

Outline of Economics
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SOCI>Economics

economics

People have wants, but resources are scarce, so demand and supply affect resource use and need satisfaction {economics}| {political economy}. Economics topics are bonds, business, circulation, demand, distribution, goods, government, margin, market, money, relative advantage, scarcity, securities, services, stocks, supply, and trade.

philosophy

Economics assumes people separately make rational choices to maximize personal benefit and minimize personal harm {individualism, economics}, rather than being affected by traditions, duties, social pressures, or other community effects. Business make supply to meet people's preferences. Demand and supply set prices.

home economics

People can study cooking, cleaning, and maintaining houses {home economics}|.

mercantile

commercial {mercantile}|.

ways and means

expenditures and revenues {ways and means}|.

SOCI>Economics>Psychology

liquidity trap

People can be unwilling to spend, even at very low interest rates {liquidity trap}, because they expect future to be worse and want to save or because they do not perceive need. Making more money causes more spending. Expected inflation causes more spending. More exports can cause more spending.

moral hazard

In some economic situations, one person can gain by taking risk, but another person or business pays for losses {moral hazard}. First person loses little if enterprise fails. Second entity can gain little if enterprise succeeds. Statistically, houses with fire insurance for original house value are more likely to have fires if house value goes down. Statistically, unregulated financial institutions with government insurance for investor money are more likely to issue risky financial instruments.

To prevent moral hazard, second entity must require first person to risk his or her money. For houses, house down payment must be large enough to deter owner from risking loss. For financial institutions, leverage must not be too great, and managers must adhere to principles. Second entity must require that loaned money go only to stated purpose, not to risky investments.

parsimony

People can spend money sparingly {parsimony}.

speculation

People and businesses can buy at lower price and hope to sell at higher price {speculation}|. Speculation typically happens in rising markets and can make economic cycles worse. If economy has contracted and prices are lower, buying can help consumption rate and reduce price fluctuation. If economy has expanded and prices are higher, selling can help consumption rate and reduce price fluctuation.

sunk-cost fallacy

After investing time or money, people do not change investments {sunk-cost fallacy}. They do not calculate probabilities from current state onward, because they believe they should not waste their investment.

SOCI>Economics>Psychology>Preferences

economic preferences

Job satisfaction, job training, job location, status, new ideas, economic cycles, war, peace, world conditions, weather, and strikes can change preferences {economic preferences}. People can choose to have more income or more leisure. People can choose to have more income by working at two or more jobs at once or by getting more education or training.

preference curve

People have desire for owning goods or services, at given time under given income, and they have relative desires between goods or services {preference curve}|.

SOCI>Economics>Psychology>Caveat

caveat emptor

let buyer beware {caveat emptor}|.

caveat venditor

let seller beware {caveat venditor}|.

SOCI>Economics>Psychology>Marginal Utility

utility in economics

Goods and services have uses {utility, economics}}. Economic decisions are about whether to buy or produce one more good or service {marginal principle, decision}. Total consumption or production results from decisions.

marginal utility

Purchase of one more good or service has value related to use {marginal utility, purchase}. Marginal utility decreases as quantity increases {diminishing marginal utility law, quantity}. Last item has lower value than first item, if item price, consumer preferences, consumer income, and other item prices remain the same.

price

Good or service price is marginal value for current consumer.

preferences

For any good or service pair, one combination gives optimum satisfaction, and many combinations give equal satisfaction.

consumption and saving

People have consumption uses {utility of consumption} {consumption utility} and saving uses {utility of saving} {saving utility}. Consumption has value related to use {marginal utility of consumption}, and saving has marginal utility {marginal utility of saving}. Total consumption utility is sum of personal and business consumption utilities. Maximum total consumption utility results when all goods and services have same marginal utility divided by price, because buying another item can gain no more utility.

To maximize total utility, marginal consumption utility equals marginal saving utility, because switching consumption and saving can gain no more utility. Therefore, savings rise as income rises. Leisure marginal utility equals labor marginal utility, because trading work and leisure can gain no more utility.

margin

For serial good or service purchases, the last good or service purchased has a value {margin} | {marginal utility}. Last item has lower value than first item.

marginal principle

Economic decisions are whether to buy or produce one more good or service {marginal principle, psychology}}, not about total consumption or production.

consumers' surplus

Good or service market price is typically below good or service marginal value to most consumers {consumers' surplus}.

diminishing returns

Marginal utility decreases as quantity increases {diminishing marginal utility law, psychology} {law of diminishing marginal utility} {diminishing returns law} | {law of diminishing returns} {decreasing returns law} {law of decreasing returns}. Last item has lower value than first item.

SOCI>Economics>Theories

public choice theory

Checking consequences and analyzing results can improve economic structures {public choice theory}.

social choice theory

Analyzing situations and methods can improve selection methods {social choice theory}. Situations must be reachable and stable.

SOCI>Economics>Macroeconomics

macroeconomics

Governments analyze national economies {macroeconomics}}.

economic growth

For economic growth, developed nations need to keep interest rates high to encourage investment. They need high capital returns to pay high interest.

Developing nations have surplus labor and high underemployment. To grow as a transition economy, they need low population growth, increased capital, increased savings, and stable wages. They mix rural subsistence economies and

urban money economies, with political conflicts. They have poor markets and poor distribution systems. They export only resources and unfinished goods. They need imports but have no cash to pay for them. They have low taxes, few schools, small wealthy class, no middle class, low investment rate, untrained business class, and poor agricultural techniques. They need capital goods and investment to change these problems.

economic growth: rate

If factor pricing is competitive and costs per factor unit are constant, output growth rate is sum of technology, labor, capital, and resource increase rates, each weighted by GNP percentage. Output per worker can increase through education, skill learning, management techniques, total economic organization, economies of scale, and inventions.

SOCI>Economics>Macroeconomics>Economy

economy

In countries, labor, money, goods, and services can move freely, to create producing and consuming systems {economy}. Economies have variable labor, capital, natural resources, land, production methods, technologies, and income distributions, which affect societal and personal goods-and-services preferences.

functional category

Economy divisions {functional category} {situs} are manufacturing, commerce, education, law enforcement, finance, transportation, and government. Economy parts have equal status.

invisible hand

Market economies use supply and demand in open markets {invisible hand} to regulate prices.

