

## AP Macroeconomics: Vocabulary

Aggregate Spending (GDP): the sum of all spending from four sectors of the economy.  $GDP = C + I + G + X_n$

Aggregate Income (AI) : the sum of all income earned by suppliers of resources in the economy.  $AI = GDP$

Nominal GDP: the value of current production at the current prices

Real GDP: the value of current production, but using prices from a fixed point in time

Base year: the year that serves as a reference point for constructing a price index and comparing real values over time.

Price index: a measure of the average level of prices in a market basket for a given year, when compared to the prices in a reference (or base) year.

Market Basket: a collection of goods and services used to represent what is consumed in the economy

GDP price deflator: the price index that measures the average prices level of the goods and services that make up GDP.

Real rate of interest: the percentage increase in purchasing power that a borrower pays a lender.

Expected (anticipated) inflation: the inflation expected in a future time period. This expected inflation is added to the real interest rate to compensate for lost purchasing power.

Nominal rate of interest: the percentage increase in money that the borrower pays the lender and is equal to the real rate plus the expected inflation.

Business cycle: the periodic rise and fall (in four phases) of economic activity

Expansion: a period where real GDP is growing.

Peak: the top of a business cycle where an expansion has ended.

Contraction: the period where real GDP is falling

Recession: two consecutive quarters of falling real GDP.

Trough: the bottom of the business cycle where a contraction has stopped.

Depression: a prolonged, deep contraction in the business cycle

Consumer Price Index (CPI): the price index that measures the average price level of the items in the base year market basket. This is the main measure of consumer inflation.

Inflation: the percentage change in the CPI from one period to the next.

Nominal Income: today's income measured in today's dollars. These are dollars unadjusted by inflation.

Real income: today's income measured in base year dollars.

Consumption Function: a linear relationship showing how increases in disposable income cause increases in consumption.

Autonomous Consumption: the amount of consumption that occurs no matter the level of disposable income. In a linear consumption function, this shows up as a constant and graphically it appears as the y intercept.

**Saving function:** a linear relationship showing how increases in disposable income cause increases in savings.

**Dissaving:** another way of saying that saving is less than zero. This can occur at low levels of disposable income when the consumer must liquidate assets or borrow to maintain consumption.

**Autonomous saving:** the amount of saving that occurs no matter the level of disposable income. In a linear saving function, this shows up as a constant and graphically it appears as the y intercept.

**Marginal Propensity to Consume (MPC):** the change in consumption caused by a change in disposable income, or the slope of the consumption function.  $MPC = \Delta C / \Delta DI$ .

**Marginal Propensity to Save (MPS):** the change in saving caused by a change in disposable income, or the slope of the saving function.  $MPS = \Delta S / \Delta DI$

**Determinates of Consumption and Saving:** factors that shift the consumption and saving functions in the opposite direction are Wealth, Expectations, and Household Debt. The factors that change consumption and saving in the same direction are Taxes and Transfers.

**Expected Real Rate of Return:** the rate of real profit the firm anticipates receiving on investment expenditures. This is the marginal benefit of an investment project.

**Real rate of interest:** the cost of borrowing to fund an investment. This can be thought of as the marginal cost of an investment project.

**Decision to invest:** a firm invests in projects so long as the real expected real rate of return is greater than the  $i$ .

**Investment Demand:** the inverse relationship between the real interest rate and the cumulative dollars invested. Like any demand curve, this is drawn with a negative slope.

**Autonomous investment:** the level of investment determined by investment demand. It is autonomous because it is assumed to be constant at all levels of GDP.

**Market for loanable funds:** the market for dollars that are available to be borrowed for investment projects. Equilibrium in this market is determined at the real interest rate where the dollars saved (supply) is equal to the dollars borrowed (demand)

**Demand for loanable funds:** the negative relationship between the real interest rate and the dollars invested by firms.

**Private Saving:** saving conducted by households and equal to the difference between disposable income and consumption.

**Public Saving:** saving conducted by government and equal to the difference between tax revenue collected and spending on goods and services.

