A Glossary of Economic Terms

Ability to Pay Principle: The idea that the rich should pay more taxes than the poor. (See also Benefit Principle of Taxation.)

Absolute Advantage: The idea that nations should produce goods which absorb fewer resources than in other countries, and exchange their surpluses for goods produced with fewer resources elsewhere; replaced by the Law of Comparative Advantage. Absolute advantage exists whenever a party or nation can produce a specific good using fewer resources than another party or nation requires.

Accounting costs (explicit costs) vs. economic costs: The real (economic) costs of production usually exceed the accounting (bookkeeping) costs of production because economic costs include both accounting costs and implicit costs.

Activism: The Keynesian notion that Aggregate Demand should be adjusted by government macroeconomic policy to offset shocks to Aggregate Demand or Aggregate Supply. "Fine-tuning" is an extreme version of this approach.

Administration Lag: The period that passes before discretionary policy changes can be implemented; monetary policy can be implemented quickly through the FED's Federal Open Market Committee; fiscal policies entail long administration lags because discretionary changes in taxes or government expenditures require changing the law.

Administrative Costs of Regulation: Include the salaries of government workers, inspectors, office supplies, etc. (See also compliance costs of government regulation.)

Ad valorem tax: A percentage tax on the value (PQ) of a sale or purchase. Retail sales taxes are examples of ad valorem taxes.

Adverse Selection: Occurs when a party to a contract has been deceived about the qualities it expects to receive from a transaction.

Aggregate Demand Curve: The negative relationship that exists between the general price level (*P*) and the quantity demanded (*Q*) of total national output.

Aggregate Expenditures: The sum of consumption, investment, government purchases, and net exports (C + I + G + [X-M]).

Aggregate Expenditures Curve: The relationship between Aggregate Expenditures and income; positively sloped because income induces spending. Sometimes known as a Keynesian cross diagram.

Aggregate Supply Curve: A positive relationship between real national production (*Q*) and the absolute price level (*P*).

Aid to Families with Dependent Children (AFDC) A major program designed to alleviate poverty; originally this program was characterized by a payment structure which provided incentives for recipients not to work.

Allocative efficiency: Allocative efficiency requires the pattern of national output to mirror what people want—and are willing and able to buy.

Allocative Mechanisms: Alternative modes for a society to use in deciding how inputs will be allocated among competing ends and how incomes and production will be distributed.

Anarchism The idea that government should be eliminated, leaving people largely free to do as they pleased. Anarchists believe that social harmony would evolve naturally through cooperative efforts. Most philosophical anarchists recognize the importance of private property rights and, hence, completely disavow social ownership.

Appreciation of a Currency When the exchange rate (price) of a currency increases as measured by its exchange rates with other currencies.

Arbitrage: The risklessly profitable process of buying a good at a lower price in one market and selling the same good at a higher price in another market. This requires relative price differentials between markets to exceed the transaction costs incurred with intermarket transfers of goods. Arbitrage forces relative prices of the same good toward equality in all markets.

Artificial Barriers to Entry: Significant barriers to entry that are not caused by natural market forces. Government or existing firms erect these barriers to exclude competition.

Asset Demand for Money: Exists because people (*a*) perceive money as riskless relative to alternative assets, (*b*) confront transaction costs in acquiring other assets that exceed their expected rate of return, and (*c*) expect the prices of alternative assets to fall in the near future.

Asymmetric Information: When people have different levels of knowledge about a bargaining situation.

Automatic (Built-in) Stabilizers: Government tax and spending mechanisms that automatically drive the federal budget into deficit when the economy slumps or into a surplus when inflationary pressures build; tend to stabilize economic activity.

Automation: Technological advances that replace human labor by machinery.

Autonomous Expenditure: Spending unrelated to income; occurs at zero income. Investment, government purchases, net exports, and part of consumer spending are all treated as autonomous in very simple Keynesian models.

Autonomous Spending Multiplier: The number which, when multiplied by the sum of all autonomous spending, yields equilibrium income; in simple Keynesian models, this multiplier equals the reciprocal of the marginal propensity to save.

Average Fixed Cost (**AFC**): Average fixed cost equals total fixed cost (*TFC*) per unit of output (*Q*) = *TFC/Q*. The AFC curve graphs as a rectangular hyperbola.

Average Physical Product of Labor ($\boldsymbol{APP_L}$*):* The average physical product of labor is production per worker and equals total output (Q) divided by labor (L), or Q/L. Average physical products for other resources (e.g., capital or land) are calculated in parallel ways.

*Average Propensity to Consume (**APC**):* Consumption (*C*) as a proportion of disposable income Y_d. The $apc = C/Y_d$.

*Average Propensity to Save (**APS**)*: Saving (*S*) as a proportion of disposable income Y_d. The $APS = S/Y_d$.

Average Revenue: Revenue per unit of output; synonym for price in the absence of price discrimination; equals total revenue (*TR*) divided by output: *TR/Q*.

Average Revenue Product Revenue per unit of an input; is computed by dividing a given total revenue (*TR*) by the amounts of given resources (e.g., workers (*L*)) generating this revenue (e.g., *TR/L*).

Average Total Cost (ATC) Total cost incurred per unit of output; often termed *average cost* or *unit cost*. ATC is calculated as TC/Q, or ATC = AVC + AFC.$ATC = AVC + AFC$.

Average Variable Costs (AVC) Variable cost per unit of output; equals *TVC/Q*. (See also variable costs.)

Axis: One of the intersecting lines used to measure how variables are related in a Cartesian coordinate system. The x-axis measures variables laid out horizontally, and the y-axis measures variables laid out vertically. The plural of axis is axes.

Bad: Anything the consumption of which decreases human happiness. “Bads” include substances (e.g., pollution) or activities (e.g., murder) for which reduction would increase human welfare—an antonym for a good. Excessive amounts can transform marginal units of certain goods into bads. For example, a dash of oregano can flavor spaghetti sauce in a good way, but a pound of oregano would spoil a large pot of sauce. The excess oregano would be a bad, not a good.

Balance of Payments: A record of the payments between a country and the countries with which it trades. Balance of payments deficits occur when a country's payments of money to foreigners exceed its receipts from foreigners. A balance of payments surplus occurs when a country's receipts from foreigners exceed its payments to foreigners.

Balance of Trade (deficit, surplus): The relationship between a country's annual exports and imports. A deficit in the balance of trade exists when the dollar value of a country's imports exceeds the value of its exports. A surplus in the balance of trade exists when the dollar value of a country's exports exceeds the dollar value of its imports. Differs from balance of payments because foreign investment flows and loans, etc., affect payments.

Barrier to Entry: A significant obstacle of some sort that either discourages or prevents the entry of firms into an industry. Barriers to entry exist when potential competitors face significant cost disadvantages that make entry into an industry difficult or impossible. Some barriers to entry are natural, as when significant economies of scale favor the survival of only one or a few firms (e.g. public utility companies). Other barriers are legal (e.g., patents, copyrights, and trademarks), or strategic, as when a firm practices anti-competitive policies (e.g., violence from illegal drug suppliers who protect their territories).

Barter Trading goods for other goods rather than money.

Basic Economic Problem: Scarcity, which means that fewer goods are freely available than people want to consume.

Basic Economic Question: What economic goods will be produced, *when* and *how* will resources be used for which types of production, and *who* will get to use the goods?

Benefit Principle of Taxation The idea that individuals should be taxed in proportion to the marginal benefits that they receive from governmentally provided commodities and services. (See also ability to pay.)

Bilateral Monopoly Occurs when a monopoly supplier confronts a monopsonistic buyer.

Black Market: Transactions that violate legal price ceilings or other laws and regulations.

Blacklisting Circulation by employers of lists to bar hiring of union organizers or other "troublemakers."

Block Pricing A system of price discrimination intended to make utility rates efficient.

Board of Governors The governing body of the Federal Reserve System. Six regular board members are appointed to staggered 14-year terms of office; the Chair is appointed to a 4 year term.

Bonds Promises by government or corporations to pay certain amounts of money by specific future dates.

Break-even Point The rate of output at which total revenue equals total cost, so that profit is zero.

Bretton Woods Agreement (1944) Established both the International Monetary Fund and a fixed exchange rate system with the dollar as the world's key currency. Other nations agreed to peg their currencies to the dollar.

Budget Deficits or Surpluses Occur, respectively, when government outlays exceed or fall below government revenues.

Budget Line A line showing various combinations of goods which cost the same amount as the consumer's income.

Bureaucracy A large organization with many employees, called bureaucrats; tends to be governed by many rules and regulations, called red tape.

Business Cycles Alternating periods of expansion and contraction in economic activity.

Business Firms Centers of production, they sell goods in output markets and buy services in resource markets.

Buyers' Market Occurs when the prevailing market price lies above the equilibrium price, resulting in a surplus.

Capital All physical improvements made to natural resources that facilitate production, including buildings and all machinery and equipment.

Capital Deepening When the percentage growth of the capital stock exceeds the growth rate of the labor force; real per capita output normally rises.

Capital market: A capital market is a market in which either financial capital or economic capital is traded. International capital markets are increasingly efficient, so that economic and financial capital flow across national borders rapidly (over $600 trillion annually) when investors perceive differences in expected rates of return.

Capital Widening When the labor force and the capital stock experience identical percentage rates of growth.

Capitalism An economic system based on private property rights and emphasizing private, as opposed to governmental or collective, decision making. (See also laissez faire, socialism.)

Capitalization The process whereby income streams are transformed into wealth, resulting in the elimination of economic profits.

Cartel An organization of firms that jointly make decisions about prices and production for the entire group, usually attempts to charge monopoly prices and limit production to monopoly rates of output. OPEC is an example.

Cartesian coordinate: An ordered pair of numbers (x,y) that identifies how variables may be related graphically along a horizontal x-axis and a vertical y-axis.

Caveat Emptor: An ancient legal doctrine which suggests that buyers are the best judges of whether or not they receive full value from the goods they purchase, and that buyers should bear the consequences of their own decisions; it means "let the buyer beware."

Caveat Venditor: A legal doctrine reflected in prohibitions against fraud and in sellers' legal liability for damages if unknown dangers lurk in a product; a Latin phrase meaning "let the seller beware."

Celler-Kefauver Antimerger Act (1950): This act made it illegal for major firms to acquire the stock or assets of their competitors.

Central Bank: An institution whose function it is to make a nation's financial system operate as smoothly as possible; serves as the government's banker. The central bank of the United States is the Federal Reserve System, or FED.

Central Planning or *Centralized Decisionmaking* Major economic decisions are made by some central authority, as in the Soviet Union.

Certificates of Deposit (CDs): Very long-term, high-value savings accounts issued by financial institutions.

Ceteris paribus: A Latin phrase by which economists mean, “all else held constant.” Economists invoke *ceteris paribus* extensively in their analyses, especially in partial equilibrium models.