SOCI>Economics>Macroeconomics>Economy>Employment

employment

People have jobs {employment}. Full employment is impossible. Need for unskilled labor always decreases over time. Automation displaces workers. People can be training or retraining. Business cycles change demand. Industries have different productivities. Unit-cost increase is greater near full capacity. Time lags delay reaching full capacity.

frictional unemployment

Job changing, automation, and retraining can cause unemployment {frictional unemployment}.

full employment

Everyone that wants to work can be working {full employment}. At full employment, increasing product-1 production causes decreasing product-2 production.

SOCI>Economics>Macroeconomics>Economy>Types

planned economy

Economies {planned economy} {command economy} can have central-government planning boards, which calculate and set production-unit prices, inputs, and outputs, based on value, desired distribution, and national goals. Bargaining sets output quotas. Consumers choose what to buy.

effects

Planned economies emphasize output, rather than cost. Planned economies often have poor-quality output, because they set price with little regard for cost, so managers must minimize costs.

incentives

In planned economies, incentives depend on goods produced {piece-rate}. Manual laborers and skilled workers have good pay. Service jobs pay less.

government

Government services and staple goods are free or cheap, such as housing, basic foods, medicine, and school.

state capitalism

National government can perform free-market business functions in one or more markets {state capitalism}. Market economies can have state ownership of capital and investment.

state monopoly

Market economies can have state ownership of capital, resources, and businesses {state monopoly}|.

SOCI>Economics>Macroeconomics>Economy>Types>Market

market economy

Economies {market economy}| can allow production units to decide what and how much to produce, and consumers to decide what and how much to consume, in open markets.

assumptions

People can buy or sell in all markets. People act in their self-interest to increase income and decrease cost. People know prices.

Market economies use supply and demand in open markets to regulate prices, by the invisible hand. All markets and prices interconnect. Demand for one product reduces demand for other products. Supply of one product reduces supply of other products. Price changes reflect everyone's self-interest and so bring about greatest common good {utility, market}.

regulation

Pure market economies do not necessarily result in full people or resource employment, economic growth, needed public services, or ideal income distribution, so government must regulate some markets. Government can create good markets, provide needed information, block monopolies, assess social costs, and control external effects.

competition

If free-market economies have many buyers and sellers, exchanges are insignificant percentage of total exchanges, and buyers and sellers do not cooperate, then sellers compete for buyers in pure competition.

laissez-faire

Free-market economies can have no business regulations and allow all good and service exchanges {laissez-faire, market}|.

worker-control

Workers can elect company leaders {worker-control capitalism}| or run company themselves {worker-control socialism}|.

syndicalism

Workers can control capital {syndicalism}|.

SOCI>Economics>Macroeconomics>Economy>Types>Socialism

socialism economics

Market economies can adjust markets through central planning and/or decentralized changes {socialism}| {market socialism}, to more equally distribute wealth and income based on need or effort.

state socialism

Economies {state socialism}| {central-planning socialism} can have centralized economic planning.

national socialism

Government can control a capitalist society {national socialism}|.

SOCI>Economics>Macroeconomics>Economy>Stages

subsistence economy

Economies {subsistence economy}| can depend on families or small communities, which produce and consume only their own products.

mercantilism

After feudalism, European countries tried to start colonies, acquire gold and silver, mine minerals, build commercial and military navies, and industrialize {mercantilism}|. Objective was positive trade balance.

transition economy

Developing nations often have poor markets, poor distribution systems, and high underemployment; export resources but not finished goods; need imports but have no cash to pay for them; and have low taxes, few schools, small wealthy class, no middle class, low investment rate, untrained business class, and poor agricultural techniques. Developing countries need capital goods and investment to change these problems {transition economy}| and become developed countries.

SOCI>Economics>Macroeconomics>Economy>Stages>Growth**industrialization**

Modern economic production depends on machines and large-scale output {industrialization}|. Industrialization makes cheaper goods and leads to higher population, and so causes more industrialization. Developing-society industrialization separates people into groups that work and groups that are traditional.

sustainable development

Meeting current economic needs responsibly {sustainable development}| can allow future generations to meet their economic needs. Wealth per capita can increase at optimum rate. Wealth is capital, natural resources, knowledge, skill, and organizations, but income includes only goods and services value.

SOCI>Economics>Macroeconomics>Government Actions**community goods and services**

Governments produce goods {community goods} and services {community services} that are not profitable or proper for businesses. For example, national government provides defense, prints money, and has retirement and disability programs. Local government provides education, fire services, housing, police services, and roads.

exchequer

national treasury {exchequer}|.

external effect

Government can provide public goods that make better citizens, better consumers, or better-trained workers {external effect, government}|, such as public education and health-and-safety publications.

fair trade law

States typically have laws {fair trade law} to protect small retailers against chain stores belonging to large corporations.

macroeconomic populism

Nations can spend for popular job-creating programs that are run by state or led by cronies {macroeconomic populism}|, by borrowing from other nations or printing money. This can cause inflation, bank failure, and currency devaluation. This also usually has high tariffs to protect jobs.

nationalization

National governments can run businesses {nationalization}|, perhaps as benevolent monopolies. Nationalized firms can be inefficient and fail to meet customer needs.

patent in business

Patents {patent, business}| allow inventors to make, sell, and use inventions as sole owners. Others must pay {licensing, patent} to use invention.

price support

Government can guarantee good base prices {price support}|.

pump priming

National government can spend money in industry sectors to raise demand {pump priming, economics}|.

social security

Countries typically have funds {social security}| in which workers pay income percentage into fund, from which they or their spouses can retrieve money when they retire or become disabled.

transfer payment

Unemployment payments, accident or disability payments, illness payments, and old age payments {transfer payment, government}| provide money directly to people unable to work.

welfare

Anti-poverty programs, retraining grants and programs, aid to dependents, and aid to handicapped {welfare, government}| provide money indirectly to people unable to work.

workmen's compensation program

Programs {workmen's compensation}| can receive percentage of worker income for use in case of death or disability.

