The Digital Economist

A Glossary of Terms

-A-

Abundance--A physical or economic condition where the quantity available of a resource exceeds the quantity desired in the absence of a rationing system.
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.

-B-

Budget Constraint / Budget Set--Different bundles of goods and services that are attainable to the consumer at given market prices and the consumer's fixed level of income.

-C-

Competition--The process of consumers bidding prices upwards or producers cutting prices in order to allow those agents to be involved in a market trade.
Complementary Goods---A pair of goods where the quantity demanded of one increases when the price of a related good decreases.
Complete Preferences--The ability of a consumer to fully identify his/her preference for any combination or bundle of goods and services.
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 (household)--An economic agent that desires to purchase goods and services with the goal of maximizing the satisfaction from consumption of those goods and services.
Consumer Optimum--Identification of an attainable bundle of goods that maximizes a consumer's level of satisfaction given his/her level of income and market prices.
Consumers Surplus--The difference between what a consumer is willing to pay for each unit of a commodity consumed and the price actually paid.
Cross-Price Elasticity of Demand--A measure of sensitivity in the quantity demanded of one goods in reaction to changes in the price of a related good.

-D-

Decreasing Returns to Scale (DRS)--A long run production concept where a doubling of all factor inputs results in less than double the amount of output.
Demand--A relationship between market price and quantities of goods and services purchased in a given period of time. Represents the behavior of buyers in the market place.
Demand-side Shocks – Aggregate changes to the *ability to spend* in an economy.

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-D-

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)--An economic concept that refers to the notion that additional units consumed of a particular commodity provide less and less additional satisfaction relative to previous units consumed.
Dominant Strategy--A game theoretic outcome where the choice of one player is the same independent of choices made by other players in the game.

-E-

Economics -- The study of how a given society allocates *scarce* resources to meet (or satisfy) the unlimited *wants and need* of its members.
Economic Agent--A decision maker involved in any type of economic activity.
Economics-- The study of how a given society allocates scarce resources to meet the unlimited wants and need of its members.
Edgeworth Box--An analytical tool used to study the behavior of two economic agents based on preferences for goods and services when production of those goods is held constant.
Efficiency--A situation in the allocation of resources where the benefits of consuming one more unit exactly equal the (social and private) costs or producing that good.
Elasticity – A measure of the sensitivity of quantity demanded (supplied) to changes in market price.
Equilibrium--A condition where there is no tendency for an economic variable to change.
Equilibrium Price – That price that equates the *quantity supplied* by sellers with the *quantity demanded* by buyers in the market.
Exogenous (Shift) Variables – Variables outside a particular model with value taken as *a given*.
Expenditure--The amount spent by a consumer on a bundle of goods or services (the product of market price and quantity demanded).

-F-

Factors of Production--An exhaustive list of inputs required for any type of production.
Factor Prices--The payments made to the factors of production (rents, wages, interest, and profits).
Final Goods and Services--Goods and services that are purchased for direct consumption.
Fixed Costs of Production--Those costs of production that are independent of production levels in the short run.
Flow Variable -- A variable that is measured per unit of time..

-G-

Game Theory--A modeling technique that accounts for strategic behavior of economic agents reacting to the actions of others.

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-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-

Income Effect--A reaction of consumer's demand for goods or services due to changes in purchasing power holding relative prices constant (see Substitution Effect).
Income Elasticity of Demand--A measure of sensitivity of quantity demanded to changes in consumer income.
Income-Neutral Good--A good where quantity demanded is unchanged when consumer income changes.
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.
Increasing Returns to Scale (IRS)--A long run production concept where a doubling of all factor inputs more than doubles the amount of output.
Indifference Curve--A set of points that represent different bundles of goods which provide the consumer with the same level of satisfaction (or utility).
Inferior Good--A good where quantity demanded decreases when consumer income increases (there is an inverse relationship between quantity demanded and income).
Intermediate Goods and Services-- Goods (or services) used to produce other goods (i.e., capital equipment).

-L-

Lexicographic Preferences--Preferences that can be strictly ranked --usually applies in situations where only one good in a bundle is preferred by the consumer.
Long Run Production-- Production activity where all factors of production may vary in quantity. The firm has the freedom to substitute among these factors or production in attempts to minimize costs.