Change in demand: Graphically, a change in demand is a shift of the entire demand curve in response to a change in one of the determinants of demand. A change in price does not change demand—the demand curve does not shift.

Change in quantity demanded: A change in quantity demanded results from a change in the price of the good, and is reflected in a movement from one point on a given demand curve to another point on that curve.

Change in quantity supplied: A change in quantity supplied is shown by a movement along an existing supply curve and occurs with a change in the price of the good or service.

Change in supply: Graphically, a change in supply is a shift of the entire supply curve in response to any change in a determinant of supply other than the good's own price.

Christian Socialism Emphasizes the virtues and dignity of work and advocates labor unionization; rejects the violent means to overthrow capitalism advocated by radical socialists and communists.

Circular Flow Model: A circular flow model shows how goods and resources flow among households, firms, and government through markets in exchange for payments. Households are centers for wealth holding and consumption, and buy goods from the firms that produce them; firms buy resources from households in order to produce goods and services.

Classical Theory A systematic study of the functioning of a market economy which concluded that, in the long run, the economy would always attain full employment at equilibrium GDP, assuming the validity of Say's Law and flexible wages, prices, and interest rates.

Clayton Act (1914): Specified offenses more precisely than did the Sherman Act (1890); the Clayton Act forbade price discrimination and interlocking directorates, exempted collective bargaining from antitrust actions, and exempted agricultural associations so that nonprofit corporations could be formed without violating antitrust laws.

Closed Shop: A firm that has agreed to hire only union members; these agreements are illegal under the Taft-Hartley Act.

Collective Bargaining: The process by which workers who are members of a labor union negotiate with an employer to set wages, hours, and working conditions.

Coinsurance: Medical insurance where the patient pays x percent of the cost of medical treatment. This is often couples with a deductible where the patient pays the first y dollars of any medical treatment or the first y dollars of medical treatment within a given period of time (usually a calendar year).

Command Economy: These economic systems resolve the basic economic questions through central planning; allocations of inputs and distributions of goods are coordinated by a bureaucracy.

Commodity: Any tangible produced good that usually may be owned.

Commodity Money: Has substantial value independently of what it will buy. Gold and silver coins are examples.

Common Stock: Ownership shares in a corporation.

Communism: An idealized classless society in which all people would live and work under the condition "from each according to ability, to each according to needs"; under communism, all nonhuman property would be owned collectively.

Comparable Worth: The idea that jobs typically filled by women should generate wages equal to those paid to men with comparable skills.

Comparative Advantage: A comparative advantage in producing or selling a good is possessed by an individual or country if they experience the lowest opportunity cost in producing the good.

Comparative Advantage, Law of: Mutually beneficial trade can always take place between two countries (or individuals) whose pretrade cost and price structures differ.

Competition A process driving price close to opportunity cost. Pure competition requires: (*a*) numerous potential buyers and sellers; (*b*) homogeneous outputs or inputs, precluding nonprice competition; (*c*) each buyer and seller to be small relative to the market so that no single decision will influence the price of the item or service; and (*d*) an absence of long run barriers to entry or to exit. Perfect competition requires, in addition, that transactions entail perfect information and mobility, so that contracting costs are ignored. (See also contestable markets theory.)

Competitive labor market: In a competitive labor market, there are so many buyers (firms) and so many sellers (workers) that no individual or organization alone can affect output prices or the wage rate.

Complementary Goods Goods that are consumed together, such as tennis racquets and balls, hot dogs and mustard, left shoes and right shoes, and cars and gasoline. A negative cross-price elasticity of demand exists between complementary goods.

Compliance Costs of Government Regulation Costs incurred mainly by the private sector (and also by state and local governments) in the process of complying with regulations. (See also Administrative Costs of Regulation.)

Concentration Ratio The percentage of some aspect of market power (e.g., sales) wielded by the leading 4 or 8 firms in an industry.

Conglomerate A firm that operates in several different industries.

Constant Cost Industry The long run industry supply curve is horizontal; constant per unit production costs are incurred for every output level because the supplies of all the resources used are perfectly price elastic.

Consumer Equilibrium (the Cardinal Utility approach): Consumer equilibrium occurs when utility is at a maximum because consumers lack any net incentive to change their purchasing patterns. A consumer maximizes total utility when the last cents spent on each good yield the same number of utils of satisfaction; no reallocation of spending will increase total utility.

Consumer Equilibrium (the Indifference Curve approach) Consumers maximize satisfaction upon reaching tangency between their budget constraint lines and the highest attainable indifference curves.

Consumer Price Index ***(CPI)*** A statistical comparison, over time, in the prices of goods bought by typical urban consumers; the base year equals 100, with subsequent changes in the price level reflecting inflation (over 100) or deflation (under 100).

Consumer Surplus The gain consumers derive from differences between the amounts of money they would willingly pay to consume alternative quantities of a good and the smaller payments required for them to consume those quantities of the good. Graphically, this is the area below consumers' demand curves but above the price line.

Consumption: Spending by households for goods used to gratify human wants. In macroeconomics, the total of all consumers' spending is also termed consumption.

Contingent Labor Force: Contingent workers include part-time employees, employees in business services, self employed and temporary workers.

Contestable Markets Theory: Suggests that all advantages of pure competition as a market structure are realized if freedom of entry and exit exists, and that the number of firms currently in a market is less important for efficiency than the threat of potential new entrants. (See also competition.)

Contraction (Recession): A decline in economic activity; unemployment and inventories rise unexpectedly.

Contribution Standard: The idea that income should be distributed according to the productivity of one's resources.

Corporation An organization formed under state law that is considered a legal person distinct and separate from its owners.

Cost-Push Inflation Upward price level movements that originate on the supply side of the economy; cost-push cycles of inflation generate clockwise adjustment paths of inflation versus real output.

Costs: The costs of any good or activity are the value of the next best opportunities foregone.

Cost-shifting This occurs when patients who pay less than the full costs of their medical care are subsidized through higher charges to patients who have insurance or pay the full costs of treatment.

Costs of Unemployment, Economic: Include the opportunity costs of the output unemployed workers could have produced were they employed.

Credit: A promise to pay at some future date is exchanged for money.

Cross Elasticity of Demand: A measure of the responsiveness of the quantity demanded of one good to changes in the price of another. It is computed by dividing the relative change in quantity demanded of a good by the relative change in price of another good.; This is roughly: $\%\Delta Q_x/\%\Delta P_y$; positive for substitute goods, but negative for complementary goods.

Crowding-Out Hypothesis: The idea that increases in governmental spending inevitably cause reductions in private consumption or investment.

Crude Quantity Theory of Money: A monetary theory that the price level is exactly proportional to the nominal money supply (M).

Currency: Coins and paper money.

Cyclical Deficit: The difference between government revenues and outlays that emerges because the macroeconomy is operating below its potential. (See also structural deficit.)

Cyclical Unemployment: Unemployment that results from a recession.

Decentralized Decisionmaking: When most decisions about what to produce, when and how to produce, and who gets to use output are determined in private markets.

Decentralized Socialism: Economic systems characterized by social ownership of resources, but which rely on markets to resolve the economic problem by setting equilibrium prices and quantities.

Decrease in Demand: An entire demand curve shifting downward and to the left; occurs only if one or more of the nonprice determinants of demand change. Less will be purchased at each possible price.

Decrease in quantity demanded: A decrease in quantity demanded results from an increase in the price of the good, and is a leftward movement from one point on a given demand curve to a point that reflects a higher price and a lower quantity.

Decrease in quantity supplied: A decrease in quantity supplied is shown by a movement towards the origin along an existing supply curve, and results from a decline in the price of the good or service.

Decrease in Supply The entire supply curve shifts to the left; occurs only if one of the nonprice determinants of supply changes so that less will be available at each possible price.

Decreasing Cost Industry: An industry for which the long-run supply curve is negatively sloped, reflecting declines in per unit costs as production in the industry increases.

Deflating: Using a price index to adjust monetary values for changes that occur to the price level over time; dividing the nominal values of a time series for a variable by (1% of) the price level during the period in which the nominal variable occurs.

Deflationary Gap: See recessionary gap.

Demand The amounts of a good that people are actually willing and able to buy, given the prices and choices available to them.

Demand Curve: A demand curve connects the maximum quantities of a good an individual or group are willing and able to buy at various prices, or the maximum prices they are willing and able to pay for various possible quantities of a good.

Demand Deposits Funds kept in a financial institution that by law must be available upon the depositor's demand; checking accounts.

Demand function: Relationships that show how certain determinants affect the amounts of a good or resource that people are willing and able to buy in a given period. A market demand function, for example, can be expressed as $Q_D = f(P, P_{ref}, P_{og}, Y, N, T, E)$, where Q_D = the amount people want to purchase per period; P = price of the good, P_{ref} = tastes and preferences; P_{og} = prices of related goods; Y = income; T = a proxy for taxes, subsidies, or government regulations; and E = expectations about, e.g., future prices or availability.

Demand, Law of The quantity demanded of an economic good varies inversely with its price.

Demand Price The highest price that buyers are willing and able to pay for a specific amount of a good or resource. Also known as subjective price. (See also supply price.)

Demand Schedule A table reflecting the maximum quantities of a given good or resource that will be purchased at various market prices.

Demand schedule: A table reflecting the maximum quantities of a given good or resource buyers are willing and able to purchase per period at various market prices.

Demand-Side or *Demand-Pull inflation* Hikes in the price level that originate from growth of Aggregate Demand; caused by excessively rapid increases in the growth rate of the nominal money supply or upward shifts in autonomous real expenditures; demand-pull inflation generates a counterclockwise adjustment path of inflation versus real output.

Depreciation: The loss in value of a piece of capital because of wear-and-tear encountered in production, or because of obsolescence. The amount of capital used up during a period. Accountants compute depreciation for tax purposes in a measure economists call the capital consumption allowance.

Depreciation of a Currency A decrease in the value of one currency measured in terms of its exchange rates with other currencies.

Depression A sharp and sustained decline in business activity.

Derived Demand The demand for a resource that exists because of its productivity; resource demands are derived from demands for output.

Determinant: A variable that influences or affects another variable.

Determinant of demand: Any influence on the demand for a good. Determinants of demand include: (a) the price of the good, (b) tastes and preferences, (c) prices of related goods, (d) income, (e) expectations about changes in prices, availability, or other influences on demand, (f) numbers of buyers in the market, and (g) such government policies as taxes or subsidies and laws or regulations.

Determinant of supply: Any influence on the supply of the good. Determinants of supply include: (a) the price of the good, (b) technology, (c) prices of related goods, (d) resource prices, (e) expectations about prices, (f) numbers of sellers in the market, and (g) government subsidies, taxes, and regulations.