SOCI>Economics>Macroeconomics>Government Actions>Tax**tax types**

People pay money to government in many forms {tax, types}. Taxes include capital-gains, excise, export, import, sales, turnover, and withholding taxes. Income tax can be on personal or business revenue. Estate tax can be on wealth at death. Property tax can be on real estate holdings. National taxes are income and value-added taxes. State taxes are income taxes, excise taxes, and sales taxes. Local taxes are property taxes. Taxes can be regressive or progressive.

capital gains tax

Taxes {capital gains tax}| can be on capital gains over more than one year {long-term capital gains tax} or less than one year {short-term capital gains tax}.

excise tax

Taxes {excise tax}| can be on each item or service.

export tax

Taxes {export tax}| can be on goods sent to foreign countries.

import tax

Taxes {import tax}| can be on goods purchased from foreign countries.

sales tax

Taxes {sales tax}| can be a percentage, typically 3% to 8%, of retail purchase price, usually excluding food.

turnover tax

Taxes {turnover tax}| can be on buying and selling goods or services.

withholding tax

People typically must send income percentage {withholding tax}| to government to pay future taxes. Employers typically send paycheck percentage to government.

SOCI>Economics>Macroeconomics>Government Actions>Tax>Types**progressive tax**

Taxes {progressive tax}|, such as income taxes, can assess at higher rates for higher incomes or wealth. They take lower percentage of income or wealth from lower-income people.

regressive tax

Fixed percentage taxes {regressive tax}|, such as sales and property taxes, take more value from lower-income people than from higher-income people. These taxes reduce consumption more than savings.

SOCI>Economics>Macroeconomics>Government Actions>Monetary Policy

monetary policy

Governments can reach target GNP and control economic cycles by changing money price and availability {monetary policy}| {monetary theory}.

money supply: printing money

Governments can increase or decrease money in circulation {money supply} by printing or not printing money.

money supply: bonds

Governments can sell and buy bonds at fixed interest rates for different periods, such as three-month bonds and thirty-year bonds.

money supply: bank loans

Governments can raise or lower their bank-loan interest rate, the discount rate. If discount rate is lower, banks can charge customers lower loan interest rate, so people borrow more and money in circulation increases.

money supply: reserves

Governments can require banks to keep lower or higher percentages of money to cover loans, by the reserve ratio. If reserve ratio is lower, banks can loan more, people can borrow more, and circulating money increases.

interest rate

Printing money, decreasing discount rate, decreasing reserve ratio, and offering bonds increases money supply. When money supply increases, interest rates decrease, because money is less valuable. When interest rates decrease, money supply increases, because people save less.

Not printing money, increasing discount rate, increasing reserve ratio, and buying bonds decreases money supply. When money supply decreases, interest rates increase, because money is more valuable. When interest rates increase, money supply decreases, because people save more.

government

People receive income from working, spend for personal expenses, and have expectations about economy. Income changes slowly, but spending and expectations can change quickly. Government can affect people's spending and expectations. Government can raise and lower money supply, independently of taxes and spending, because it is the largest and most powerful institution and can incur or pay down debt. See Figure 1.

To stop expansion and inflation, governments increase interest rates and decrease money supply, to encourage saving and discourage borrowing. See Figure 2.

To stop recession, governments decrease interest rates and increase money supply, to encourage spending and encourage borrowing. See Figure 3.

Figure 1

Money supply, interest rates, bond selling, discount rate, and reserve ratio are normal.

Normal government spending and taxing

Normal people spending and saving

	Government			
Government Spend	People Tax	People Spend	People Save	
1	1	1111111	1	Normal demand

Figure 2

low interest rate and increased money supply

Normal government spending and taxing

People spend more and save less

Government Spend	Government Tax	People Spend	People Save	
1	1	11111111	0	Higher demand

Figure 3

high interest rate and decreased money supply

Normal government spending and taxing

People spend less and save more

Government Spend	Government Tax	People Spend	People Save	
1	1	111111	11	Lower demand

circulation of money

Money passes from person to person {circulation, money} | {money circulation}.

discount rate

Governments can vary interest rate {discount rate} | at which central bank lends money to commercial banks.

multiplier effect of money

Money-supply and disposable-income increases result in larger increases in spending {multiplier effect, money}, because increased money passes from person to person, by repeated spending. The multiplier process causes larger GNP increase than original income increase.

money supply

Government controls money supply. Government can change planned national expenditures or savings and so disposable income.

marginal propensities

People save some income and spend rest. Money-supply and disposable-income increases add extra income. People who receive extra income must decide how much to save {marginal propensity to save, multiplier} and how much to spend {marginal propensity to consume, multiplier}. Fraction that people decide to spend is money that goes into circulation. Average marginal propensity to spend is never 100%.

marginal propensities: change

Multiplier effect causes marginal-propensity-to-spend changes to multiply throughout economy.

circulation

Some money-supply or disposable-income increase goes to merchants. Merchants decide how much extra income to save or spend. Some money-supply or disposable-income increase goes to middlemen. Middlemen have marginal propensities to spend. Some money-supply or disposable-income increase goes to producers. Producers have marginal propensities to spend. Some money-supply or disposable-income increase goes to workers and investors. Workers and investors are the people that started the cascade. Some money-supply or disposable-income increase keeps cascading.

