

The Digital Economist

A Glossary of Macroeconomics Terms

-A-

Absolute Advantage – A comparison of input requirements between two regions or countries where one country can produce a given level of output with less input relative to potential trading partners.

The **Accelerator** -- A parameter that defines the relationship between national income and the required capital stock.

Aggregate Demand – A measure of *purchasing power* in an aggregate economy.

Aggregate Expenditure – The sum of all expenditure components (Consumption, Investment, Government, Net Export) in an aggregate economy.

Aggregate Output – A theoretical adding-up of all goods and services produced in an aggregate economy – theoretical since different goods have different units of measure making it impossible to actually add up quantities.

Aggregate Production – The conversion of all factor inputs available in an economy into *aggregate output*.

Aggregate Supply – A measure of the ability to produce goods and services in an economy showing the relationship between *aggregate output* and the price level.

Arbitrage – The buying and selling of common goods in markets separated by distance or time to take advantage or profit from price differences.

An **Asset** -- Anything of value owned by an individual, institution or economic agent.

Autonomous Expenditure-- Expenditure that takes place independent of national income.

-B-

Balance of Payments – A system of accounts of merchandise trade, factor income payments, net asset purchases, and official transfers between one country and its trading partners around the world.

A **Bond** -- A long term (1+ year) debt instrument.

Business Inventories -- Additions or deletions to existing inventory levels in response to economic conditions (a flow variable).

Business Cycle -- An economic contraction (recession) followed by an expansion.

-C-

The **Capital Account** – One component of the *Balance of Payments* listing asset purchases among nations.

Capital Gain -- A positive difference between the sale price of an asset and its purchase price.

Capital Loss -- A negative difference between the sale price of an asset and its purchase price.

Central Bank – An institution acting as lender of last resort within a banking system and responsible for control over monetary aggregates.

Comparative Advantage – A comparison of *opportunity costs* in production between two regions or countries where one country can produce a given level of output with lower opportunity cost relative to potential trading partners.

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Compensation Approach – A method to measure aggregate economic activity by adding-up all payments (income received) made to the factors of production.

Constant Marginal Productivity – A production relationship in the *short run* where there is a proportional relationship between additions in the variable input and additions to output.

Constant Returns to Scale (CRS) -- A *long run* production concept where a doubling of all factor inputs exactly doubles the amount of output.

Consumer -- An economic agent that desires to purchase goods and services with the goal of maximizing the satisfaction (*utility*) from consumption of those goods and services.

Consumer Price Index (CPI) -- A weighted average of the prices of a representative market basket of goods and services that represents consumption patterns in some base time period.

Contractionary Policies – Economic policy designed to reduce the level of *aggregate demand* in an economy usually in an attempt to rid the economy of *inflationary pressure*.

Current Account -- One component of the *Balance of Payments* listing merchandise trade, factor income flows, and unilateral transfers among nations.

Cyclical Unemployment -- Changes in unemployment attributed to economic activity over the *business cycle*.

-D-

Debt-Deflation – A process in the aggregate where high levels of consumer, business, and government debt become difficult to service due to price *deflation* and corresponding high *real interest rates*. The result in higher levels of defaults, liquidation, and asset price deflation that contributes to the price deflation already present in an economy.

Deflation -- A decline in the aggregate *price level* over some defined time period.

Demand -- A relationship between market price and quantities of goods and services purchased in a given period of time.

Demand Deposits – Deposits in the commercial banking system that are readily accessible and used for immediate purchases. Includes checking accounts and current accounts.

Demand-side Shocks – Aggregate changes to the *ability to spend* in an economy.

Depreciation -- A measure of the wear-and-tear that affects capital equipment or other intermediate goods.

Desired Real Rate of Return – One component of *nominal interest rates* that represents the agreed-upon (by lender and borrower) change in *purchasing power* to the lender for lending to a productive economy. The value of this component is usually close to the real rate of economic growth.

Diminishing Marginal Productivity (DMP) -- A *short run* production concept where increases in the variable factor of production lead to less and less additional output.

Diminishing Marginal Utility (DMU) – The notion that additional units of a good consumed per time period provide less-and-less satisfaction relative to previous units consumed. Allows for satiation in consumption.

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Direct Finance -- The transfer of loanable funds through the use of capital markets (i.e., the Stock and Bond markets) usually facilitated by investment banks.

Discount -- The difference between the face value of a debt instrument and the market price of that same instrument.

Disinflation -- A decline in the overall rate of *inflation*. Prices are still rising but by a smaller amount relative to previous time periods.

Disintermediation -- The removal of funds from a financial intermediary (a bank or other depository institution).