Devaluation of a Currency: Occurs when exchange rates are either "pegged" or fixed under a gold standard and some government decides to decrease the gold content of its currency; not synonymous with depreciation of currency.

Development, Economic: Qualitative changes in an economic system; economic development occurs when there are improvements in either the quality of life or the quality of goods, or both.

Dialectical Materialism: Karl Marx's explanation of historical change; all massive social and cultural changes are determined by contradictions that exist in the ways that societies produce, exchange, distribute, and consume goods; for the most part, these contradictions are embedded in conflicts that exist between the different classes in society.

Diminishing Marginal Returns, Law of: When additional equal units of a variable input are applied to fixed inputs, a point is inevitably reached where total output increases at a diminishing rate as additional units of the variable input are applied to the fixed inputs; diminishing marginal returns are pervasive even in the long run because it is virtually impossible to vary all influences on production both proportionally and simultaneously.

Diminishing Marginal Utility, Principle of: Consumption of successive units of a good eventually causes an additional unit of the good to yield less satisfaction than that of the preceding unit.

Diminishing Returns, Law of: The further any activity is extended, the more difficult (and costly) to extend it further.

Dirty Float: Occurs when governments intervene in a "floating" foreign exchange market in order to stabilize exchange rates.

*Discount Rate (**d**):* The interest rate that the FED charges member banks when they borrow money from FED "discount windows."

Discretionary Fiscal Policy: Deliberate changes in government spending and tax policies for economic stabilization purposes.

Discrimination, Economic: Occurs when equivalent units of a resource receive different rates of remuneration even though their potential marginal contributions to total output are the same.

Diseconomies of Scale: Diseconomies of scale exist when increased inputs result in less than proportional increases in output so that long-run average costs rise with output.

Disequilibrium: When the forces for change in a system are not in balance.

Disincentives: Penalties that discourage an activity; often applied to government policies that discourage productive activities.

Disinflation: A significant decrease in the rate of inflation, this normally creates pressures for recessions.

*Disposable Personal Income (**DPI**):* The after-tax income households receive in a given year; equals consumption plus saving ($C + S$).

Dissaving: Negative saving; occurs when desired consumption exceeds income; families go in debt or draw down past savings to afford their purchases.

Distortion Costs of Inflation: Losses from distorted decisions caused when inflation warps relative prices and reduces certainty.

Distributive efficiency: Distributive efficiency requires people who value relatively the most (a ratio) each of the goods society produces to consume them relatively more. For example, if you prefer apples to peanuts while I like peanuts better than apples, your apple-to-peanut consumption ratio must be greater than mine.

Divestiture: When court orders require large corporations to break down into smaller independent companies.

Division of Labor: The division of labor entails specialization – dividing work on a productive endeavor into a number of tasks, each performed by a different person. One person may design a computer program, for example, while another writes the computer code, a third "debugs" the program, a fourth writes the user manual, a fifth copies the program to diskettes, a sixth packages and ships the programs, and so on.

Dominant Strategy: In game theory, a player's best response, no matter what strategy other players might pick.

Double Coincidence of Wants: A requirement of barter that you must locate someone who has what you want and who wants what you have to transact.

Dumping: When a country sells an export for less than the price charged domestically for that good; may result from international price discrimination, which entails charging desperate domestic buyers more than indifferent foreign buyers; predatory dumping occurs when a country tries to drive competitors out of a market to establish a monopoly.

Durable Goods: Consumer goods usually useful for an extended period, typically a year or more. Cars and trampolines, for example, are durable goods. Swim suits or grape jelly, on the other hand, are non-durable goods.

Economic Growth: Quantitative change in an economic system; occurs when a society acquires greater productive capacity that can be used for consumption or investment.

Economic Incidence of a Tax: The final burden of a tax; that is, who actually pays the tax through lower purchasing power.

Economic (Capital) Investment: Purchases of new output that can be used for further production. The four basic types of new capital are: (*a*) new business structures; (*b*) new residential structures; (*c*) new machinery and equipment; and (*d*) inventory accumulation.

Economic Profit: The excess of revenues over the opportunity costs of the resources employed; these profits reward an entrepreneur if they exceed the minimum necessary to continue the firm's existence and are a premium for risk bearing and innovating.

Economic Rent: Surpluses reaped by owners of a resource if it is paid more than the minimum necessary to elicit the supply of the resource.

Economics: The study of how individuals and societies allocate their limited resources in attempts to satisfy their unlimited wants.

Economies of Scale: When long-run average costs fall as output rises.

Economies of Scope: Cost savings realized because certain types of production are complementary.

Efficiency, Economic: Occurs when the opportunity cost of some specific amount of a good is at its lowest possible value, and when maximum production from given resources and costs is achieved; implies that gains to anyone entail losses to someone else.

Efficiency Wages: Wages that exceed market clearing wages, which are intended to raise the costs of dismissal and reduce shirking by employees.

Efficient markets theories: (1) **Weak**: All published information is completely capitalized and reflected in the relative prices of alternative assets. (2) **Semi-strong**: All new information is immediately capitalized into the relative prices of alternative assets. (3) **Strong:** In addition to all the information available that might affect a particular asset, asset prices also reflect rational forecasts of all possible future events (including, e.g., predictions about changes in government policies).

Egalitarianism: The idea that everyone should have the same income.

Elasticity: The sensitivity of one variable relative to some other variable. (See also income elasticity of demand, price elasticity of demand, price elasticity of supply.)

Eminent Domain: Government's legal right to acquire property without the previous owner agreeing to the price government pays.

Empire Building: Exaggerating the difficulty of the mission of a bureaucracy so that the budget of the agency will be expanded.

Employment Act of 1946: Established the Council of Economic Advisors and set priorities of full employment with price level stability, but provided few directives about how to achieve such goals.

Employment Discrimination Occurs when particular groups suffer a higher incidence of unemployment than other groups.

Entrepreneurship The organizing function which combines the services provided by other resources so that goods are produced.

Entry and Exit into an Industry If there are no barriers to entry and exit, entry into an industry by outside competitors or exit of existing firms continue until economic profits are zero; positive profits attract new entrants, while economic losses cause exit from an industry. Potential entry by competitors is the key to "contestable" markets theory.

Equal Distribution of Income Standard One ethical criterion for distributing income and wealth; assumes that an extra dollar means more to the poor than to the rich, and ignores the disincentives for production that occur when incomes are independent of productivity.

Equal Marginal Advantage, Law of Efficiency requires similar resources to be used to equally advantage. In consumption, the last cent spent on any good must yield the same satisfaction as the last cent spent on any other good. In production, the last cent spent on any resource must yield the same output as the last cent spent on any other resource.

Equal Marginal Productivities per Dollar, Principle of The last few cents spent on any resource must yield the same additional output as the last few cents spent on any other resource. This is a requirement for least cost production and maximum profit.

Equal Marginal Utilities per Dollar, Principle of The last few cents spent on any good yield identical amounts of satisfaction or utility; algebraically, this requires $MU_1/P_1 = MU_2/P_2 = \ldots = MU_m/P_m$, where the subscripts 1 through m-1 denote commodities and m denotes money.

Equation of Exchange $MV = PQ$, where M denotes the nominal money supply, V denotes the income velocity of money, P denotes an index for the general price level, and Q denotes real output; a tautology, since it is true by definition.

Equilibrium Exists when the pressures that bring about change in the market system are in balance. Macroeconomic equilibrium--when desired demand expenditure equals actual income or output. Microeconomic equilibrium--when the quantities of a good or resource demanded and supplied are equal.

Equilibrium (Market-Clearing) Price The market price that clears the market.

Equilibrium Quantity The quantity of a good marketed at the equilibrium price.

Equity Fairness, a normative concept; value judgments are inherent in specifying what is fair.

Escalator Clauses Contractual obligations specifying that future payments of money will be adjusted for price level changes.

Excess Burdens of a Tax The amounts by which the total burden of a tax exceeds government revenue yielded by the tax.

Excess Demand The amount by which the quantity demanded exceeds the quantity supplied when the prevailing market price lies below the market-clearing price; normally associated with shortages.

*Excess Reserves (**XR**)* the amounts by which banks' legal (total) reserves exceed their required reserves.

Excess Supply The amount by which the quantity supplied exceeds the quantity demanded when the prevailing market price lies above the market-clearing price; normally associated with surpluses.

Exchange Controls Legal limits on the ability to buy or sell foreign currencies; frequently stimulate black markets for foreign money.

Exchange Rate The value of one currency expressed in terms of another currency, or some combination of other currencies.

Excise Tax A per unit tax levied on a specific good.

Exclusive Good A good is exclusive if people can be denied access at a relatively low cost; if these people do not pay, they may be excluded from consuming the good.

Expansion (Recovery) The phase of the business cycle when economic activity begins to increase; employment rises, inventories fall unexpectedly.

Expected Rate of Inflation The percentage annual rate at which economic transactors expect the general price level to rise.

Expenditure Approach to Estimating GDP GDP equals the sum of personal consumption, investment, government purchases of commodities and services, and net exports: GDP $= C + I + G + (X - M)$.

Explicit Costs Outlays of funds to individuals or firms external to the producer; some examples are wages paid employees, rent payments, utility bills, and purchases of intermediate goods.

Exploitation Payment of wages less than the value of the marginal product of labor. May result from a firm's monopsony power as a hirer of labor, or because a firm has monopoly power.

Exports Goods manufactured in this country and purchased by foreigners.

External Supply Shocks These shocks, which originate outside the economy, shift the Aggregate Supply curve to the left; rising production costs create pressures for supply-side (cost-push) inflation and increasing unemployment.

Externalities Market failures that occur whenever some activity affects economic transactors who are not directly involved in the activity. Pollution is an example of a negative externality; education generates positive externalities to the extent that all of society gains from being a part of a more educated populace. External costs and benefits are largely ignored by individual decision makers.

Fabian Socialism This socialist theory advocates nationalizing only heavy industry; all other property would be privately owned, although extensive welfare programs would ensure that people's needs were met.

*Family Allowance Plan (**FAP**)* Many European nations countries now have family allowance plans based on the number of minor children in a family; these payments are usually adequate to feed and to clothe each child in the family and are made regardless of the family's income.

Featherbedding The employment of workers who are not in productive jobs; normally a result of union pressure or inefficient government regulation.

Federal Funds Market A privately operated network that enables banks to borrow or lend large amounts of money for very short periods.

Federal Open Market Committee (FOMC) The policymaking body within the Federal Reserve System.

Federal Reserve System (FED) Central bank of the United States; created by Congress in 1913 to buffer financial crises by acting as a bankers' bank and lender of last resort; the FED's primary role is conducting monetary policy.

Federal Trade Commission (FTC) Act (1914) Created the FTC and empowered it to challenge any "unfair methods of competition ... , and unfair or deceptive acts or practices in or affecting commerce."