If average marginal propensity to spend is high, more people receive significant extra income. If average marginal propensity to spend is low, fewer people receive significant extra income. Typically, extra money is miniscule after ten transaction levels.

transaction velocity

Average marginal propensity to spend determines average number of times currency units change hands {transaction velocity, currency}. Transaction velocity can be ten.

multiplier

For example, people can spend 75% of increased money supply or disposable income for personal consumption, government, or exports and 3% for saving, 20% for taxes including Social Security and Medicare, and 2% for imports. Assume transaction velocity is 10. Income increase x multiplies through economy. Multiplier is sum, over transaction-velocity number, of the cascade of marginal propensities to spend. In this example, multiplier is $0.75 * x + 0.75 * (0.75 * x) + 0.75 * (0.75 * 0.75 * x) + 0.75 * (0.75 * 0.75 * 0.75 * x) + 0.75 * (0.75 * 0.75 * 0.75 * 0.75 * x) + 0.75 * (0.75 * 0.75 * 0.75 * 0.75 * 0.75 * x) + 0.75 * (0.75 * 0.75 * 0.75 * 0.75 * 0.75 * 0.75 * x) + 0.75 * (0.75 * 0.75 * 0.75 * 0.75 * 0.75 * 0.75 * 0.75 * x) + 0.75 * (0.75 * 0.75 * 0.75 * 0.75 * 0.75 * 0.75 * 0.75 * 0.75 * x) = (0.75 + 0.54 + 0.41 + 0.30 + 0.23 + 0.17 + 0.13 + 0.09 + 0.06 + 0.04) * x = 2.8 * x$. Number of terms is 10. Terms contribute successively lower values.

multiplier: example

Assume average marginal propensity to spend is 90% = 9/10. For every 10 extra dollars, average person spends 9 dollars and saves 1 dollar. See Figure 1. After 10 people receive remaining money, changes are insignificant, so transaction velocity is 10. Multiplier is approximately 9.

multiplier: USA

USA multiplier is 3 or 4.

multiplier: time

The multiplier process takes three to six months to complete. The multiplier effect makes economic planning difficult for more than two years.

Figure 1

Marginal propensity to spend is 9/10.

Money increase is 10.0 (1111111111)			
1st person spends	9.0	(1111111111)	and saves 1.0.
2nd person spends	8.1	(11111111)	and saves 0.9.
3rd person spends	7.2	(1111111)	and saves 0.8.
4th person spends	6.3	(111111)	and saves 0.7.
5th person spends	5.4	(11111)	and saves 0.6.
6th person spends	4.5	(1111)	and saves 0.5.
7th person spends	3.6	(111)	and saves 0.4.
8th person spends	2.7	(11)	and saves 0.3.
9th person spends	1.8	(1)	and saves 0.2.
10th person spends	0.9	(0)	and saves 0.1.

Transaction velocity ~ 10.

Multiplier is 9.

reserve ratio

Governments can change required minimum ratio {reserve ratio}| of bank reserves to demand deposits, because money available for loans is amount over minimum percentage of demand deposits {free reserves} {excess reserves}. If amount available for loans is more, interest rate is less, and people take out more loans for higher amounts.

transaction velocity

Average number of times currency units change hands {money turnover} is money-supply use rate {transaction velocity, monetary policy}|. It measures economy expansion.

Gresham law

Of two moneys with same denomination, people hoard higher-valued one and circulate lower-valued one {Gresham's law} {Gresham law} (Thomas Gresham).

SOCI>Economics>Macroeconomics>Government Actions>Monetary Policy>Propensity**average propensity**

People spend a fraction of total disposable income {average propensity to consume} (APC) and save a fraction {average propensity to save} (APS). $APC + APS$ equals one, because people must spend or save income.

marginal propensity

People consume a fraction of disposable-income increases {marginal propensity to consume, income} (MPC) and save a fraction {marginal propensity to save, income} (MPS). For people, $MPC + MPS$ equals one, because people must spend or save income.

SOCI>Economics>Macroeconomics>Government Actions>Fiscal Policy**fiscal policy**

Governments can adjust tax rates and government spending {fiscal policy}| {fiscal theory} to obtain target GNP and/or control economic cycles.

government revenue

People and businesses receive income from working, spend for personal expenses, and have expectations about economy. Income changes slowly, but spending and expectations can change quickly. Government can control spending using tax policies.

government spending

Government can spend more or less, independently of taxes, because it is the largest and most powerful institution and can increase or decrease debt. See Figure 1.

taxes

Tax decrease with no government-spending change increases demand, because people have more money. See Figure 2.

Tax increase with no government-spending change reduces demand, because people have less money. See Figure 3.

spending

Government-spending decrease with no taxation change decreases government demand. See Figure 4.

Government-spending increase with no taxation change increases government demand. See Figure 5.

spending and taxes

Government-spending decrease with equal tax decrease decreases overall demand somewhat, because government spends all, but tax decrease only fractionally increases private demand. See Figure 6.

Tax increase with government-spending decrease reduces overall demand greatly. See Figure 7.

Tax decrease with government-spending increase increases overall demand greatly. See Figure 8.

Government-spending increase with equal tax increase increases overall demand somewhat, because government spends all, but tax increase only fractionally decreases private demand. See Figure 9.

balanced budget

If government spending equals government revenue, GNP still tends to increase {balanced budget theorem}, because taxation only fractionally reduces private spending, but government spends all.

spending purposes

Government spending allocates resources to public functions, redistributes income, and stabilizes economic fluctuations.

tax effects

Taxation reduces private consumption and saving. Goods taxes keep price high but do not encourage production, because producers do not receive higher price. Fixed percentage taxes, such as sales, property, and other regressive taxes, take more value from lower-income people than from higher-income people. Regressive taxes reduce consumption more than savings. Taxes that assess at higher rates for higher incomes or wealth, such as income taxes and other progressive taxes, take lower percentage of income or wealth from lower-income people. Progressive taxes reduce savings more than consumption.

