resource allocation and increased production and consumption in each country.

HL **theory of comparative advantage** According to this theory (also known as a law), as long as opportunity costs in two (or more) countries differ, it is possible for all countries to gain from specialisation and trade according to their comparative advantage; this results in an improvement in the global allocation of resources, resulting in greater global output and consumption. Is a more powerful explanation of the gains from trade than the theory of absolute advantage.

HL **third degree price discrimination** Occurs when a firm price discriminates (i.e. changes different prices that are not justified by difference in costs) among different consumer groups; is based on the principle that different consumer groups have different price elasticities of demand (PED) for a product, so that higher prices are charged to consumers with a lower PED and lower prices to consumers with a higher PED.

tied aid The practice whereby donors make the recipients of foreign aid spend a portion of the borrowed funds on the purchase of goods and services from the donor country. It occurs only in the context of bilateral (not multilateral) aid.

tight monetary policy See *contractionary monetary policy*.

HL **total costs** The sum of fixed and variable costs.

HL **total product** The total quantity of output produced by a firm.

total revenue The amount of money received by firms when they sell a good (or service); it is equal to the price (P) of the good times the quantity (Q) of the good sold. Therefore total revenue = $P \times Q$.

tradable permits Permits that can be issued to firms by a government or an international body, and that can be traded (bought and sold) in a market, the objective being to limit the total amount of pollutants emitted by the firms. If a firm can produce its product by emitting a lower level of pollutants than the level set by its permits, it can sell its extra permits in the market. If a firm needs to emit more pollutants than the level set by its permits, it can buy more permits in the market. Tradable permits are part of *cap-and-trade schemes*.

HL **trade creation** The replacement of higher cost products (imported or domestically produced) by lower cost imports that results when a trading bloc is formed and trade barriers are removed. (To be contrasted with *trade diversion*.)

HL **trade diversion** The replacement of lower cost products (imported or domestically produced) by higher cost imports that results when a trading bloc is formed and trade barriers are removed. (To be contrasted with *trade creation*.)

trade liberalisation The policy of liberalising (freeing up) international trade by eliminating trade protection and barriers to trade (i.e. tariffs, quotas, etc.)

trade protection Government intervention in international trade through the imposition of trade restrictions (or barriers) to prevent the free entry of imports into a country and protect the domestic economy from foreign competition.

trading bloc A group of countries that have agreed to reduce tariff and other barriers to trade for the purpose of encouraging the development of free or freer trade and cooperation between them. See also *free trade area*, *customs union* and *common market*.

transfer payments Payments made by the government to individuals specifically for the purpose of redistributing income, thus transferring income from those who work and pay taxes towards those who cannot work and need assistance. Groups receiving transfer payments may include older people, sick people, very poor people, children of poor families, unemployed people and others; in their entirety they are referred to as 'vulnerable groups'.

underallocation of resources Occurs when too few resources are allocated to the production of a good relative to what is socially most desirable, resulting in its underproduction.

underemployment The number of underemployed people, defined as all people above a particular age (i.e. not children) who have part-time jobs when they would prefer to have full-time jobs; or have jobs that do not make full use of their skills and education.

underground market Refers to a market that arises whenever a buying/selling transaction is unrecorded; may involve legal goods and services (such as plumbing done by a plumber who does not report the income) or illegal goods and services (such as drugs). May also arise due to the imposition of price ceilings leading to shortages. Also known as 'parallel market'.

undervalued currency A currency whose value is lower than its free-market value; may occur if the exchange rate is fixed (or pegged), or in a managed exchange rate system, but not in a freely floating exchange rate system. To be contrasted with *overvalued currency*.

unemployment The number of unemployed people, defined as all people above a particular age (i.e. not children) who are not working and who are actively looking for a job.

unemployment rate A measure of the amount of unemployment in an economy, expressed as a percentage, calculated by taking the total number of unemployed people in an economy and dividing by the labour force, and multiplying by 100.

unit elastic demand Refers to a price elasticity of demand value of one; see *price elasticity of demand*.

unit elastic supply Refers to a price elasticity of supply value of one; see *price elasticity of supply*.

urban informal sector That part of an urban economy that lies outside the formal economy, consisting of economic activities that are unregistered and legally unregulated. In developing countries these activities are often a very large part of the urban economy; unlike in developed countries, where they are usually pursued to avoid taxes and labour laws, in developing countries they are a matter of physical survival of substantial portions of the population.

value of output flow In the circular flow of income model, refers to the value of output that is sold by firms and purchased by consumers, which is equal to the *expenditure flow* and *the income flow*.

HL **variable costs** Costs that arise from the use of variable inputs, and that vary or change as output increases or decreases (hence they are 'variable'). An example of a variable cost is wages, or the payment for labour resources (a variable input).

wage A payment, per unit of time, to those who provide labour; this includes all wages and salaries, as well as supplements (such as bonuses and commissions).

HL **weighted price index** A measure of average prices in one period relative to average prices in a reference period called a base period; a weighted price index is a price index that 'weights' the various goods and services according to their relative importance. In the consumer price index (CPI), goods and services are weighted according to their relative importance in consumer spending.

welfare In general, refers to the well-being of a population. In microeconomics, it is measured by the amount of social surplus (consumer and producer surplus) that is generated in a market. Welfare is greatest, i.e. social surplus is greatest, in competitive market equilibrium when there are no externalities, and marginal social benefits are equal to marginal social costs (MSB=MSC).

welfare loss Refers to loss of a portion of social surplus that arises when marginal social benefits are not equal to marginal social costs (MSB≠MSC), due to market failure.

withdrawals See *leakages*.

World Bank A development assistance organisation, composed of 185 member countries which are its joint owners, that extends long-term credit (loans) to developing country governments for the purpose of promoting economic development and structural change. It consists of two organisations: the International Bank for Reconstruction and Development (IBRD), which lends to middle income countries on non-concessional (i.e. commercial) terms (therefore its activities and lending do not form part of foreign aid); and the International Development Association (IDA), which has similar activities to the IBRD but extends loans to low income countries on highly concessional terms; these activities form part of foreign aid (see *concessional loans*). About 75% of World Bank lending is through the IBRD.

World Trade Organization (WTO) An international organisation that provides the institutional and legal framework for the trading system that exists between member nations worldwide, responsible for liberalising trade, operating a system of trade rules and providing a forum for trade negotiations between governments, and for settling trade disputes.