Disposable Personal Income -- Personal Income less taxes paid.

Dividends -- The fraction of corporate earnings periodically paid out to shareholders.

Durable Goods -- Goods that deliver consumption services over an extended period of time.

-E-

Earnings -- The net-income after taxes and interest earned by a corporation available for internal financing or for the payout as *dividends*.

Economic Expansion / Economic Growth -- Growth in *Real GDP* for one fiscal quarter or more.

Economics -- The study of how a given society allocates *scarce* resources to meet (or satisfy) the unlimited *wants and need* of its members.

Employment -- A measure of those individuals in the labor force working, at least one hour per week, for pay.

Equilibrium -- A situation where there is no tendency for a variable to change.

Equilibrium Price -- That price that equates the *quantity supplied* by sellers with the *quantity demanded* by buyers in the market.

Excess Reserves -- Reserves held by commercial banks in excess of *the reserve requirements* established by the central bank. A non-income producing asset.

Exchange Rate -- The value of a domestic currency expressed in terms of a foreign currency or basket of foreign currencies.

Exogenous (Shift) Variables -- Variables outside a particular model with value taken as *a given*.

Expansionary Policies -- Economic Policies designed to increase the *ability to spend* in an economy, increase the *ability to produce*, or both.

Expected Total Rate of Return -- The yield on an asset that include both the periodic return/payment and any *capital gains or losses* based on expectations about the future sale price of that asset.

Expenditure Approach -- A method to measure aggregate economic activity by adding-up all type of spending (Consumption, Investment, Government, Net Export) in a national economy.

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-F-

Factors of Production / Factor Inputs -- An exhaustive list of inputs required for any type of production.

Financial Intermediation -- A form of indirect finance where an institution (a bank) acts as an intermediary to reduce transactions costs and facilitate borrowing and lending.

Financial Markets -- Institutions designed to facilitate the transfer of funds from savers (lenders) to borrowers.

Final Goods and Services -- Goods and services that are purchased for direct consumption.

Fiscal Policy -- Economic policy based on changes to the government budget (i.e., changes in government spending or changes in taxes/tax rates).

Fixed Nonresidential Investment -- Additions to the existing stock of plant and equipment used in the production of goods and services.

Fixed Residential Investment -- Additions to the existing stock of housing used to provide housing services.

Flow Variable -- A variable that is measured per unit of time.

Frictional Unemployment -- Unemployment that exists as a natural consequence of market activity where individuals are in-between jobs.

-G-

Gains from Trade -- The measured (positive) difference in quantities of goods and services available with and without trade.

GDP -- Gross Domestic Product -- The market value of all final goods and services produced in a given time period.

Gross Investment -- Investment that includes additions to the capital stock as well as the replacement of depreciated capital.

-H-

Human Capital/Wealth -- A measure of the skills, ability and productivity of human beings.

Human Needs -- A quantity of goods and services necessary for human survival.

Human Wants -- The desire for goods and services over and above what is necessary for human survival.

-I-

Implicit Price Deflator (IPD) -- The ratio between *Nominal GDP* and *Real GDP*.

Income Producing Asset -- An asset that is used to generate revenue from the production and sale of goods and services.

Increasing Opportunity Costs -- A relationship driven by *diminishing marginal productivity* such that more and more of one good must be given up in the transfer of resources used in the production of additional units of another good.

Income Taxes -- Taxes that are based on and vary with personal or corporate income.

Indirect Business Taxes -- Taxes that tend to be built into the price of a particular good (i.e., excise taxes).

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Indirect Finance -- The transfer of loanable funds (deposits) through the use of financial intermediaries (commercial banks).

Induced Expenditure -- Changes in spending due to changes in (national) income. *See the Marginal Propensity to Spend.*

Inflation -- An increase in the *price level* over some defined time period.

Inflationary Expectations -- Anticipated future changes in the *price level*.

Interest Sensitivity of Investment -- A measure of responsiveness of investment expenditure to changes to the (*real*) *interest rate*.

Interest Sensitivity of Money Demand -- A measure of responsiveness of the demand for cash balances to changes in the (*nominal*) *interest rate*.

Intermediate Goods and Services -- Goods (or services) used to produce other goods (i.e., capital equipment).

Inventory Depletions / Accumulation -- Changes to *business inventories* in response to changing economic conditions.

Investment -- Changes to the existing capital stock or business inventories.

-L-

Labor Force Participation Rate -- The ratio of those in the labor force (the employed plus the unemployed) and those that are available for work.

Laspeyres Index -- A weighted average of prices based on the use of base-period consumption patterns. Also known as the *Consumer Price Index (CPI)*.