Figure 1

Normal government spending and taxation

Normal people spending and saving

Government Spend	Government People Tax	People Spend	People Save	
1	1	1111111	1	Normal demand

Figure 2

low tax rate

Government spends same and taxes more

People spend less and save same

Government Spend	Government People Tax	People Spend	People Save	
1	0	11111111	1	Higher demand

Figure 3

high tax rate

Government spends same and taxes more

People spend less and save same

Government Spend	Government People Tax	People Spend	People Save	
1	11	111111	1	Lower demand

Figure 4

low government spending

Government spends less and taxes same

People spend same and save same

Government Spend	Government People Tax	People Spend	People Save	
0	1	1111111	1	Lower demand

Figure 5

high government spending

Government spends more and taxes same

People spend same and save same

Government Spend	Government People Tax	People Spend	People Save	
11	1	1111111	1	Higher demand

Figure 6

low tax rate and low government spending
Government spends same and taxes more
People spend less and save same

Government Spend	Government People Tax	People Spend	People Save	
0	0	11111111	1	Normal demand

Figure 7

high tax rate and low government spending

Government spends same and taxes more

People spend less and save same

Government Spend	Government People Tax	People Spend	People Save	
0	11	111111	1	Much lower demand

Figure 8

low tax rate and high government spending

Government spends less and taxes same

People spend same and save same

Government Spend	Government People Tax	People Spend	People Save	
11	0	11111111	1	Much higher demand

Figure 9

high tax rate and high government spending

Government spends more and taxes same

People spend same and save same

Government Spend	Government People Tax	People Spend	People Save	
11	11	111111	1	Higher demand

SOCI>Economics>Macroeconomics>Economic Cycle

economic cycle

Economies tend to have periodic expansion and contraction {economic cycle}|.

multiplicative effects

Economies cannot expand at optimum moderate rate, because expansion tends to cause more expansion, and contraction tends to cause more contraction. See Figure 1.

multiplicative effects: contraction

If economy starts to contract, people become more pessimistic. They try to save money and spend less. Demand goes down, and economy contracts more. Economic cycle is on downward curve and goes toward recession.

However, lower demand makes prices lower. Lower demand for money makes interest rates lower and money cheaper. People have saved money. Eventually, lower prices make demand increase. Lower interest rate makes saving less attractive. People can no longer postpone buying things that have worn out. People start to save less and spend more. Recession ends. Economic cycle is at downward-curve bottom.

multiplicative effects: expansion

If economy starts to expand, people become more optimistic. They spend more money and save less. Demand goes up, and economy expands more. Economic cycle is on upward curve and goes toward expansion.

However, higher demand makes prices higher. Higher demand for money makes interest rates higher and money more expensive. People have little saved money. Eventually, higher prices make demand decrease. Higher interest rate makes saving more attractive. People already have everything they need and can postpone buying things. People start to spend less and save more. Expansion ends. Economic cycle is at upward-curve top.

cycle period

If expectation changes are rapid, economic-cycle period is short. See Figure 2.

cycle amplitude

If expectation changes are large, economic-cycle amplitude is high. See Figure 3.

efficiency

For maximum efficiency, economy can minimize economic fluctuations and maintain stable business conditions. Demand and supply can balance, so prices reflect real value, not expectations about the future. Efficient economic cycles have long periods and small amplitudes. See Figure 4.

National government can dampen economic-cycle amplitudes and lengthen economic-cycle periods. During expansion, government can tax more and spend less to decrease demand. During contraction, government can tax less and spend more to increase demand. Taxation and spending rates can depend on previous economic cycles.

equilibrium

Economy is in equilibrium {equilibrium, economy} if total spending equals total costs, because prices equal costs. Economy is in equilibrium if personal savings equal business investment, plus government purchases, minus taxes, plus exports, minus imports {national income identity, cycle}, because consumption equals output. Gross national product (GNP) is in equilibrium if planned expenditures equal present output, with no excess demand or supply. Economy can be at equilibrium, but not at full employment, when demand is unequal to output.

Figure 1

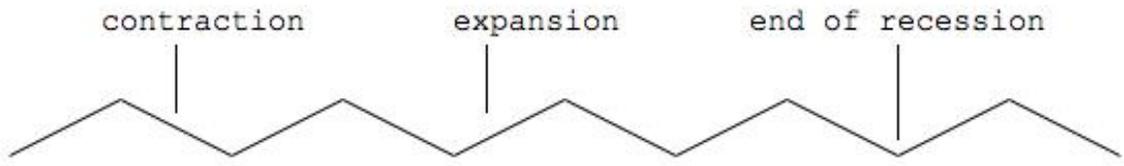


Figure 2
shorter period (and same amplitude)



Figure 3
higher amplitude (and same period)

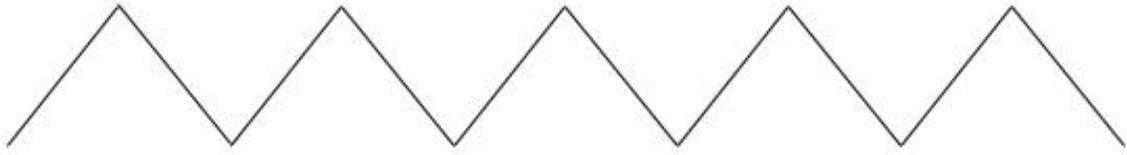


Figure 4
lower amplitude and lower period



acceleration principle

In economies or business sectors, small sales-rate changes typically result in large investment-and-inventory changes {acceleration principle}.

up

GNP changes direction {turning point} and goes up in response to unused production factors, too-low investment, and too-low inventory levels. In recession, unused capacity and labor lead to lower costs and excess supply, both leading to lower prices and increased demand. In recession, low investment leads to low prices and increased demand. In recession, high inventory levels lead to excess supply, and lower prices and increased demand.

down

GNP changes direction and goes down in response to limited production factors, too-high investment, and too-high inventory levels. In expansion, production-factor limitations result in reduced supply and higher costs, both leading to higher prices and reduced demand. In expansion, high investment leads to higher prices and reduced demand. In expansion, low inventory levels lead to reduced supply, and higher prices and less demand.

bubble in economics

House or stock prices can rise much beyond reasonable value {bubble, economics}.

deflation

If national planned expenditures are too low {deflationary gap}, businesses have unused resources and lower prices {deflation}.

depression of economy

National economies can have severe recession {depression, economics}.

expansion of economy

In good times {expansion}, employment increases. Business inventories increase. Machinery and equipment expenditures increase. Consumer durable-good expenditures increase. Durable-good production increases. Business profits increase. Tax receipts increase. Interest rates increase.

growth recession

Economies can have growth but growth is too slow and results in idle capacity and high unemployment {growth recession}.

inflation of economy

Price increases {inflation, economics}| stop by reducing demand.

demand

Excess planned business investment, decreased planned saving, and government budget deficit cause excess demand.

government

Raising interest rates decreases planned business investment. Raising interest rates can increase planned savings. Government can tax more or spend less to reduce demand. Government can change price expectations through communication with public and businesses. Higher worker wage demands make higher prices from businesses {wage-price spiral}, but government can block them.

inflation

Government receives political pressure from people with fixed incomes, because inflation reduces money value. Inflation decreases long-term lending, because money value decreases over time, and people do not want repayment with lower-value currency.

stagflation

Inflation and slower-than-normal growth {stagflation} can happen together. Money supply is high, and job-creation rate is low.

thrift paradox

If people save too much and reduce planned expenditures, GNP decreases, resulting in lower savings {thrift paradox}| {paradox of thrift}, because savings rate is lower when GNP is lower.

