ECONOMICS TODAY

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Macroeconomics

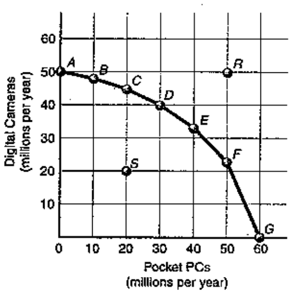
1. Economics is the study of allocating limited resources to satisfy unlimited wants.

2. Economic models or theories are simplified representations of the real world.

Scarcity and Trade-Offs

1. Opportunity cost is the highest-valued, next-best alternative that must be sacrificed to obtain an item or to satisfy a want.

2. The production possibilities curve gives all possible output combinations that can be efficiently produced with a fixed amount of resources.



Law of Demand

When the price of a good goes up, people buy less of it, *ceteris paribus* (other things equal).

Law of Supply

At higher prices, a larger quantity will be supplied than at lower prices, *ceteris paribus* (other things equal).

Movements Along vs. Shifts in a Demand or Supply Curve

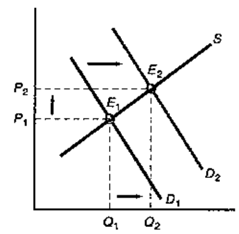
If the relative price changes, we *move along* a curve—there is a change in quantity demanded and/or supplied. If a *ceteris paribus* condition affecting demand or supply changes, we *shift* the curve—there is a change in demand and/or supply.

Market Equilibrium

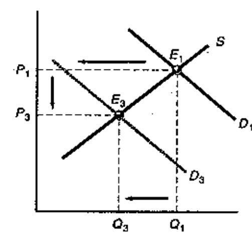
At the market clearing price, quantity demanded equals quantity supplied; there is no surplus or shortage.

Changes in Demand & Supply

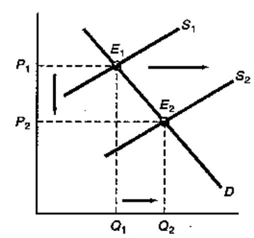
1. An increase in demand causes the market price to increase and the equilibrium quantity to increase.



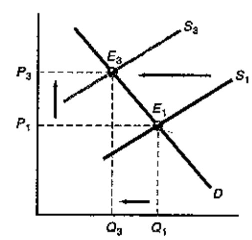
2. A decrease in demand causes the market price to decrease and the equilibrium quantity to decrease.



3. An increase in supply causes the market price to decrease and the equilibrium quantity to increase.



4. A decrease in supply causes the market price to increase and the equilibrium quantity to decrease.



Price Ceilings & Floors

1. A price ceiling is a legal maximum price which results in a shortage and encourages black markets.

2. A price floor is a legal minimum price, such as an agricultural price support, which results in an excess quantity supplied, or a surplus, at the floor price.

Market Failures

1. Externalities are spillover costs or benefits from an economic activity.

2. Public goods are goods that can be consumed by many individuals simultaneously at no additional cost and with no reduction in quality or quantity.

Marginal & Average Tax Rates

$$\text{Marginal tax rate} = \frac{\text{change in taxes due}}{\text{change in taxable income}}$$

$$\text{Average tax rate} = \frac{\text{total taxes due}}{\text{total taxable income}}$$

Taxation Systems

1. Under proportional taxation, the tax bill comprises exactly the same proportion of each individual's income.

2. Under progressive taxation, as income increases, a higher percentage of the additional income is taxed.

3. Under regressive taxation, as income increases, a lower percentage of the additional income is taxed.

Types of Taxes

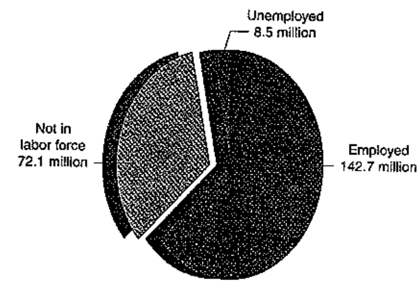
1. Sales taxes are assessed on the prices paid for on prices of a large array of items; an excise tax applies to a specific item.

2. *Ad valorem* taxes are assessed as a fraction of the price of an item; a unit tax is a constant tax levied on each unit.

Unemployment

1. The labor force consists of adults who either have jobs or are looking for jobs.

2. Unemployment is the total number of adults who are in the labor force but have not found a job.



Inflation & Deflation

1. Inflation occurs when the average of all prices in the economy is rising; deflation arises when the average of all prices is declining.