**Supply of loanable funds:** the positive relationship between the dollars saved and the real interest rate.

**Fiscal Policy:** deliberate changes in government spending and net tax collection to affect economic output, unemployment, and the price level. Fiscal policy is typically designed to manipulate AD to “fix” the economy.

**Expansionary Fiscal Policy:** increases in government spending or lower net taxes meant to shift the aggregate expenditure function upward and shift AD to the right:

**Contractionary fiscal policy:** decreases in government spending or higher net taxes meant to shift the aggregate expenditure function downward and shift AD to the left.

**Sticky prices:** if price levels do not change, especially downward, with changes in AD, then prices are thought of as sticky or inflexible. Keynesians believe the price level does not usually fall with Contractionary policy.

**Budget deficit:** exists when government spending exceeds the revenue collected from taxes.

**Budget surplus:** exists when government spending is less than revenue collected from taxes.

**Automatic stabilizers:** mechanisms built into the tax system that automatically regulate, or stabilize, the macroeconomy as it moves through the business cycle by changing net taxes collected by the government. These stabilizers increase a deficit during a recessionary period and increase a budget surplus during an inflationary period, without any discretionary change on the part of the government.

**Crowding out effect:** when the government borrows funds to cover a deficit, the interest rate increases and households and firms are pushed out of the market for loanable funds.

**Net export effect:** a rising interest rate increases foreign demand for U.S. dollars. The dollar then appreciates in value, causing net exports from the U.S. to fall. Falling net exports decreases AD, which lessens the impact of the expansionary fiscal policy.

**Productivity:** the quantity of output that can be produced per worker in a given amount of time.

**Human capital:** the amount of knowledge and skills that labor can apply to the work they do and the general level of health that the labor force enjoys.

**Non-renewable resources:** natural resources that cannot replenish themselves. Coal is a good example.

**Renewable resources:** natural resources that can replenish themselves if they are not over-harvested.

**Technology:** a nation's knowledge of how to produce goods in the best possible way.

**Investment tax credit:** a reduction in taxes for firms that invest in new capital like a factory or piece of equipment.

**Supply side fiscal policy:** fiscal policy centered on tax reductions targeted to AS so that GDP increases with very little inflation. The main justification is that lower taxes on individuals and firms increase incentives to work, save, invest and take risks.

**Aggregate Demand AD:** the inverse relationship between all spending on domestic output and the average price level of that output. AD measures the sum of consumption spending by households, investment spending by firms, government purchases of goods and services, and the net exports bought by foreign customers.

**Foreign sector substitution effect:** when the avg. price of U.S. output increases, consumers naturally begin to look for similar items produced elsewhere.

**Interest rate effect:** if the avg. price level rises, consumers and firms might need to borrow more money for spending and capital investment, which increases the interest rate and delays current consumption. This postponement reduces current consumption of domestic production as the price level rises.

**Wealth effect:** as the avg. PL rises, the purchasing power of wealth and savings begins to fall. High prices therefore tend to reduce the quantity of domestic output purchased.

**Determinates of AD:** AD is a function of the four components of domestic spending (CIGXx). If any of these components increases or decreases, holding the others constant, AD shifts right or left.

**Aggregate Supply AS:** the positive relationship between the level of domestic output produced and the avg. price level of that output.

**Macroeconomic short run:** a period of time during which the prices of goods and services are changing their respective markets, but the input prices have not yet adjusted to those changes in the product markets. During the SR, the AS curve has three stages – horizontal, upward sloping and vertical.

**Macroeconomic long run:** a period of time long enough for input prices to have fully adjusted to market forces. In this period, all product and input markets are in a state of equilibrium and the economy is operating at FE. Once all markets in the economy have adjusted and there exists this long-run equilibrium, the AS curve is vertical at GDP<sub>r</sub>.

**Determinates of AS:** AS is a function of many factors that impact the production capacity of the nation. If these factors make it easier, or less costly, for a nation to produce, AS shifts to the right. If these factors make it more difficult, or more costly, for a nation to produce, then AS shifts to the left.

**Macroeconomic Equilibrium:** occurs when the Q of real output D is equal to the Q of real output supplied. Graphically this is at the intersection of AD and AS.