Fee-for-service This entails medical payments (usually to doctors) that are tailored to the specific treatment. (See Health Maintenance Organizations).

Fiat Money Money that is worthless as a commodity and which has value only because of its use as a medium of exchange.

Final Goods Goods bought by the consumers or investors who ultimately use them.

Financial Capital Securities; paper claims to goods or resources.

Financial Intermediation The process by which household saving is made available through financial institutions to those desiring to spend in excess of their income (especially investors).

Financial Investment Paper documents representing financial claims on assets, created when purchases of stocks, bonds, and real estate are made.

Fine-tuning Government attempts to make the economy function as smoothly as possible by frequently changing both monetary and fiscal policies to offset even minor fluctuations in economic activity.

Firm An entity that operates one or more plants and which buys productive resources from households.

Fiscal drag A tendency to generate budget surpluses in a growing economy, assuming that government spending and tax rates remain unchanged; arising because of our progressive income tax, fiscal drag retards growth of Aggregate Demand.

Fiscal Policy Policies for government spending or setting tax rates or revenues to either stimulate or contract economic activity; intended to offset cyclical fluctuations in economic activity.

Fisher Effect Adjustments of nominal interest rates as borrowers and lenders compensate for expected inflation in order to secure some equilibrium "real" rate of interest.

Fixed Costs The total of all costs not related to the level of production; fixed costs are also known as historical, sunk, or overhead costs, and are irrelevant for rational decision making.

Fixed Exchange Rates A system in which international agreements set the values of all currencies in terms of one another; the exchange rates of currencies are not allowed to respond to changes in the relative supplies and demands for the currencies; balance of payments surpluses and deficits occur in a fixed exchange rate system when equilibrium exchange rates differ from the fixed (pegged) exchange rates and can be eliminated only through adjustments of Aggregate Demands or Aggregate Supplies.

Flexible (Floating) Exchange Rates The major alternative to a system of fixed exchange rates; under this exchange rate system, markets for individual currencies determine their equilibrium and actual exchange rates.

Flexible Wages, Prices, and Interest Rates According to classical theory, full employment was guaranteed by the existence of perfectly flexible wages, prices, and interest rates. (See also Say's Law.)

Flow Variable An economic variable that is only meaningful if measured over a period of time; income and production are examples.

Foreign Exchange A stock of foreign currencies held as an asset.

Foreign Sector Substitution Effect Tendency to import more and export less in response to an increase in the price level, and to invest more abroad and less domestically because a higher price level normally entails higher domestic production costs. Partially accounts for the negative slope of the Aggregate Demand curve. (See also Wealth Effect and Interest Rate Effect.)

Forward (Futures) Markets: Markets in which contracts to deliver currencies, financial securities, or products at some future date are bought and sold.

Fractional Reserve Banking System A banking system in which banks are legally required to hold only a fraction of their demand deposit liabilities in the form of reserves.

Free Enterprise System Agreements to trade are made by private buyers and sellers; ownership of resources is private, not social.

Free Good A good for which the quantity demanded fails to exceed the quantity available at a price of zero.

Free-Rider Problem Encountered in the consumption of public goods; refers to the lack of incentives for people to reveal their true preferences for public goods once these goods are provided; nonexclusive goods can be consumed at a zero price by those who contribute nothing to cover their production costs.

Frictional Unemployment Unemployment that exists because no one possesses perfect knowledge concerning job opportunities, nor free mobility between places of employment; lends a certain flexibility to the economy.

Functional Distribution of Income A breakdown of total income into the proportions paid to owners of various types of resources.

Functional Finance The view that balance in the economy is important and that imbalance in the federal budget is not important.

Future Goods Investments (postponed consumption) that boost productive capacity.

Gains from Scale Cost savings realized because international trade enables firms to become larger because they serve larger markets.

Gains from Specialization of Labor The extra output yielded when workers combine different types of expertise to perform a particular task.

Gains from Trade Improvements in human welfare because trading parties gain by acquiring (*a*) unique goods that they could not produce, (*b*) goods at lower costs than could be yielded by own-production, (*c*) transfers of technology (*d*) greater income that, through higher saving, stimulates investment, (*e*) gains from economies of scale made possible by larger markets, and (*f*) calmer relations with other people because of mutual interdependence.

Galloping Inflation Increases in the price level at double-digit rates annually.

Game Theory A technique that requires assessing the potential gains and losses from all possible strategies by all participants in some activity so that the most likely combinations of choices and outcomes can be ascertained.

General Equilibrium Analysis A method of analysis that not only looks at the direct effects of some variables on others, but also at indirect effects and feedbacks among the economic variables.

General Training Training that increases the productivity of a worker equally for numerous possible places of employment.

GDP (Implicit Price) Deflator A price index composed largely of components from the **CPI** and **PPI**; used to adjust nominal GDP for changes in the price level.

GDP Gap The amount by which current GDP is below full-employment GDP.

Gold Standard Money may be exchanged at a fixed rate for gold; e.g., until 1933, one ounce of gold could be bought from the U.S. Treasury for $35, or sold to it for $35.

Good Anything which satisfies a human want and, in so doing, increases human happiness.

Gresham's Law Bad money drives out good.

Grim Strategy In game theory, entails refusal to commit to a position until other players commit to a position.

Gross Domestic Product (GDP) The value of all production that takes place in a country annually, regardless of whether the resources used are owned domestically or by foreigners. GDP replaced Gross National Product as the primary measure used to report U.S. production in 1991.

Gross National Product (GDP) The value of all output produced by resources owned by the citizens of a country. The standard measure for U.S. production until 1991. See also Gross Domestic Product.

Health Maintenance Organizations (HMOs) These health organizations typically cover the health needs of their members for a fixed fee per person.

*Herfindahl-Hirschman Index (**HHI**)* The sum of the squares of the market shares of the firms in an industry; **HHI**s are now used as a guideline for antitrust actions.

Hoarding Holding money in idle cash balances; money that is hoarded is not spent on consumption or investment; causes velocity to fall.

Horizontal Combination A firm which has numerous plants producing identical or similar products.

Household Income Used for consumption, saving, or taxes: $Y = C + S + T$

Households Individual or family units that provide input services, and that are the ultimate storehouses of wealth; they purchase goods in the output markets, and they sell resources in input markets.

Human Capital Improvements made in the labor embodied in human beings; people invest in human capital so that their labor services become both more productive and more highly paid.

Human Capital Discrimination Reduces access by certain groups to schooling, on-the-job training, or to human capital investments.

Humphrey-Hawkins (Full Employment and Balanced Growth) Act (1978) Augments the Employment Act of 1946 by (*a*) identifying specific economic priorities; (*b*) directing the president to establish goals based on those priorities; and (*c*) creating procedures to improve the coordination and development of economic policy between the president, the Congress, and the Federal Reserve System.

Hyperinflation Increases in the price level at rates exceeding 50 percent per month.

Idle Cash Balances Money that is hoarded.

Impact Lag The period that passes before newly implemented changes in policy have an impact on economic activity; the impact lag of tax policy is short relative to that of monetary policy.

Implicit Costs The opportunity costs of all resources that a firm's owner makes available for production without direct outlays of money; examples are the values of the entrepreneur's funds, labor, and land tied up in the firm.

Implicit Labor Contract Unspoken agreements between firms and workers that the firm will continue to provide jobs when economic conditions are poor if the employee does not demand huge wage increases during periods of prosperity.

Imports Goods produced in foreign countries and consumed or invested domestically.

Income Approach to Estimating GDP GDP is the sum of personal consumption, total savings, and total taxes (GDP = $C + S + T$).

Income Effect Changes in consumption patterns arising because price changes also change the purchasing power of money incomes; may be positive, negative, or zero.

Income Elasticity of Demand A measure of the responsiveness of the quantity demanded of a good to changes in real income; computed by dividing the percentage change in the quantity demanded of a good by the percentage change in real income: $\%\Delta Q_{xd} / \%\Delta Y$.

Income Velocity (V) of Money $V = PQ/M$; the number of times annually that the average unit of money changes hands during the process of purchasing *GDP* (*PQ*).

Incomes Policies Measures intended to curb inflation without reducing Aggregate Demand expenditures; these policies include jawboning, wage and price guidelines, and wage and price controls.

Increase in Demand When the entire demand curve shifts upward and to the right; more will be purchased at every price; occurs only if one of the nonprice determinants of demand changes.

Increase in Supply When the entire supply curve shifts rightwards; buyers will be offered more at every price; occurs only if a nonprice determinant of supply changes; causes equilibrium price to decrease.

Increasing Cost Industry An industry whose long-run supply curve is an upward sloping line; higher costs per unit are incurred as production in the industry increases.

Index Numbers Numbers used to make relative comparisons of a specific variable between time periods.

Indicative Planning France, whose economy is primarily capitalistic, has used indicative planning, which entails trying to coordinate economic activity by setting production targets for major industries.

Indifference Curve A line connecting the various combinations of two goods that yield the same total utility; the consumer is indifferent among the various bundles of goods along an indifference curve.

Indirect Business Taxes Various taxes that are viewed by business firms as costs of production; are not part of National Income since they are not resource payments. Examples are sales and excise taxes.

Induced Expenditures Expenditures that depend on income.

Industrial Policy Government uses subsidies, tax breaks, and protection from foreign competition to support "target industries" that have high productivity, strong "linkages", or future importance.

Industry All firms that compete in some product market.

Industry Interest Theory of Regulation Regulation of industry serves not the public interest, but instead serves the particular interests of the regulated industries.

Infant Industry Argument for Tariffs The notion that emerging industries need to be protected from more efficient, established, foreign competitors.

Inferior Good A good for which the income elasticity of demand is negative; the demand for this type of economic good varies inversely with real income; technically, a good for which the income effect of a price change is negative.

Inflation Upward movements of the absolute price level.

Inflationary Gap The amount by which autonomous expenditures exceed those necessary for full employment income or output.

Informative Advertising Accurate information provided to consumers so that good economic choices can be made at lowered transaction costs; not a waste of resources.

In-Kind Transfers Welfare paid, not as cash, but rather as, e.g., food stamps, educational grants, or housing allowances.

Innovation In the 1930s, Joseph Schumpeter argued that progress in capitalist systems is driven by major innovations, including: (*a*) introduction of a new good, or new quality in a familiar product; (*b*) introduction of new technology; (*c*) opening of a new market; (*d*) discovery of a major source of raw materials; and (*e*) reorganization of a major industry.

Inputs Things used in the production process, such as labor and raw or semifinished materials.

Insurance principle Since most people are willing to pay to avoid some financial risk, insurance companies sell guarantees against such risks, charging a fee high enough to cover administrative costs and earn a profit.

Interest Payments per time period for the use of capital services.

Interest Rate Effect The Aggregate Demand curve slopes down in part because higher price levels increase the interest rate, which reduces purchases; dollar amounts to financing a given investment grow, while the nominal supply of loanable funds available does not.