SOCI>Economics>Macroeconomics>Measurement

econometrics

Economic measurements {econometrics}| can build and verify economic theories, typically using regression analysis. Analysis can be about one variable over time {time-series analysis}, two variables at one time {cross-sectional analysis}, both variables on same sample {panel analysis}, or both variables on different samples {pooled cross-sectional analysis}. Econometrics requires classifying businesses and industries, such as by Standard Industrial Classification or North American Industry Classification System.

national income identity

Economy is in equilibrium if personal savings equal business investment plus government purchases minus taxes plus exports minus imports {national income identity, measurement}, because consumption equals output.

Pareto optimum in economics

Economies can reach state in which one consumer cannot become better off without making another worse off {static efficiency} {Pareto optimum, economics}, with same resources and technology.

conditions

Static efficiency results under the following conditions {pure market economy}. Plants operate at capacity and are at optimum scale. For all goods, marginal utility divided by price are equal. Price equals marginal cost. For all resources, marginal product divided by price are equal. For all factors, marginal revenue products are equal for all uses. Leisure marginal value equals labor marginal value. Marginal saving value equals marginal consumption value. Good marginal-utility ratios are equal for all consumers. Workers do what they like best and can do best. Workers can move freely among jobs.

Phillips curve

Because employment increases in economic expansions, which inflation typically accompanies, unemployment level and price level inversely relate {Phillips curve}. Money and wage inflation relates to unemployment: $(dw / dt) / w = h(U)$, where dw is wage change, dt is time change, w is wage, U is unemployment, and $h(U) < 0$. As unemployment increases, wages and prices decline.

SOCI>Economics>Macroeconomics>Measurement>Measure

current account balance

Trade balance, services balance, and interest payments {current account balance} measures exports compared to imports.

disposable income

Personal consumption plus personal savings {disposable income}| is an economy measure.

effective demand

People can try to keep money rather than spend {effective demand}, so demand is less than optimum. People feel that their money is not enough for future needs. Printing more money can increase effective demand because money seems plentiful.

gross national product

gross investment + government purchases + personal consumption + net exports {gross national product}| (GNP) is an economy measure.

income of nation

In economies, people receive different incomes {income, economy} depending on skills, education, experience, responsibilities, and rank.

inequality measures

Governments measure income inequality {Lorenz curve} {Gisi coefficient}.

policies

Government policies can increase income equalization.

School loans and scholarships {education grant} improve worker incomes later.

Unemployment payments, disability payments, illness payments, and old-age payments {transfer payment, income} provide money directly to people unable to work. Anti-poverty programs, retraining grants and programs, aid to dependents, and aid to handicapped people {welfare, income} provide money indirectly to people unable to work.

Progressive taxation takes more money from higher-income people and less from poorer people. Taxes on wealth take money from rich people.

Laws against discrimination help people have equal opportunity to get income.

Savings bonds allow people to receive income later.

Wages and salaries {labor value}, set in labor market, determines income. Money value, set in money market, also determines people's income.

imputed income

Income {imputed income} can be real but not monetary: farm production consumed by farm family, value of rent not paid to owner for house use, and housewife-work value.

national debt

Governments have debt {national debt}, which they typically owe to citizens. Taxes pay this debt. Debt payments go back to people that pay taxes {tax friction}.

national income

Total country output income {national income} does not equal national product, because some production remains unsold, in inventory.

national product

Countries can produce goods and services {national product}.

net national product

Gross national product minus capital consumption {net national product} is an economy measure.

personal income

Personal consumption + personal taxes + personal savings {personal income} is an economy measure.

planned expenditures

Economies have personal consumption schedules, business investment schedules, government expenditure schedules, and net export schedules {planned expenditures}. Saving schedule and investment schedule must be equal for optimum GNP, because then demand and supply are equal.

SOCI>Economics>Macroeconomics>Measurement>Economic Forecasting

econometric forecasting

Economists can use models, with equations about economic indicators, to predict business cycle {econometric forecasting}.

analytical forecasting

Economists can use estimated government spending, investment, exports, imports, and consumer spending to forecast GNP {analytical forecasting}.

barometric forecasting

Economists can use past indicator performance to predict business-cycle turning points {barometric forecasting}.

SOCI>Economics>Macroeconomics>Measurement>Economic Indicators

economic indicator

Indicators {indicator, economy} {economic indicator} can predict GNP and business cycles. Some indicators do not relate to business cycle: price index, imports, exports, payment balance, and government activities.

coincident series

Indicators that accompany business cycles {coincident series} are job openings, employment, production, sales, income, investment backlog, wholesale-price index, bank reserves, and interest rates.

lagging series

Indicators that lag business cycle {lagging series} are long-term unemployment, investments, inventories, labor costs, debt, and loan rates.

leading series

Indicators that predict GNP and business cycles {leading series} are average work week, overtime, new unemployment-benefit claims, new investment intentions, business creation, inventory investment, commodity prices, stock prices, profits, margins, cash flows, money flows, credit flows, delinquencies, business failures, hiring, and layoffs.