**Recessionary Gap:** The amount by which full-employment GDP exceeds equilibrium GDP.

**Inflationary Gap:** the amount by which equilibrium GDP exceeds full-employment GDP.

**Demand-pull inflation:** this inflation is the result of stronger C from all sectors of AD as it continues to increase in the upward sloping range of AS. The PL begins to rise and inflation is felt in the economy.

**Deflation:** a sustained falling PL, usually due to weakened AD and a constant AS.

**Recession:** in the AD and AS model, this is described as falling AD with a constant AS curve. GDP<sub>r</sub> falls far below FE levels and the U% rises.

**Circular Flow of Economic Activity:** a model that shows how households and firms circulate resources, goods and incomes through the economy. This basic model is expanded to include the G and Foreign sector.

**Closed economy:** a model that assumes there is no foreign sector (M and X)

**Aggregation:** the process of summing the microeconomic activity of households and firms into a more macroeconomic measure of economic activity.

**Gross Domestic Product:** the market value of the final goods and services produced within a nation in a given year.

**Final goods:** goods that are ready for their final use by consumers and firms.

**Intermediate goods:** goods that require further modification before they are ready for final use.

**Double counting:** the mistake of including the value of intermediate stages of production in GDP on top of the value of the final good.

**Second hand sales:** final goods and services that are resold. Even if they are resold many times, final goods and services are only counted once, in the year in which they were produced.

**Nonmarket transactions:** household work or do-it-yourself jobs are missed by GDP accounting. The same is true of G transfer payments and purely financial transactions.

**Underground economy:** these include unreported illegal activity, bartering, or informal exchange of cash.

**Domestic Price:** the equilibrium price of a good in a nation without trade.

**World Price:** the global equilibrium price of a good when nations engage in trade.

Balance of Payments statement: a summary of the payments received by the U.S. from foreign countries and the payments sent by the U.S. to foreign countries.

Current account: this account shows current import and export payments of both goods and services and investment income sent to foreign investors of U.S. and investment income received by U.S. citizens who invest abroad.

Capital account: this account shows the flow of investment on real or financial assets between a nation and foreigners.

Official reserves account: the Fed's adjustment of a deficit or surplus in the current and capital account by the addition or subtraction of foreign currencies so that the balance of payments is zero.

Exchange rate: the price of one currency in terms of a second currency.

Appreciating (depreciating) currency: when the value of a currency is rising (falling) relative to another currency, it is said to be appreciating (depreciating)

Determinates of exchange rates: external factors that increase the price of one currency relative to another.

Revenue tariff: an excise tax levied on goods not produced in the domestic market.

Protective tariff: an excise tax levied on a good that is produced in the domestic market so that it may be protected from foreign competition.

Import Quota: a limitation on the amount of a good that can be imported into the domestic market.

Asset Demand: the amount of money demanded as an asset. As nominal interest rates rise, the cost of holding money begins to rise and you are more likely to lessen your asset demand for money.

Money Demand: the demand for money is the sum of money demanded for transactions and money demanded as an asset. It is inversely related to  $i$ .

Theory of Liquidity Preference: Keynes' theory that the interest rate adjusts to bring the money market into equilibrium.

Fractional Reserve Banking: a system in which only a fraction of the total money deposited in banks is held in reserve as currency.

Reserve Ratio: the fraction of total deposits that must be kept on reserve

Required reserves: the portion of a deposit that must be held at the bank for withdrawals.

Excess reserves: the portion of a deposit that may be borrowed by customers.

Balance sheet: a tabular way to show the assets and liabilities of a bank.

Asset of a bank: anything owned by the bank or owed to the bank.

Liability of a bank: anything owned by depositors or lenders

Money Multiplier: this measures the maximum amount of new checking deposits that can be created by a single dollar of excess reserves.

Expansionary monetary policy: designed to fix a recession and increase AD, lower the unemployment rate, and increase GDP

Contractionary monetary policy: designed to avoid inflation by decreasing AD, which lowers the price level and GDP

Open Market Operations: a tool of monetary policy, it involves the Fed's buying or selling of securities to or from commercial banks and the general public.

Federal funds rate: the i% paid on short terms loans made from one bank to another.