Liquidity -- A measure of the ease by which a financial asset can be converted into a form readily accepted as payment for goods and services.

Liquidity Premium -- An adjustment to a real interest rate to compensate for the direct relationship between uncertainty and the duration of a debt contract.

Long Run Aggregate Supply -- The *potential output* of an economy independent of changes in the aggregate price level.

-M-

M₁ -- A narrow money supply measure that includes currency in circulation and the value of *demand deposits*.

M₂ -- A broad money supply measure that includes currency, *demand deposits*, and the value of *time deposits*.

Macroeconomics -- The study of economic behavior in the aggregate.

Marginal Cost -- The cost of producing one more unit of a particular good or service.

Marginal Productivity (of Labor) -- The contribution to the level of output by adding one more unit of the variable input (typically labor).

Marginal Propensity to Consume -- The fraction of each additional dollar of income devoted to consumption expenditure.

Marginal Propensity to Spend -- The fraction of each additional dollar of income devoted to any type of spending (i.e., consumption, investment, government, or net exports).

Marginal Rate of Transformation (MRT) -- The ratio of marginal productivity values in the production of two goods. Measures how much of one good is given up relative to the gain in production of a second good as one unit of a variable input is transferred to the production of the former to the latter.

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Market -- A place or institution where buyers and sellers come together and exchange factor inputs or final goods and services. A market is one of several types of economic rationing systems.

The **Markup** – The proportional relationship between the *marginal cost* of producing a goods or service and its market price.

Medium of Exchange – A financial asset (usually coin, currency or a near-cash instrument) used in place of barter in the exchange of goods and services.

Microeconomics – The study of individual (producers / consumers) economic behavior. That branch of economics concerned with the determination of *relative prices*.

Monetary Policy – Economic policies designed to affect aggregate demand via changes in monetary aggregates and interest rates.

Money Market Instrument -- A short term (less than 1 year) debt instrument.

Money Multiplier -- The relationship between changes in the monetary base and the money supply.

Money Velocity – *See Velocity*.

Monetary Base -- Also known as High-powered Money. Reserves plus Currency in the monetary system -- the main liabilities of the central bank.

-N-

National Income -- The sum of all types of income (wages, net interest, profits, and net rental income) earned in a given time period by any type of economic agent (individuals or corporation).

Natural Rate of Unemployment -- That rate of unemployment where there is neither upward nor downward pressure on prices.

Net Investment -- Investment exclusive of replacement of depreciated capital.

Nominal GDP -- GDP measured at current prices.

Nominal Interest Rate -- The interest rate published as part of a debt contract.

Non-Durable Goods -- Goods that tend to be immediately consumed or deliver consumption services over a short period of time.

Non-Income Producing Asset -- Something of value that does not generate any income or revenue stream.

Normal (Current) Yield -- The ratio between the annual income generated by an asset and its purchase price. Also known as the *present value of a perpetuity*.

-O-

Okun's Law – An empirical relationship stating the constant relationship between the rate of *unemployment* and the *output gap* (the difference between *Real GDP* and *Potential GDP*).

Open Market Operations – A tool used by the Federal Reserve to inject or remove reserves from the banking system via the purchase or sale of government securities.

Opportunity Costs – That which must be given up in the transfer of resources to an alternative use. The next best use of resources.

Output Gap – The measured difference between *Real GDP* and the *Potential Output* of an Economy.

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-P-

Paasche Index -- A weighted average of prices based on current expenditure patterns. Also known as the *GDP (or Implicit Price) Deflator*.

Peak -- A point of transition in the business cycle from *expansion* to *contraction*.

Permanent Income -- Expected levels of individual income that guide consumption expenditure decisions.

Personal Income -- The income earned by individual households in a given time period.

The **Phillips Curve** -- A theoretical relationship between the *unemployment rate* of a given economy and rates of (wage) *inflation*.

Potential Output -- A measure of the economy's *ability to produce* goods and services.

Present Value -- The value of a future payment or stream of payments discounted by some appropriate rate of interest (or *rate of time preference*).

Present Value of a Perpetuity -- The Ratio between the periodic payment (interest, rent, profits, or revenue) and the market rate of interest (or desired yield). The mathematical equivalent of the present value of an annuity over an infinite number of time periods.

Price Level -- An aggregate measure of the market prices for all goods and services in an economy. Usually measured via the use of a price index assigning different weights to the individual goods.

Price-Earnings Ratio -- The ratio between the periodic (annual) earnings of a corporation and the market price of one of its shares of stock. The reciprocal of the *present value of a perpetuity* calculation.