Intermediaries (Middlemen) Firms that convey goods from the ultimate producer to the ultimate user. Intermediaries are profitable only if they reduce transaction costs.

Intermediate Goods Semiprocessed goods used in the production of other economic goods.

International Trade Exchanges of goods across national boundaries; facilitates efficient uses of the world's scarce resources.

Investment Additions to the economy's real capital stock, i.e., all final purchases of capital equipment (machinery, tools, etc.), all residential or commercial construction, and changes in inventories.

Invisible Hand Adam Smith's term for automatic market adjustments toward equilibrium.

Involuntary Saving Occurs when government policies decrease consumption in order to stimulate capital accumulation; governments can force individuals to save a portion of their income through taxation, inflationary financing of government expenditures, or by setting low wages and high prices.

Jawboning Oratory used by policymakers to persuade people or institutions to act against their individual interests; especially common as an exhortation to hold prices below equilibrium levels.

Joint Profit Maximization A cartel of oligopolistic firms tries to share the profits that a monopoly would make if it controlled the industry.

Key Currency An international medium of exchange; use of the U.S. dollar as an international medium of exchange was a major reason that the U.S. has been able to run persistently large balance of payments deficits since 1951.

Keynes Effect The initial decreases (**increases**) in both the nominal interest rate and the real interest rate brought about by an increase (**decrease**) in the rate of growth of the nominal money supply.

Keynesian Fiscal Policy Policies designed to combat the problems associated with inadequate Aggregate Demand.

Keynesian Government Growth Ratchet The tendency for government to grow because policymakers cut taxes and expand spending during economic downturns but do not raise taxes or cut spending during inflationary episodes.

Keynesian Investment Schedule The idea that investment demand is insensitive to movements of the interest rate, but that it is very sensitive to changes in expectations.

Keynesian Liquidity Preference The idea that the demand for money is extremely sensitive to interest rate movements and may even become horizontal at very low interest rates.

Keynesian Model A framework used to describe how output responds to changes in Aggregate Demand; generally ignores price level changes.

Keynesian Monetary Transmission Mechanism The idea that changes in the nominal money supply affect consumer spending only indirectly; money → interest rate → investment → income represents the chain of events emanating from a change in the money supply's rate of growth.

Keynesian theory Specifies that macroeconomic adjustments involve changes in quantities below full employment and that price level changes only become the major adjustment mechanism when Aggregate Demand grows at full employment.

Keynes' Fundamental Psychological Law of Consumption Consumption expenditures increase as income rises, but by a smaller amount.

Kinked Demand Curve Model An oligopolistic pricing model that explains noncollusive oligopolistic behavior and predicts stickiness or rigidity of prices in oligopolistic industries.

Labor Labor services are typically measured in terms of the total amount of time worked during a given interval.

Labor Force Participation Rate (LFPR) The proportion of a population in the labor force; computed by dividing the labor force by the total population.

Labor Theory of Value The idea that the value of anything is exactly proportional to the labor time socially necessary for its production; this approach was the standard economic explanation of price until late in the 1800s and is still an article of faith among Marxists.

Labor Unions A worker organization that negotiate labor contracts with firms' managers to set wages and the conditions of work.

Laffer Curve A figure showing that very high tax rates may so discourage productive efforts that fewer tax revenues are collected than if tax rates were substantially lower.

Laissez-Faire This philosophy embraces the notion that a market system operates most efficiently when government minimizes its activity in the economy; according to this philosophy, governments should provide national defense and police protection, specify property rights, and enforce contracts drawn up between economic agents--and little or nothing else. (See also capitalism, socialism.)

Land Includes all natural resources, such as unimproved land, minerals, water, air, timber, wildlife, fertility of the soil.

Legal Barriers to Entry Governmentally erected barriers to entry into an industry; these barriers maintain monopoly power by legally prohibiting or limiting competition from other firms; barriers include patents, copyrights, and licensing or bonding restrictions.

Legal Incidence of a Tax Falls on the party who legally must pay the tax to government, but the economic burdens may be shifted to others.

Legal Reserves Total bank reserves; the sum of bankers' required reserves and excess reserves.

Lemons Market The notion that adverse selection will cause the market for used cars to be dominated by bad used cars (lemons) because asymmetric information causes good used cars ("creampuffs") and lemons to sell for the same prices. Sometimes generalized to other markets, e.g., labor markets.

Lerner Index of Monopoly Power (LMP) An estimate of monopoly power using the percent by which price of output exceeds marginal cost; monopoly power is then measured as: $(P - MC)/P$.

Libertarianism A philosophy based on the notion that individual freedom is the most important social goal; libertarianism emphasizes the inherently coercive nature of government, and urges reliance on the free market system to resolve nearly every human problem.

Limit Pricing Occurs when firms that possess monopoly power set a profitable price that is low enough to discourage potential entrants.

Liquidity How relatively costless it is to turn a specific asset into cash. The transaction costs entailed with the purchase or sale of an asset are positively related to its ***il****liquidity*. One way to estimate liquidity is to consider how much you would lose if you bought and then immediately sold an asset. The greater the percentage loss in such an exchange, the less liquid is the asset.

Liquidity Preference The total demand for money in a Keynesian model; derived by summing the transactions, precautionary, and asset (speculative) demands for money.

Liquidity Trap The horizontal portion of the Keynesian liquidity preference curve; occurs only when economic transactors choose to hold all increases in the nominal money supply in idle cash balances; it is doubtful if perfect liquidity traps have ever existed.

Logrolling When legislators trade votes.

*Long Run (**LR**)* A period of sufficient duration for all feasible resource adjustments to any event to be completed.

*Long-Run Average Cost Curve (**LRAC**)* A curve showing the minimum average costs of producing each level of output after adjusting all resource inputs, including the size of the plant.

Long Wave Theory of Business Cycles A theory of long (50-60 year) waves in economic activity was developed in the 1920s by a Russian economist named Kondratieff.

Lorenz Curve A Lorenz curve shows the degree of inequality that exists in distributions of income or wealth in a particular society.

M1 = currency + demand deposits in commercial banks + all interest paying checkable accounts.

M2 = M1 + time deposits.

M3 = M2 + long-term deposits (Certificates of Deposit or CDs).

Macroeconomic Equilibrium Occurs when Aggregate Supply and Aggregate Demand are equal; when this occurs, the economy is stationary.

Macroeconomics The branch of economics concerned with aggregate variables such as the levels of total economic activity, unemployment, inflation, the balance of payments, economic growth and development, the money supply, and the federal budget.

Majority Rule When the winning side of a vote must capture 50 percent plus one vote.

Malthusian Prognosis Reverend Thomas Malthus, an early nineteenth century English economist, promulgated the dismal notion that all workers were doomed to live a subsistence existence; in formulating his forecast, Malthus neglected to consider the favorable impact of technological advances on the world's ability to produce food.

Marginalism The idea that decisions are based on the effects of small changes from a current situation.

Margin Requirements A FED tool that sets the legal minimum percentage down payments required for purchases of stock.

*Marginal Cost = Marginal Revenue (**MC = MR**)* A condition required for maximum profits. Typically, $MR > MC$ for units prior to the $MR = MC$ level of output, so extra output boosts profit or cuts losses. Higher output levels than the $MR = MC$ level entail $MR < MC$ and would not be produced.

Marginal Cost (MC) The change in total cost associated with producing an additional unit of output; computed by dividing the change in total cost (ΔTC) by the change in output (ΔQ): MC = ΔTC/ΔQ = ΔTVC/ΔQ.

*Marginal Physical Product of Labor (**MPP_L**)* The additional output produced by an additional unit of labor; computed by dividing the change in total output (□Q) by the change in labor (ΔL): ΔQ/ΔL.

*Marginal Propensity to Consume (**MPC**)* The change in saving brought about by a small change in disposable income ($MPC = \Delta C/\Delta Y_d$).

*Marginal Propensity to Save (**MPS**)* The change in saving brought about by a small change in disposable income ($MPS = \Delta S/\Delta Y_d$).

*Marginal Resource (or Marginal Factor) Cost (**MRC**)* The additional cost incurred in purchasing the services of an additional unit of a productive input; computed by dividing the change in total cost of production (ΔTC) by the change in input (ΔN): that is, ΔTC/ΔN; also computed by dividing the change in total variable costs of production (ΔTVC) by the change in input (ΔN): that is, ΔTVC/ΔN.

*Marginal Revenue (**MR**)* The additional revenue associated with selling an additional unit of output; computed by dividing the change in total revenue by the change in output: $MR = \Delta TR/\Delta Q$.

*Marginal Revenue Product (**MRP**)* The additional total revenue generated by an added unit of a variable input; computed by dividing the change in total revenue (ΔTR) by the change in input (ΔN): that is $\Delta TR/\Delta N$; or by multiplying marginal revenue by the marginal physical product of a resource: that is, MR x MPP_n.

*Marginal Social Benefits (**MSB**)* Computed by summing the marginal private benefits and the marginal external benefits, if any, from consuming additional units of commodities or services.

Marginal Social Costs The sum of marginal private costs and any marginal external costs incurred in producing additional units of a good.

*Marginal Utility (**MU**)* The added utility or satisfaction derived by a consumer from the consumption of an additional unit of a good.

Markets Mechanisms that enable buyers and sellers to strike bargains and to transact.

Market Demand Curve A graphic representation totaling all individual demand curves; it is derived for the most goods by horizontally summing all individual demand curves.

Market Economies Systems that rely on market interaction of supplies and demands to resolve the economic problem; the price system is used to coordinate the diverse plans of consumers and producers.

Market Equilibrium When neither shortages nor surpluses exist because. at the prevailing price, the quantities demanded and supplied are equal.

Market Failure When the market resolution of an economic problem is inefficient, inequitable, or unstable.

Market Period An interval too short to allow changes in decisions about amounts of output, so that only prices may be varied.

Market Price The price that is confronted in the market whether we buy or not.

Market Supply Curve A figure derived by horizontally summing all individual supply curves.

Market System See Capitalism, Free Enterprise System.

Maximizing Behavior **Homo sapiens** are perceived as human calculators who strive to maximize pleasure and to minimize pain.

*Measure of (Net) Economic Welfare (**MEW**)* A welfare measure obtained after deducting from GDP items that do not contribute to economic welfare and adding items that do, but which are not counted in GDP.

Measure of Value and Unit of Account The function performed by money as a common denominator through which the relative prices of goods are stated; reduces the information costs associated with exchange.

Median Voter Model Suggests that the median voter must be captured to achieve a majority of the vote, and attempts to explain why political parties and candidates tend to be so similar, and why two parties tend to dominate electoral processes.

Medicaid A federal program that mandates shared state and federal funding for health care for the poor.

Medicare A federal government plan that subsidizes medical insurance for Americans over 65 years of age.