2. Inflation or deflation are gauged using a price index, which measures the cost of today's market basket of goods as a percentage of the cost of the same basket during a base year.

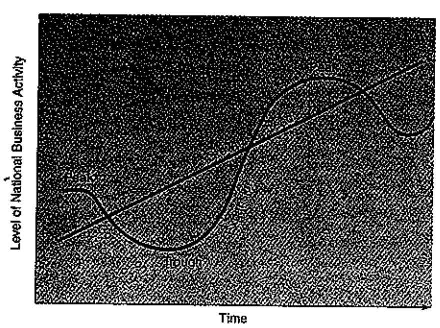
$$\text{Price index} = \frac{\text{cost today of market basket}}{\text{cost of market basket in base year}} \times 100$$

Business Fluctuations

Business fluctuations are ups and downs in overall business activity.

1. An expansion is a rise in business activity.

2. A contraction is a fall in business activity; a recession is a persistent contraction; a depression is a severe contraction.



National Income Accounting

1. Gross domestic product (GDP) is the total market value of all items produced within a nation's borders.

2. Computing GDP

a. Expenditure Approach:

$$GDP = C + I + G + X$$

b. Income Approach

$$GDP = \text{wages} + \text{rent} + \text{interest} + \text{profits}$$

Nominal & Real GDP

$$\text{Real GDP} = \frac{\text{nominal GDP}}{\text{price level}} \times 100$$

Economic Growth

1. Economic growth is the annual rate of change in per capita real GDP.

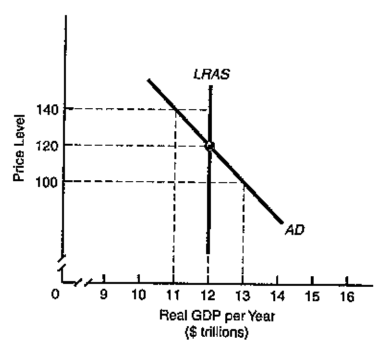
2. Sources of economic growth are growth of capital, growth of labor, and growth of capital and labor productivity.

Long-Run Equilibrium

1. The long-run aggregate supply curve is a vertical line representing the real output of goods and services after full adjustment has occurred.

2. The aggregate demand curve shows planned purchases of all goods and services at various price levels.

3. Long-run equilibrium is at the price level at which total planned expenditures equal total planned production.



Classical & Keynesian Macro Analysis

1. The classical model relies on Say's law, which states that the production of goods and services generates equal planned expenditures.

2. In the Keynesian model, prices adjust gradually, so the short-run aggregate supply curve slopes upward.

Consumption & Saving

1. The sum of consumption and saving is disposable income.

2. Average and marginal propensities to consume and save:

$$APC = \frac{\text{real consumption}}{\text{real disposable income}}$$

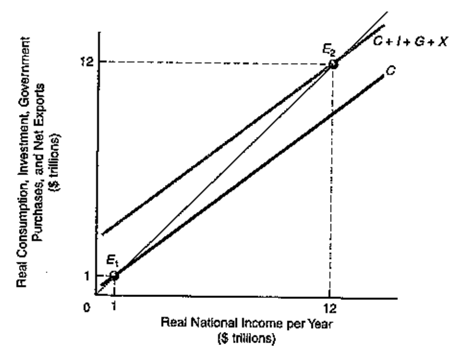
$$APS = \frac{\text{real saving}}{\text{real disposable income}}$$

$$MPC = \frac{\text{change in real consumption}}{\text{change in real disposable income}}$$

$$MPS = \frac{\text{change in real saving}}{\text{change in real disposable income}}$$

Equilibrium National Income & Multiplier

1. Equilibrium national income occurs when total planned real expenditures equal total production, or at the point at which the $C + I + G + X$ curve crosses the 45-degree reference line.



2. The mutliplier formula:

$$\text{Multiplier} = \frac{1}{1 - MPC} = \frac{1}{MPS}$$

Discretionary Fiscal Policy

1. An increase in government spending or reduction in taxes generates a multiplier effect on total planned expenditures.

2. When the government finances higher spending or lower taxes by borrowing, interest rates rise, so there is a crowding-out effect as private planned investment or consumption decline.

3. Net of crowding out, higher government spending or a tax cut raise aggregate demand, which in the short run brings about a higher price level and an increase in real GDP.

Policy Time Lags

1. Recognition time lag: The time required to gather information about the state of the economy.

2. Action time lag: The time between recognizing an economic problem and implementing policy to solve it.

3. Effect time lag: The time that elapses between policy implementation and results.

Deficit Financing and the Public Debt

1. A fiscal deficit is a flow of government spending in excess of taxes over time; the public debt is the stock of accumulated deficits from past years.