SOCI>Economics>Macroeconomics>International Trade

trade

Countries typically benefit from good, service, and money exchange {international trade} {trade, economics}|. Even if one country is always better than the other {comparative advantage, trade}, both can benefit, because each country can make what it does best. No trading has less market efficiency and higher cost. Immigration laws and visa requirements can restrict labor movements. Tariffs can restrict goods and services. Goods can have quotas. Foreign-investment restrictions can constrain money flow.

arbitrage

People can buy securities in one market at lower price and then sell them in another market at higher price {arbitrage}|.

autarky

Countries can have no international trade {autarky}|, because they have all resources they need.

balance of payments

Economies send currency to, and receive currency from, other countries {balance of payments}| {payments balance}.

demand

Currency demand increases with exports, foreign investment, foreign loan payments, and gold purchases.

supply

Currency supply increases with imports, overseas military operations, loans to other countries, and gold inflows.

exchange

Currency values vary relative to other currencies. National economies can use exchange-rate system {fixed exchange rate}|. In open currency markets, currency exchange rates vary by demand and supply. Currency values depend on purchasing power, which relates to interest rates. Open currency markets can have wide exchange-rate fluctuations, making international trade more difficult.

institutions

Central banks try to keep currency-exchange rates within fixed ranges, by buying and selling currency to control market. International Monetary Fund (IMF) lends money to countries and regulates international financial and currency markets.

comparative advantage

Between two countries, one country can produce goods or services cheaper than the other country, because one country has cheaper and usually more abundant production factors, including labor and capital, for those goods or services. One country typically produces some goods and services cheaper, and the other country produces other goods and services cheaper, because countries differ randomly in production factors. However, one country can produce all goods and services cheaper than the other country. For example, isolated islands can have high costs for everything.

importing

Countries try to get the cheapest and most abundant goods and services for their consumers. With free trade, countries can import needed goods and services that are cheaper than it can make domestically. Countries import goods and services that they make least efficiently and least cheaply, compared to other countries.

exporting

Countries try to expand markets for which they have the cheapest and most abundant goods and services, or higher value for quality, for their producers and for general prosperity. With free trade, countries can export goods and services that they make cheaper and/or that they do not need. They export goods and services that they produce most efficiently and cheapest, compared to other countries.

trade advantage

For two countries and two products, one country can typically produce one product cheaper {trade advantage}, and the other country can produce other product cheaper. Consumers in both countries have more value if they pay less. Producers in both countries have more value if they sell at lowest cost. With free trade, first country can send product in which it has advantage to second country, and second country can send product in which it has advantage to first country. Both countries now pay less for what they need than they pay with no international trade {absolute advantage}, and producers produce most cheaply. See Figure 1, Figure 2, and Figure 3.

production: factor

Countries have labor, capital, and natural-resource production factors, which they can use to produce goods and services. Production factors have production units. Full-time workers are labor production units. Machines are capital production units. Natural-resource production unit is one ton. At any time, countries have numbers of production factors.

Production units in different countries are the same in some ways and different in other ways. For example, natural resources can differ in purity, form, extraction ease, and cost. Machines can differ in quality, form, features, and cost. Average worker can differ in skill, knowledge, strength, and cost.

production: productivity

One production unit can help make many different goods or services. Production units have different efficiencies {productivity, unit} in making different things. For example, one worker can make two tables a day but only one rocking chair. One machine can weld two motorcycles in a day but only one car. One ton of iron can make several motorcycles but only one car.

When production units shift from making one good or service to making another, productivity ratio shows relative original product and new product amounts.

production: opportunity cost

If producer makes good or service, producer and country cannot make different good or service and has opportunity cost. Businesses must choose what to make with available production units. Businesses and countries make goods and services, based on demand. Available production units determine good and service cost and supply. Demand and cost determine prices, and prices affect demand, supply, and opportunity cost.

production: marginal cost

At any time, companies and countries try to use available production units most efficiently, to keep costs low and meet demand. Uses have optimum or lowest production marginal cost for the most recent good or service.

production: lowest marginal cost

Businesses try to make good and service optimum amounts at lowest marginal cost. Countries try to have good and service optimum amounts. At optimum, if any production unit shifts to another product, product cost rises, price rises, demand falls, and then supply and price decrease to where they were before. Other-product cost rises, price rises, demand falls, and supply and price decrease to where they were before. Everything returns to optimum. Other situations result in lower total production, because production optimizes already.

production: cost

Countries have fixed numbers of production units. Production units can make constant good and service numbers. People know relative productivities for producing goods and services in all countries. People know relative costs for producing goods and services in all countries, so people know relative product costs. In each country, goods and services have different costs.

production: product amount

If country has lowest product cost, for same total cost it can make more product than another country.

comparative advantage

Even if country has lower product cost for all products than other country, international trade can be advantageous for both countries {comparative advantage, international trade}. The country that is better in everything exports the good or service that it makes the most cheaply compared to the other country and that has highest price difference. The country that is worse in everything exports the good or service that it makes almost as cheaply as the other country and that has lowest price difference. See Figure 4 and Figure 5.

For two countries and two products, each country can have higher cost for one product and not the other, or both countries can have higher cost for same product. In both cases, one country exports the product in which it has biggest difference. The other country exports the product in which it has least difference. See Figure 6 and Figure 7.

foreign exchange

For trade, country must sell something to another country to earn foreign currency to buy other country's exports. For only two countries, trade balance must be equal, so selling gets the money for buying. Trade must be reciprocal. Reciprocal trade requires trade advantage, or countries should not trade.

efficiency

International trade allows both countries to be as efficient as possible. Countries can employ all resources, receive the most money, and pay the least. Consumers get the most goods and services, at lowest prices. Workers get highest wages. Countries use resources most efficiently.

For example, each country has one worker each, who can perform 12 hours of work. Countries can make X or Y. See Figure 8.

Businesses maximize productivity. Different workers take different times to make different things. Different workers have different costs. Workers maximize productivity. Idle workers make nothing, so businesses make workers produce something. Workers must work at something, to gain money to buy domestic and/or imported goods, so the only question is: At what do workers work? Workers work where they can gain the most money.

With no trade, workers cannot specialize as much and so cannot get higher income. There is less opportunity and less productivity. With no trade, production must meet domestic needs only. Smaller markets have fewer economies of scale, scarcer resources, fewer workers, and less total money and demand. With trade, cheapest workers work to sell to higher-priced market and make more money.