Medium of Exchange The most important service that money provides; refers to standard items used to execute transactions.

Menu (Repricing) Costs of Inflation The costs in time and effort incurred in redesigning rate schedules and repricing goods.

Mercantilism A discredited economic doctrine that fostered imperialism and advocated surpluses in a country's balance of trade.

Merger The joining of two or more firms into a single firm.

Microeconomics The branch of economics that focuses on individual decision making, the allocation of resources, and how prices, production, and the distribution of income are determined.

Mid-Point Bases Used in elasticity calculations to avoid ambiguity in measuring percentage changes to variables. An average of the beginning and ending period is used as the base from which relative changes are measured.

Mixed Economies Societies in which some allocations rely on the market system while others rely government or some other allocative mechanism.

Model The structure of a theory.

Monetarism The idea that erratic growth in the money supply is the major cause of macroeconomic instability.

Monetarist Monetary Transmission Mechanism The idea that changes in the growth rate of the nominal money supply affect private spending directly; an increase in the money supply yields a proportional rise in nominal GDP: MS □ $(C + I)$ □ Y is the causal chain emanating from a change in the monetary growth rate.

Monetary Base or *High-Powered Money* (**MB**) The total of bank reserves plus currency held by the nonbanking public.

Monetary Growth Rule The idea that the economy will be relatively stable if the money supply is set to grow at a low fixed percentage rate regardless of short run economic conditions.

Money Illusion Decision makers suffer from money illusion if their decisions are based on movements of the monetary values of economic variables rather than on the real values of the variables.

Money Multiplier ($\boldsymbol{m_p}$, $\boldsymbol{m_a}$) Potentially equals the reciprocal of the reserve requirement ratio ($m_p = 1/\boldsymbol{rr}$)--the number which, when multiplied by a change in total reserves, yields the potential change in the money supply. Actually, $m_a = MS/MB$ because of currency holdings of the public, excess reserves, and other leakages.

Monopolistic Competition An industry in which many firms sell slightly differentiated goods and there is freedom of entry or exit; monopolistic competition resembles pure competition, but goods are heterogeneous and each firm possesses a bit of monopoly power.

Monopoly The lone seller of a good that has no close substitutes.

Monopoly Power Possessed whenever a seller can force prices up by restricting output.

Monopsonist The sole buyer of a particular good or resource.

Monopsony Power Possessed whenever a buyer can force price down by restricting purchases.

Moral hazard When a contract creates an incentive for opportunistic behavior that raises the costs or lowers the benefits to the other party.

Moral Suasion See "Jawboning."

Multiplier Effect The total change in spending that results when new autonomous spending boosts income which, in turn, is spent, creating more income, and so on. See also Autonomous Expenditures Multiplier.

Nash Equilibrium A strategy combination in game theory where no player has a net incentive to change unless other players change.

National Banks Banks chartered by the Comptroller of the Currency and that must be members of the Federal Reserve System.

National Debt The value of government bonds in the hands of the public or foreigners.

*National Income (**NI**)* A measure of economic activity computed by summing all resource incomes; equals the sum of wages and salaries, rents, interest, and corporate and noncorporate incomes.

Natural Barriers to Entry Significant barriers to entry that result from the nature of the economic good or from the cost structure inherent in its production.

Natural Monopoly A market in which only one seller can most efficiently produce an economic good; the production process is characterized by tremendously large fixed costs and relatively small variable costs; emerges where the market demand is small relative to the economies of scale.

Natural Rate Theory The notion that the economy is inherently stable and that unemployment and real interest will coincide with their natural rates in the long run; according to this theory, traditional Keynesian policy goals are unattainable because attempts to drive down unemployment or real interest rates more than can be reconciled with people's preferences are self-defeating in the long run.

Negative Externality When a market transaction imposes costs on third parties not directly involved in any aspect of the exchange.

Negative Income Taxes (NIT) Negative income tax plans represent attempts to reconcile equity and efficiency considerations in resolving the problems posed by income inequality and poverty; the negative income tax plan maintains incentives for recipients to work to earn additional income.

Net Domestic Product (**NDP**) The net value of commodities and services produced in the economy after adjusting for the fact that we have used up productive capacity; equals GDP minus depreciation; also equals National Income (**NI**) plus indirect business taxes. See also Net National Product.

Net Investment Gross investment minus depreciation; represents net additions to an economy's capital stock or productive capacity.

Net National Product (**NNP**) The net value of commodities and services produced by resources owned by the citizens of a country after adjusting for the fact that we have used up productive capacity; equals Gross National Product minus depreciation; also roughly equals National Income (**NI**) plus indirect business taxes.

Neutral Tax Imposition of a neutral tax distorts neither consumer buying patterns nor the methods used by firms in the conduct of their business; in other words, the imposition of a neutral tax does not distort relative prices by inducing substitution effects.

New Classical Macroeconomics Modern theories that extend classical theories of competitive markets, normally supports laissez faire macroeconomic policies.

New Industrial Organization (new I-O) In contrast to the more traditional Structure-Conduct-Performance (SCP) approach, new I-O deemphasizes the numbers of competitors in an industry, and stresses (**a**) how economic interactions can be better modeled with *game theory*, (**b**) how *asymmetric information* among transactors shapes business decisions and market structures, and (**c**) how *strategies* develop in response to the specifics of different competitive environments.

New Keynesian Economics Macroeconomic theories that blend traditional Keynesian insights with more elements of classical macroeconomic theory. New Keynesians continue to emphasize quantity rather than price adjustments to macroeconomic disturbances, and to focus on efficiency wages and other impediments to perfect wage-price flexibility. However, far more than traditional Keynesians, new Keynesians accept the notion that changes in the money supply are important in explaining both inflation and recession, and they are less "activist" in their approaches to macroeconomic policymaking.

Nominal Rate of Interest The average annual percentage monetary premium paid for the use of money.

Nominal Price The monetary ("absolute") price of a good. (See also relative price.)

Nominal Values The current dollar values of economic variables.

Nondiscretionary Fiscal Policy See Automatic Stabilizers.

Nondurable Goods Goods that are used up in less than one year.

Noneconomic Costs of Unemployment Include the psychological trauma of being unemployed and the social unrest unemployment engenders.

Nonexclusive Good A good is nonexclusive if a person can enjoy it without paying for the right to consume; the result when it is relatively expensive to prevent individuals from consuming a good.

Nonrival Good A good is nonrival if consumption of the good by an individual does not prevent consumption of the same unit of that good by other people.

Normal Good Any good with a positive income elasticity of demand.

Normal Profits A normal cost of production; income that entrepreneurs must receive to make production worthwhile to them.

Normative Economics Deals with values and addresses what should be rather than what is.

Occam's Razor The "principle of parsimony," which suggests that the simplest workable theories are also the best and most useful.

Occupational crowding This occurs when women and members of other disadvantaged groups are forced into low-wage occupations.

Occupational Discrimination Exclusion of certain groups from particular occupations.

Oligopoly A market in which several large firms control most of an industry's output. The few firms that comprise the industry must each consider other firms' reactions before setting its policies; mutually interdependent behavior is the unique characteristic of oligopoly; the importance of predictability leads to cooperation between firms. Pure oligopolies produces homogeneous outputs, while impure oligopolies produce slightly differentiated outputs.

Open Market Operations When the FED's Open Market Committee buys and sells U.S. bonds; these operations determine the size of the money supply by altering the amounts of reserves in the banking system.

Open Shop A firm that employs workers without considering union membership.

Opportunity Cost The value of the next best opportunity to a good or to some activity.

Opportunity Cost of Money Keynesians view the true price of money as the interest rate, since the closest alternatives to money as an asset are stocks, bonds, and other assets that pay interest. Monetarists argue, instead, that the true price of money is the reciprocal of the absolute price level--the purchasing power of money--since money is a substitute for all other goods and assets.

Outputs Transformed materials; the results of production.

Paradox of Thrift The possibility suggested by Keynes that an increase in saving at all income levels (depicted by an upward shift of the saving function) may cause equilibrium income or output to decrease, and could result in less saving rather than more.

Parity The idea that government subsidies should be used to ensure that agricultural goods' prices are stable relative to other prices.

Partial Equilibrium Analysis A method of economic analysis which looks at the direct effects of some chosen variables on others, assuming other influences constant.

Partnership An unincorporated firm formed by two or more persons.

Passive Policy Setting permanent policies (e.g., a monetary growth rule) and allowing the market system to adjust to any temporary shocks to the economy.

Patents Legal barriers to entry that extend to their holders a renewable right to produce an economic good for 17 years and that prohibits the production of the good by other firms; intended to promote research and development of new goods and technologies.

Payoff Matrix In game theory, a table that matches sets of gains or losses when "players" choose from the options available to them. The payoff to any player from selecting a particular option depends on the option(s) selected by other players.

Peak (Boom) The phase of the business cycle when a preponderance of measures of economic activity are at their high points.

Per Capita Income A crude measure of economic well-being computed by dividing National Income by the population.

Perfectly Price Elastic Demand or Supply Curves Horizontal lines at the current market price; perfectly price elastic demand or supply curves have a price elasticity of infinity at every point.

Permanent Income (Wealth) The average income expected over one's lifetime; according to Milton Friedman, permanent income explains a person's patterns of consumption and money holdings.

Perpetuity A bond that will pay a fixed amount of money each year until it is purchased by the government that issued it.

Personal Discrimination Bigotry; generates inequitable housing conditions, higher prices for comparable goods, reduced medical care, and other problems.

Persuasive Advertising Designed to persuade or to mislead consumers rather than to inform them; entails a waste of resources.

Phillips Curve An inverse statistical relationship between the rate of change of the general price level and the rate of unemployment; in 1959, A. W. Phillips, an English economist, reported an empirical foundation for the idea that policymakers faced a permanent trade-off between unemployment and inflation; during the 1970s, the Phillips curve proved highly unstable.

Planned Injections Equal to Planned Withdrawals A condition necessary for macroeconomic equilibrium. Injections include all forms of autonomous spending; withdrawals represent such dilutions from spending streams as saving or taxation.

Planned or Intended Investment The amount of investment that business firms desire to make at each income level, assuming that business expectations remain unchanged.

Planned or Intended Saving The amounts of saving desired at each income level, assuming that savers' expectations remain constant.

Plant A production facility with a specific location, it may be involved in processing, fabrication, assembly, wholesale, or retail.

Plurality When the outcome of an election is determined by which side gets the most votes; a majority is unnecessary.

Point Voting When each voter is assigned a certain number of votes and can cast them among various electoral issues depending on the intensity of preferences.

Political Business Cycles Swings in economic activity that occur when macroeconomic policies are manipulated to improve incumbents' chances of reelection. The economy booms before elections, and stagnates after them.

Pollution in economic parlance, a negative externality.

Pollution Abatement Programs Techniques used to reduce pollution.