Discount rate: the i% commercial banks pay on short term loans from the Fed

Quantity Theory of money: a theory that asserts that the Q of money determines the PL and that the growth rate of money determines the rate of inflation.

Equation of Exchange: the equation says the GDP is equal to the Q of money multiplied by the number of times each dollar is spent in a year.

Velocity of money: the average number of times that a dollar is spent in a year.  $V$  is defined as  $PQ/M$ .

Stock: a certificate that represents a claim to, or share of, the ownership of a firm.

Equity Financing: the firm's method of raising funds for investment by issuing shares of stock to the public.

Bond: a certificate of indebtedness from the issuer to the bond holder.

Debt financing: a firm's way of raising investment funds by issuing bonds to the public.

Fiat money: paper and coin money used to make transactions because the government declares it to be legal tender.

Functions of money: medium of exchange, store of value and unit of account.

Money supply: the quantity of money in circulation as measured by the Fed Reserve as M1, M2 and M3.

M1: the most liquid of money definitions and the basis for all other more broadly defined measures of money.

Liquidity: a measure of how easily an asset can be converted to cash.

Transaction demand: the amount of money held in order to make transactions. This is not related to the interest rate, but increases as nominal GDP increases.

Economics: the study of how people, firms, and societies use their scarce productive resources to best satisfy their unlimited material wants.

Resources: called factors of production, these are commonly grouped into the four categories of labor, physical capital, land or natural resources, and entrepreneurial ability.

Scarcity: the imbalance between limited productive resources and unlimited human wants. Because economic resources are scarce, the goods and services a society can produce are also scarce.

Trade-offs: scarce resources imply that individuals, firms, and governments are constantly faced with difficult choices that involve benefits and costs.

Disposable Income: the income a consumer has left over to spend or save once they have paid out their net taxes.

Consumption and Savings schedules: tables that show the direct relationships between disposable income and consumption and saving.

Law of Demand: holding all else equal, when the price of a good rises, consumers decrease their quantity demanded for that good.

All else equal: to predict how a change in one variable affects a second, we hold all other variables constant. This is also referred to as the “ceteris paribus” assumption.

Absolute (or money) prices: the price of a good measured in units of currency.

Relative prices: The number of units of any other good Y that must be sacrificed to acquire the first good X.

Substitution effect: the change in  $Q_{\text{Demanded}}$  resulting from a change in the price of one good relative to the price of other goods.

Income effect: the change in  $Q_D$  that results from a change in the consumer’s purchasing power (or real income)

Demand schedule: a table showing  $Q_D$  for a good at various prices.

Demand curve: a graphical depiction of the  $D$  schedule.

Determinates of demand: the external factors that shift  $D$  to the left or right.

Normal goods: a good for which higher income increases  $D$

Inferior goods: a good for which high income decreases  $D$

Substitute goods: two goods are consumer substitutes if they provide essentially the same utility to the consumer.

Opportunity Cost: the value of the sacrifice made to pursue a course of action.

Marginal: the next unit or increment of an action.

Marginal Benefit (MB): the additional benefit received from the consumption of the next unit of a good or service.

Marginal Cost (MC): the additional cost incurred from the consumption of the next unit of a good or service.

Marginal Analysis: making decisions based up weighing the marginal benefits and costs of that action.

Production Possibilities: different quantities of goods that an economy can produce with a given amount of scarce resources.

Law of increasing costs: the more of a good that is produced, the greater the opportunity cost of producing the next unit of that good.

Absolute Advantage: exists if a producer can produce more of a good than all other producers.

Comparative Advantage: a producer has comparative advantage if he can produce a good at lower opportunity cost than all other producers.

Specialization: when firms focus their resources on production of goods for which they have comparative advantage, they are said to be specializing.

Productive Efficiency: production of maximum output for a given level of technology and resources. All points on the PPF are productively efficient.

Allocative Efficiency: production of the combination of goods and services that provides the most net benefit to society.

Economic Growth: occurs when an economy’s production possibilities increase.

Market Economy (Capitalism): an economic system based upon the fundamentals of private property, freedom, self-interest, and prices.