-M-

Marginal Rate of Substitution--The rate by which a consumer may substitute a quantity of one good for another holding his/her level of utility constant.
Marginal Costs--The cost of producing one more unit of a good in the short run. A measure of the opportunity costs of the variable inputs in their next best use.
Marginal Productivity (of Labor) – The contribution to the level of output by adding one more unit of the variable input (typically labor).
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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-M-

Marginal Revenue--The revenue generated to a firm by selling one more unit of a good or service.
Marginal Utility--The satisfaction a consumer receives by consuming one more unit of some good or service.
Market--A place or institution where buyers and sellers come together and exchange factor inputs or final goods and services. A market is one particular type of economic rationing system.
The **Markup** – The proportional relationship between the *marginal cost* of producing a goods or service and its market price.
Microeconomics – The study of individual (producers / consumers) economic behavior. That branch of economics concerned with the determination of *relative prices*.
Monopolistic Competition--A market structure similar to perfect competition in that there are a large number of firms competing in a given industry. However, each firm is selling a differentiated product and may exploit brand preferences such that is may act as a monopolist with respect to its own customers.
Monopoly--A market structure where only one firm exists in a given industry. This firm has a high degree of market power such that it is able to act as a price-maker with respect to market prices.

-N-

Needs--Goods and services essential for human survival.
Negotiation Space--A set of consumption bundles (points) relative to an initial or current endowment where one or all consumers can be made better off through trade without harming any other consumers.
Normal Good--A good where quantity demanded increases when consumer income increases (a direct relationship between quantity demanded and income).

-O-

Oligopoly--A market structure with only a few firms in a given industry.
Opportunity Cost--The value of a resource applied to its next best use.

-P-

Pareto Improvement--A situation in exchange where one consumer is made better off by a trade without harming the other consumer.
Pareto Optimum--A situation where it is not possible to exchange goods or services without harming one of the agents involved.
Perfect Competition--A market structure where many firms exist, each with a small percentage of market share selling a homogeneous product. These firms are all price-takers with no influence on market price.
Price Elastic Demand--When the percentage change in quantity demanded exceeds the percentage change in market price.
Price Elasticity of Demand--A measure of sensitivity of quantity demanded to changes in market price.
Price Inelastic Demand--When the percentage change in quantity demanded is less than the percentage change in market price.

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-P-

Producer (business firm)--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 Function--A technical relationship between a certain level of factor inputs and the corresponding level of 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.
Producer Optimum--A choice of input combinations or output levels that maximize the profits of a producer taking all prices as a given.
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.
Producers Surplus--The difference between revenue received and the variable costs of production for each unit of a commodity sold. Represents a contribution to fixed costs and producer profits.
Profits--The difference between sales revenue and the costs of production.

-R-

Rationing Systems--A process used to match the desire for goods and services with their availability.
Relative Prices--A ratio of any two prices or one particular price compared to a price index.
Resources--The raw materials and other factors of production that enter the production process or final goods and services that are desired by economic agents.
Revenue --The amount received by a producer from the sale of goods and services (the product of market price and quantity sold).
Risk-- A measure of uncertainty about the value of an asset or the benefits of some economic activity.

-S-

Satiation--A level of consumption where the consumer is fully satisfied in a given period of time.
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.
Shortage--A market condition where the quantity demanded of a particular good or service exceed the quantity available.
Short Run Production--Production activity where only one factor of production may vary in quantity. All other factors of production are fixed in quantity. Substitution among factors is not possible.
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.

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-S-

Stock Variable-- A variable measured at point in time.
Substitution Effect--The reaction of a consumer's demand for goods based on changes in relative prices holding purchasing power (or utility) constant (see Income Effect).
Substitute Goods--A pair of goods where the quantity demanded of one increases when the price of a related good also increases.
Supply--A relationship between market price and quantities of goods and services made available for sale in a given period of time.
Surplus-- A market condition where the quantity supplied of a particular commodity exceeds the quantity demanded

-T-

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.
Total Effect--The observed change in quantity demanded due to a price change of one particular good.
Transitive Preferences--A logical pattern of preferences where preference of one good over a second good and preference of the second good over a third good imply preference for the first good compared to the third good.

-U-

Unitary-elastic Demand--When the percentage change in quantity demanded is exactly equal to the percentage change in market price.
Unrelated Goods--A pair of goods where the quantity demand of one is unaffected by changes in the price of the other.
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).
Variable Costs of Production--Production costs related to changing quantities of a variable factor of production in the short run.

-W-

Wants--Preferences for goods and services over and above human needs.

-Y-

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

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