Pork Barrel Legislation that yields benefits that are primarily local, but where funding is by the national government.

Positive Economics Value-free descriptions of and predictions about relationships among economic variables.

Positive Externality Occurs when a market activity bestows benefits on economic transactors who are not direct parties to the activity.

Potential GDP What an economy could produce at high rates of utilization of all resources; full employment GDP approximates potential GDP.

Precautionary Demand for Money The amount of money that economic transactors desire to hold to cover unexpected expenses; is positively related to income or wealth.

Predatory behavior Behavior by firms that attempt to drive rivals from an industry or to deter entry. Predatory tactics include low prices, expanded output, aggressive advertising, cloning rival products and overly rapid technological innovation.

Present Value The present value of any asset is the value now of the income stream expected from the asset, discounted by the interest rate; the demand price of the asset.

Pretrade Costs The rate of exchange that exists domestically between two goods prior to international trade; also referred to as the domestic terms of trade; given by the slope at each point along the production possibility frontier.

Price Ceiling A maximum legal price set at the behest of buyers.

Price Discrimination Occurs when essentially the same good is sold at different prices, and price differentials do not reflect different production costs; perfect price discrimination absorbs all potential consumer surplus derived from consuming a good.

Price Elasticity of Demand (or ***Supply****)* Measures of the responsiveness of the quantity demanded (**supplied**) of a good to changes in the price of the good; roughly computed by dividing percentage changes in quantities demanded (**supplied**) of a good by the percentage changes in its price: $\%\Delta Q_{xd}/\%\Delta P_x$ (or $\%\Delta Q_{xs}/\%\Delta P_x$. To see how these percentage changes are calculated, however, see Mid-Point Bases. (See also Elasticity, Income Elasticity of Demand.)

Price Floor A minimum legal price set at the behest of sellers.

Price Taker or *Quantity Adjuster* A competitive buyer or seller whose actions do not affect prices; they can choose only among quantities.

Principal/Agent Problem When an agent (e.g., an employee) pursues personal goals that conflict with the principal's (e.g., the employer's) contractual rights.

Prisoners' Dilemma A noncooperative "game" in which every player's dominant strategy imposes losses on all other players. The result is that all players lose relative to the payoffs available if all players followed cooperative strategies.

Private Debt Debts owed by consumers or business firms.

Private Ownership System Resources are privately owned.

Privatization The conversion of a government activity into a private business.

Product Differentiation When consumers perceive differences in competing goods; real differences in similar products may be related to durability, styling, or other physical characteristics; imaginary differences result from advertising or the imaginations of consumers; firms use product differentiation to try shift the demands for their products to the right and to decrease the price elasticity of the demands for their goods.

Production Occurs when materials are transformed in ways that make them more valuable.

Production Function The technical relationship that exists between inputs and outputs; allows all inputs to vary as different rates of production are achieved; not synonymous with total product curve.

Production Possibility Frontier (**PPF**) A curve showing the various combinations of goods that an economy could produce, assuming a fixed technology and full employment and efficient resource utilization.

Profit The excess of a firm's total revenues over total cost; accounting profits consider only the explicit costs incurred by a firm; economists view total costs in terms of opportunity costs, which include both explicit and implicit costs; is a return to entrepreneurs for bearing uncertainty and innovating.

Progressive Taxes Tax rates which vary directly with income, so that the proportion of income devoted to taxes rises as income rises.

Promotional Profits The increases in the values of stock controlled by individuals who engineer a merger.

Property Rights Legal rights that people possess over property; the broadest of property rights are *fee-simple* property rights that allow individuals: (*a*) to use goods in any manner so long as other people's property rights are not violated; (*b*) to exchange these property rights for others; and (*c*) to deny the use of their goods to others.

Property Tax A tax based on the value of capital improvements and land.

Proportional Taxes Tax rates that do not vary with income; the same percentage of income is collected in taxes regardless of the income level.

Proprietors Individuals in business for themselves.

Psychic Income Value of nonmonetary satisfaction gained from an activity.

Psychological Theories of the Business Cycle Focus on the herd instincts of human beings coupled with prolonged periods of optimism and pessimism.

Public Choice Economic interpretations of political behavior.

Public Debt Created when government spends more than it collects in tax revenue; the public debt grows when government sells bonds to the public in order to finance a deficit.

Public Good A public good is a good which can be consumed by more than one individual at a time (nonrivalry) and whose consumption cannot be denied a consumer who desires it (nonexclusion) once the good is provided.

Public Interest Theory of Regulation This theory suggests that government should control unethical business practices and regulate businesses plagued by such market failures as: (*a*) externalities, or (*b*) monopoly power derived from economies of scale.

Quantity Demanded The amount of a good purchased at a given price.

Quantity Supplied the amount of a good supplied at a given price.

Quantity Theory of Money The idea that the dominant determinant of the price level is the money supply. An extreme version attributes all inflation to excessive monetary growth.

Queuing Allocating goods or resources on a first come/first served basis. This tends to result in queues (lining up for access).

Quota A quantitative restriction on trade, the imposition of quotas raises the prices of imported goods and causes failure to fully realize potential gains from international trade.

Rate Base The value of a regulated firm's capital stock to which an acceptable, or fair, rate of return applies.

Rate of Return The annualized average size of the income stream per time period as a percentage of the dollar outlay for an investment.

Rational Expectations The notion that markets operate so efficiently that policy goals will not be achieved, even in the short run, unless the timing and the effects of demand-management policies come as surprises to the public.

Rational Ignorance Decision makers will search for information only as long as the expected benefit exceeds the expected cost and, thus, may choose to be rationally ignorant of much information.

Real Business Cycles Some new classical macroeconomists contend that external shocks to Aggregate Supply are permanent, and do not represent merely temporary departures from a long run trend of economic growth. Concludes that activist policies are unwarranted.

Real Rate of Interest The annual percentage premium of purchasing power paid by a borrower to a lender for the use of money; the amount of extra goods, expressed in percentage terms, that can be enjoyed if consumption is delayed; computed by adjusting the nominal interest rate for the rate of general price change.

Real Values The current dollar value of economic variables after adjustment for price level changes. (See also deflating.)

Recession Modern name for a depression.

Recessionary Gap A deficiency in autonomous expenditure that, if filled, would be multiplied so that full employment output was achieved.

Recognition Lag Arises because policymakers' perceptions about current economic conditions are clouded, and time and effort are required to gather, compile, process, and interpret data to gain some feeling for any widespread changes in economic activity; applies equally to both monetary and fiscal policies.

Regressive Taxes Tax rates which vary inversely with income, so that tax payments decline relative to income as income rises.

Reindustrialization See **Industrial Policy**.

Relative Price Price of a good in terms of another good. (See also Absolute Price.)

Relative income A measure of the extent to which a person's income diverges from median income for the country.

Rent Payments per time period for the services of land. (See also Economic Rent.)

Rent-Seeking Attempts by special interest groups to shape public policies to their advantage, even though such policies may impose excessive costs on the general public.

*Required Reserves (**RR**)* The reserves that banks are legally required to hold against their deposits.

Reserve Requirement Ratio (**rr**) The fraction of its deposit liabilities that a bank must hold in reserves.

Reserves The amounts of money held in a bank's vault or on deposit at the FED to meet withdrawals of deposits.

Resources Land, labor, capital, and entrepreneurship.

Ricardian Equivalence The idea that people will adjust so that whether government spending is financed by taxes or bonds is irrelevant.

Risk The likelihood of an event for which a probability can reasonably be estimated. (See Uncertainty.)

Rival Good A good is rival if consumption of a unit of the good by one individual exhausts that particular unit so that another individual cannot consume it.

Robinson-Patman Act (1936) Strengthened the Clayton Act's limits on price discrimination; however, it permitted discounts if they could be justified by differences in costs of production or if they were introduced as "good faith" efforts to meet competition.

Rule of Reason The rule of reason approach to the Sherman Act permitted certain restrictive practices of a firm despite their anticompetitive effects if the firm could prove that its conduct was based on sound business practice and was secondary to its primary business practices.

Rule of 72 The time required for some variable to double is calculated by dividing its percentage annual growth rate into 72. This approach adjusts for compounding (e.g., interest on interest).

Sales Tax A percentage tax that is typically levied on the sales value of most commodities and/or services.

Saving The change in one's total wealth over some period of time.

Say's Law "Supply creates its own demand"; that is, the very act of producing a product creates an equivalent amount of demand, since people do not work for the sake of work alone; named after the classical economist, Jean Baptiste Say.

Scarce Good A good for which the quantity demanded exceeds the amount available at a zero dollar price.

Scarcity A state the results because resources are limited and cannot accommodate all of our unlimited wants.

Screening When a principal examines the qualifications of a potential agent before offering the agent a contract.

Seasonal Unemployment Unemployment that varies with the season.

Seignorage The profits made by governments when they coin or print money.

Sellers' Market When the prevailing market price lies below the equilibrium price, resulting in a shortage.

Services Intangible economic goods.

Sherman Antitrust Act (1890) Our first antitrust law; specifies that "every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared illegal"; and, according to the second section, "every person who shall monopolize, or attempt to monopolize . . . shall be deemed guilty of a felony."

Shifted Backward A tax is shifted backward when its economic incidence falls on owners of resources supplied to the firm.

Shifted Forward A tax is said to be shifted forward when the economic incidence of the tax falls on the consumer.

Shirking A principal/agent problem that occurs when an agent (e.g., an employee) fails to perform because the principal (e.g., an employer) cannot adequately monitor the agent's performance.

Shocks An external shock (e.g., war or bad weather) causes macroeconomic disequilibrium by disrupting Aggregate Supply.

Shortage Occurs if some people cannot buy all of an economic good for which they are willing to pay the going price.

Short Run (**SR**) An analytic period of time in which at least one resource is fixed so that firms can neither enter nor leave the marketplace--a firm can shut its plant down, but it cannot leave the industry.

Shutdown Point The price/output combination at which total revenue equals total variable costs; in the short run, the firm must at least cover the variable costs of production; if it cannot, then it will shut down and minimize its losses by incurring only fixed costs.

Signaling Behavior by agents to communicate special qualifications that will elicit the offer of a contract from a principal.

Socialism A system characterized by collective ownership of property and government allocation of resources. (See also Capitalism, Laissez Faire.)

Socially Necessary Labor The Marxist concept that includes not only direct labor time, but also the labor time used to construct factories and to produce capital equipment; Marxists view all commodities and capital as congealed labor.

Special Interest Groups Groups that can gain from public policies that may not be in accord with the interests of other groups or society as a whole.

Specialization When different resources (e.g., people's labor) are used to produce different goods. This is most advantageous when resources are allocated so that every good is produced at the lowest possible opportunity cost.

Specific Training Training that a firm provides a worker that only increases the productivity of the worker for that firm.