2. The gross public debt is all federal debt irrespective of who owns it; the net public debt is the gross public debt less all interagency borrowing.

Functions of Money

1. Medium of exchange: An asset that sellers will accept in payment.

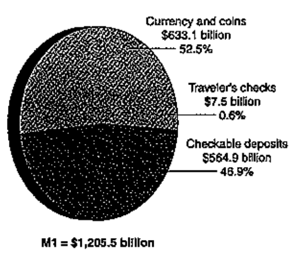
2. Unit of accounting: A measure by which prices are expressed.

3. Store of value: The ability to hold value over time.

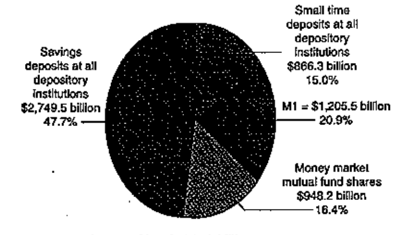
4. Standard of deferred payment: Desirable of an asset as a means of settling debts maturing in the future.

Defining Money

1. The transactions approach emphasizes money's role as a medium of exchange and suggests M1, the sum of currency, checkable deposits, and traveler's checks.

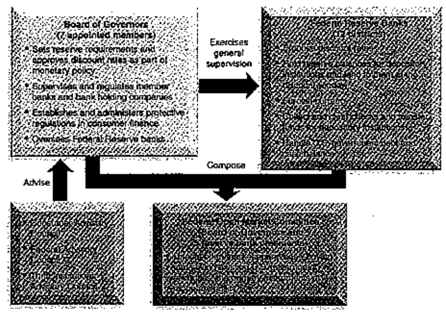


2. The liquidity approach emphasizes money's role as a temporary store of value and suggests M2, the sum of M1 and various near moneys.



Federal Reserve (Fed)

The Federal Reserve System is managed by a seven-member Board of Governors, and monetary policy is conducted by the twelve-member Federal Open Market Committee.



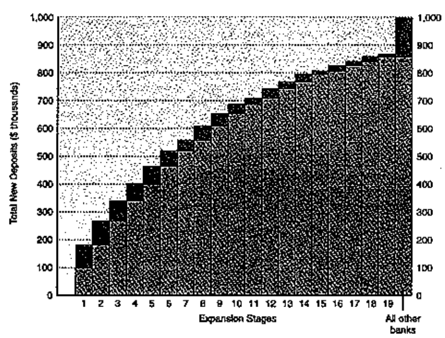
Depository Institution Reserves

1. Fractional reserve banking is a system in which depository institutions hold legal reserves—vault cash or deposits at Federal Reserve banks—that are less than the amount of total deposits.

2. Required reserves must be held as vault cash or as deposits with the Fed; excess reserves equal legal reserves minus required reserves.

The Money Multiplier

1. The Fed's creation of new reserves expands reserves at the depository institution where the funds initially are deposited; new lending by this institution and others causes a multiple expansion in the money supply.



2. The money multiplier gives the change in the money supply due to a change in reserves:

$$\text{Potential money multiplier} = \frac{1}{\text{required reserve ratio}}$$

Population Growth & Economic Growth

$$\text{Rate of growth of per capita real GDP} = \text{rate of growth in real GDP} - \text{population growth rate}$$

Balance of Payments

1. The balance of payments is a system of accounts that measures cross-border transactions of goods, services, income, and financial assets during a specific time period.

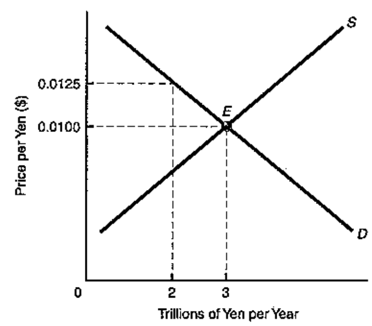
2. Every transaction in the balance of payments generates both a surplus item and a deficit item, so the overall balance of payments must equal zero.

Foreign Exchange Markets

1. The exchange rate is the price of one nation's currency in terms of the currency of another country.

2. Each import transaction constitutes a demand for foreign currency, and each export transaction constitutes a supply of foreign currency.

3. At the equilibrium exchange rate, the quantity of foreign currency demanded equals the quantity of foreign currency supplied.



4. An increase in the demand for foreign currency causes the dollar price of the currency to increase; the dollar appreciates, and the foreign currency depreciates.