Primary Stock/Bond Market -- The market where new shares of stock or new bonds are bought and sold. Activity in this market represents direct finance where actual borrowing and lending activity takes place.

Producer -- An economic agent that converts inputs (factors of production) into output (goods and services) with the goal of maximizing *profits* from production and sale of those goods and services.

Production -- The process of converting factor inputs into output.

Production in the Long Run -- Production activity where all of the factor inputs may be used in varying quantities.

Production in the Short Run -- Production activity where only one factor input is varied and all other factor inputs are fixed in quantity.

Production Possibilities -- The relationship between two or more goods demonstrating efficient levels of production for a given availability of resources and current state of technology.

Profits -- The difference between sales revenue and the costs of production.

Purchasing Power -- The quantity of goods and services that may be purchased for a given level of income and given prices.

Purchasing Power Parity -- The relationship between the prices of a common good in different countries in local currencies and the nominal exchange rate such that the relative value of the good is identical in those countries.

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-Q-

Quantity Demanded – The quantity of a good or service purchased at a given market price.

The **Quantity Equation** -- Also known as the Equation of Exchange, an identity relating the amount of money in circulation to the price level and level of output in an aggregate economy.

Quantity Supplied – The quantity of a good or service made available to the market at a given market price.

-R-

Rate of Time Preference -- The equivalent of a personal interest (or discount) rate. The measure, by which, individuals compare current and future economic activity.

Rate of Unemployment – *See Unemployment.*

Real GDP -- GDP measured at constant (some base period) prices.

Real Interest Rate -- An interest rate that has been adjusted for changes in the price level or changes in *purchasing power* over some time period.

Recession- -Negative growth in *Real GDP* for two or more fiscal quarters.

Relative Price -- A ratio of any two prices or one particular price compared to a price index.

Required Reserves – That fraction of deposits that a commercial bank is required to hold as mandated by the central bank. A non-income producing asset.

Reserve Requirement – The percentage of deposits not available for commercial lending as legally required by the central bank. A tool of monetary policy.

Risk -- A measure of uncertainty about the value of an asset or the benefits of some economic activity.

Risk Premium -- An adjustment to a *real interest rate* to compensate for uncertainty in the ability of a borrower to service a loan.

-S-

Savings -- The difference between income and expenditure in the current time period.

Scarcity -- A physical or economic condition where the quantity desired of a good or service exceeds the availability of that good or service in the absence of a rationing system.

Stagnation -- An economic condition where an economy is facing a combination of relatively high rates of *inflation*, little or no *growth*, and high *unemployment*.

Secondary Stock/Bond Market -- The market where existing shares of stock or existing bonds are traded. This market provides liquidity to these types of financial assets.

A **Share of Stock** --A financial instrument that give the holder a share of ownership in a publicly held corporation.

Shortage -- A market condition where the *quantity demanded* of a particular good or service exceeds the *quantity supplied*.

Speculation -- The purchase of a good or asset not intended for final consumption but rather in the expectation of future sale at some higher price.

Spending Multiplier -- The relationship between an autonomous spending shock and eventual changes in aggregate income.

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Standard of Living --The ratio of the output of an economy and population. Also known as per-capita output.

Stock Variable -- A variable measured at point in time.

Structural Unemployment-- Unemployment that exists as a consequence of structural changes in a regional / national economy.

Supply-- A relationship between market price and quantities of goods and services made available for sale in a given period of time.

Supply-Side Shock – An economic shock that affects an economy's *ability to produce* goods and services.

Surplus-- A market condition where the *quantity supplied* exceeds *the quantity demanded*.

-T-

Term Structure of Interest Rates – The relationship among *different nominal interest rates*, at a point in time, explained by their corresponding asset maturities.

Terms of Trade – The ratio between quantities of goods given up in trade for other goods. Equivalent to a *relative price* within a barter economy.

Time Deposits – Deposits held in the banking system that may be withdrawn only after a prescribed interval of time.

Transitory Income -- Unexpected changes or shocks to individual income. Often measured as the difference between observed income and permanent income.

Trough-- A point of transition in the *business cycle* from contraction to expansion.

-U-

Unemployment -- The difference between the number of people in the labor force and those working for pay.

Utility -- A measure of the satisfaction received from some type of economic activity (i.e., consumption of goods and services or the sale of factor services).

-V-

Velocity --The number of times a given quantity (stock) of money changes hands in a given time period (the ratio of expenditure in that time period to a given measure of the money supply).

-W-

Wealth – A stock variable measuring either the production of, or command over, the future potential flow of goods and services available for human consumption.

-Y-

Yield -- The ratio between the flow of returns (income, revenue, profits) generated by an asset and the purchase price of that asset.