Speculative Demand for Money Inversely related to the interest rate; refers to the amount of money that economic transactors desire to hold at alternative interest rates for the purpose of speculating against movements in the prices of stocks or bonds.

Speculators Intermediaries who buy a good in the hope of selling it at a higher price at a later point in time. Profitable speculation tends to reduce price volatility and the risks to others of doing business.

Spillovers (Externalities) When benefits or costs are bestowed upon third parties who are not part of a transaction; produce false price signals and lead to nonoptimal decisions.

Stabilization Attempts to use macroeconomic policy to achieve full employment, price stability, and economic growth.

Stagflation The simultaneous occurrence of high rates of inflation and high rates of unemployment; stagflation, or inflationary recession, occurs during both demand-induced and supply-induced cycles of inflation when Aggregate Supply declines relative to Aggregate Demand.

Standard Industry Classification (SIC) Codes Categories developed by the Bureau of Census in order to classify industries.

Standard of Deferred Payment Money performs this function by being acceptable in the payment of contractual obligations involving future payments.

State Banks Banks that are chartered by state governments; they have the option of becoming members of the Federal Reserve System.

Statutory (Legal) Incidence of a Tax Falls on the party responsible for paying the tax, but a tax's economic incidence may be shifted.

Sticky wages Partially account for the positive slope of short-run Aggregate Supply curves. “Stickiness” occurs when nominal wages fail to adjust to changes in market conditions as rapidly as prices do. Wage stickiness can result from (a) reluctance of individual workers to accept wage cuts when the value of their productivity has fallen, (b) the prevalence of implicit or explicit long term contracts between workers and firms, or (c) efficiency wages -- employers may try to secure diligence (non-shirking) and/or the loyalty of career employees by paying wages rates that exceed those that would prevail in purely competitive labor markets.

Stock See Common Stock.

Stock Variable An economic variable that can be measured holding time constant.

Store of Value Money is a store of value in that, except for inflation, it is a relatively riskless way of holding wealth.

Strategic Behavior Ascertaining how other people ("players" in game theory) are likely to behave, and then following tactics to maximize your gain or minimize any harm to you.

Structural Deficit The budget shortfall that would result because of the design of current government tax and outlay programs, were the economy operating at its capacity. (See also Cyclical Deficit.)

Structural Unemployment Unemployment that arises because workers do not possess the skills required for existing job opportunities.

Structure-Conduct-Performance Paradigm The theory that *market structure* almost rigidly determines each firm's *conduct* (output decisions and pricing behavior), which yields an industry's overall *performance* (e.g., its efficiency and profitability).

Subsistence Theory of Wages The theory that classical economists used to explain how wage rates were determined; this theory suggests that wages would be sufficient to meet the biological needs of workers, with only minor adjustments to meet the social and customary needs of workers.

Substitute Goods Goods that are substituted one for another in consumption; positive cross price-elasticities of demand exist between substitute goods.

Substitution Effect the change in the pattern of consumption brought about by a change in the relative price structure; the substitution effect of a price change is always negative, for consumers will always substitute cheaper goods for more expensive goods; the substitution effect is generally so powerful that it serves as the theoretical underpinning for the law of demand.

Superior (Luxury) Good A good for which the income elasticity of demand is greater than one; that is, the demand for this kind of economic good is very sensitive to real income changes.

Supplier-induced demand (SID) This is a particular application of the principal-agent problem in the medical care market. It occurs when an agent (a doctor) uses superior knowledge to induce a principal (a patient) to buy more medical care than is necessary.

Supply The amounts of goods or resources that producers or owners are willing to sell in the market under various conditions.

Supply Curve A graphic representation of the maximum quantities of a good or resources that producers or owners are willing to supply at various market prices.

Supply, Law of The quantity of an economic good supplied varies directly with the price of the economic good.

Supply Price The lowest price at which sellers are willing to make a specific quantity of a good available. (See also Demand Price.)

Supply-Side Economics A reemphasis on the importance of the effects of government policies on Aggregate Supply; rebuts Keynesian emphasis on Aggregate Expenditures.

Surplus, or *Excess Supply* The excess of the quantity supplied over the quantity demanded at a given price.

Surplus Value The difference between the total value of what workers produce and what workers are paid for their labor services; surplus value is expropriated by the capitalists, according to Marxists; surplus value is the sum of rent, interest, and profits.

Survival Principle The idea that the most efficient firms in an industry are those that remain viable over time; the optimal size of firms is indicated by the size of the firm that survives in an industry over time.

Syndicalism A revolutionary sociopolitical theory that advocates the overthrow of government and the reorganization of society into syndicates, which are effectively industry-wide trade unions.

Taft-Hartley Act (1947) This legislation amended the Wagner Act and made certain labor union practices unfair, outlawed the closed shop, and permitted individual states to pass "right-to-work" laws that ban union shops.

Tariff A tax on internationally traded goods; the imposition of tariffs raises the prices of imported goods and prevents full realization of potential gains from international trade.

Team Production Most complex forms of production cannot be accomplished efficiently (or at all) by lone individuals or families. Firms coordinate team production to (**a**) reduce transaction costs, and (**b**) exploit economies of scale.

Technological Change Occurs when a given stock of productive inputs produces a greater quantity of output, or when a given amount of output can be produced with fewer productive inputs; refers to greater efficiency in market processes, improved knowledge concerning the use of productive inputs in production, the advent of completely new production processes, improvements in the quality of human and nonhuman resources, and new inventions and innovations. The idea of progress is tightly bound up in the process of technological change.

Terms of Trade The prices of exported goods relative to imported goods after international trade has commenced.

Theory A testable hypothesis concerning the way in which observable facts are related.

Third-party payer problem Medical insurance pays the bulk of health care expenses, boosting effective demand by reducing the price paid by consumers while raising the price received by providers.

Tie-In Sales Attempts by firms to exploit their market power by using tie-in sales agreements that require customers to buy another product as a condition for buying the monopolized good.

Tit-for-Tat In game theory, a strategy that begins cooperatively. Thereafter, in any period, tit-for-tat entails echoing what the opponent did in the previous period.

Total Burdens of a Tax The amounts of money that individuals would have to be paid to make them just as well off with the tax as without.

Total Cost All costs to the firm of producing a particular rate of output; computed by multiplying the quantity of a good produced by the per unit cost of producing the good.

Total Product Curve The technical relationship that exists between production and various levels of one input, assuming that other resources are held constant.

Total Revenue The dollar value of a firm's sales; computed by multiplying the quantity of a good sold by its per unit price.

Total Revenue Minus Total Cost (TR - TC) Approach The profit maximizing firm will produce the rate of output at which total revenue most greatly exceeds total cost.

Trade Adjustment Assistance Provides retraining and financial assistance for workers disemployed because of liberalized international trade.

Transaction Costs The costs associated with gathering information about products and transporting goods and people geographically or between markets.

Transaction Demand for Money The amount of money that economic transactors desire to hold in order to execute expected transactions; is positively related to income and wealth.

Transfer Payments Transfers of income from one set of households to another set through such programs as welfare payments, social security, and food stamps.

Trap of Underdevelopment Less developed countries typically remain underdeveloped for the following reasons: (*a*) high rates of population growth that result in low per capita incomes; (*b*) negligible capital accumulation because of low saving rates fostered by low per capita incomes; (*c*) rather primitive products are purchased by consumers; and (*d*) low labor productivity.

Trough (Depression) Phase of the business cycle when most measures of economic activity are at their low point.

Unanimity A requirement that all voters agree before new policies are implemented.

Uncertainty When a reasonable estimate cannot be made of the probability that some event will occur. (See also Risk.)

Unemployment When an individual wants work but is without a job.

Unintended Inventory Changes A balancing item for the economy, these changes in inventories resolve any differences between the planned saving and planned investment functions and assure that actual saving and actual investment are equal at all times.

Union Shop A firm that will hire nonunion workers, but joining the union is a requirement for continued employment.

Uniqueness gains arise because exchange allows traders to secure goods not available from local sources in reasonable quantities at reasonable prices.

Usury Law A legal ceiling on the interest rates that lenders may charge borrowers.

Util An imaginary unit of measurement of satisfaction.

Utilitarianism A philosophy developed in England during the 1800s by Jeremy Bentham, an eccentric English philosopher and social reformer; this school of thought embraced the notion that satisfactions or utilities of individuals could be measured, and it sought "the greatest happiness for the greatest number."

Utopian Socialism All property would be collectively owned and all decisions would be democratic.

Value Added The excess of a firm's revenues over the amount it pays to other firms for intermediate goods; used to calculate GDP and, in much of Europe, as a major base for taxes.

Value-Added Approach to Estimating GDP GDP equals the sum of the values added to economic goods at each level of production.

Value of Money The purchasing power of money, which is determined by the interaction of the supply of and demand for money.

Value of the Marginal Product (**VMP**) The value to society of the output produced by an additional unit of a variable input; computed by multiplying the price of output (P_x) by the marginal physical product of a unit of input (MPP_N): that is, $VMP = (P_x) \text{ x } (MPP_N)$.

Variable Costs Costs that vary with the level of production; variable costs are also known as direct costs or prime costs, and are the only costs that rational decision makers consider.

Vertical Combination A firm having different plants producing products at different production levels within an industry.

Voluntary Saving The voluntary decisions of individuals to defer consumption until some future date.

Voluntary Unemployment The frictional unemployment that exists when everyone who wants to work at the prevailing wage rate has a job or can find one rapidly.

Wage-Price Controls Legal restrictions most often used to keep prices from coinciding with their equilibrium levels.

Wage Differentials Differences in wages that may reflect differences in training, human capital, personalities, occupations and economic discrimination.

Wage Discrimination Occurs when members of a particular group are paid less than are members of other groups for doing equal work.

Wages Payments per time period for labor services.

Wage stickiness See *Sticky wages, efficiency wages*.

Wagner Act (1935) Guaranteed labor the right to organize independent unions and made a company's refusal to negotiate with an elected union an unfair labor practice.

Wealth The discounted present values of income streams that are paid to the owner of an asset.

Wealth Effect The Aggregate Demand curve slopes down, in part, because higher price levels reduce the purchasing power of such financial assets as money or bonds, and vice versa.

Webb-Pomerene Act (1918) Exempts export trade associations from antitrust litigation.

Winners' Curse A theory that vigorously competitive situations are likely to impose losses on the winning bidder because the winning bidder is probably ignorant of information possessed by other bidders.

Yellow-Dog Contracts Contracts that were widely used by business firms during the antiunion years to prevent the formation of labor unions by their employees; as a condition of employment, workers were forced to sign a yellow-dog contract, which was an agreement not to join a labor organization.

Zero Economic Profit The long run equilibrium state of pure competition. All opportunity costs are covered by revenues, but there will be no net resource movements because no better opportunities exist elsewhere.