In second country, workers pay lower prices than with no trade. Workers work to sell more higher-priced items in first country. They make more products than before and so make more money.

First country benefits from that item's increased supply and lower prices. For both countries, overall prices go down, and wages go up.

Figure 1

Country 1 more productive than Country 2 in Product B
 Country 2 more productive than Country 1 in Product A
 Country 1 more productive in Product B than Product A
 Country 2 more productive in Product A than Product B

No Trade

	Country 1	Country 2	Total
Product A	4 (1:3)	6 (3:1)	10
Product B	12 (3:1)	2 (1:3)	14
Total	16	8	24

Trade with Absolute Advantage, Complete Specialization

	Country 1	Country 2	Total
Product A	0	12	12
Product B	24	0	24
Total	24	12	36

Trade with Absolute Advantage, Partial Specialization

	Country 1	Country 2	Total
Product A	2	9	11
Product B	18	1	19
Total	20	10	30

Trade with Opposite of Absolute Advantage

	Country 1	Country 2	Total
Product A	8	0	8
Product B	0	4	4
Total	8	4	12

Figure 2

Country 1 cheaper than Country 2 in Product A

Country 2 cheaper than Country 1 in Product B

Country 1 cheaper in Product A than Product B

Country 2 cheaper in Product B than Product A

Each country has production units whose total cost = 60.

Total production unit cost for both countries = 120.

	Country 1	Country 2
Cost of Product A	4	6
Cost of Product B	5	3

Trade with Absolute Advantage, Complete Specialization

Total Cost = $15 \cdot 4 + 20 \cdot 3 = 60 + 60 = 120$, with 35 made, the most.

Trade with Absolute Advantage, Partial Specialization

Other Cost = $5 \cdot 4 + 8 \cdot 5 + 6 \cdot 6 + 8 \cdot 3 = 60 + 60 = 120$, with 27 made.

Trade with Absolute Advantage, Partial Specialization

Other Cost = $15 \cdot 4 + 0 \cdot 5 + 6 \cdot 6 + 12 \cdot 3 = 60 + 60 = 120$, with 33 made.

Trade with Opposite of Absolute Advantage

Other Cost = $12 \cdot 5 + 10 \cdot 6 = 60 + 60 = 120$, with 22 made.

Figure 3

Country 1 cheaper than Country 2 in Product A

Country 2 cheaper than Country 1 in Product B

Country 1 cheaper in Product B than Product A

Country 2 cheaper in Product B than Product A

Each country has production units whose total cost = 60.

Total production unit cost for both countries = 120.

	Country 1	Country 2
Cost of Product A	5	6
Cost of Product B	4	3

Trade with Absolute Advantage, Complete Specialization

Total Cost = $12 \cdot 5 + 20 \cdot 3 = 60 + 60 = 120$, with 32 made, the most.

Trade with Absolute Advantage, Partial Specialization

Other Cost = $5 \cdot 4 + 8 \cdot 5 + 6 \cdot 6 + 8 \cdot 3 = 60 + 60 = 120$, with 27 made.

Trade with Absolute Advantage, Partial Specialization

Other Cost = $10 \cdot 4 + 4 \cdot 5 + 6 \cdot 6 + 12 \cdot 3 = 60 + 60 = 120$, with 32 made.

Trade with Opposite of Absolute Advantage

Other Cost = $15 \cdot 4 + 10 \cdot 6 = 60 + 60 = 120$, with 25 made.

Figure 4

Country 1 much more productive than Country 2 in Product B
 Country 1 somewhat more productive than Country 2 in Product A
 Country 1 more productive in Product B than Product A
 Country 2 more productive in Product A than Product B

No Trade

	Country 1	Country 2	Total
Product A	6 (1:2)	4 (2:1)	10
Product B	12 (2:1)	2 (1:2)	14
Total	18	6	24

Trade with Comparative Advantage, Complete Specialization

	Country 1	Country 2	Total
Product A	0	8	8
Product B	24	0	24
Total	24	8	32

Trade with Comparative Advantage, Partial Specialization

	Country 1	Country 2	Total
Product A	3	6	9
Product B	18	1	19
Total	21	7	28

Trade with Opposite of Comparative Advantage

	Country 1	Country 2	Total
Product A	12	0	12
Product B	0	4	4
Total	12	4	16

Figure 5

Country 2 somewhat cheaper than Country 1 in Product A

Country 2 much cheaper than Country 1 in Product B

Country 1 cheaper in Product A than Product B

Country 2 cheaper in Product B than Product A

Each country has production units whose total cost = 60.

Total production unit cost for both countries = 120.

	Country 1	Country 2
Cost of Product A	5	4
Cost of Product B	6	3

Trade with Comparative Advantage, Complete Specialization

$$\text{Total Cost} = 12 \cdot 5 + 20 \cdot 3 = 60 + 60 = 120, \text{ with 32 made, the most.}$$

Trade with Comparative Advantage, Partial Specialization

$$\text{Other Cost} = 5 \cdot 6 + 6 \cdot 5 + 6 \cdot 4 + 12 \cdot 3 = 60 + 60 = 120, \text{ with 29 made.}$$

Trade with Comparative Advantage, Partial Specialization

$$\text{Other Cost} = 10 \cdot 6 + 0 \cdot 5 + 12 \cdot 4 + 4 \cdot 3 = 60 + 60 = 120, \text{ with 26 made.}$$

Trade with Opposite of Comparative Advantage

$$\text{Other Cost} = 10 \cdot 6 + 15 \cdot 4 = 60 + 60 = 120, \text{ with 25 made.}$$

Figure 6

Country 1 much more productive than Country 2 in Product A
 Country 1 somewhat more productive than Country 2 in Product B
 Country 1 more productive in Product A than Product B
 Country 2 more productive in Product A than Product B

No Trade

	Country 1	Country 2	Total
Product A	12 (2:1)	4 (2:1)	16
Product B	6 (1:2)	2 (1:2)	8
Total	18	6	24

Trade with Comparative Advantage, Complete Specialization

	Country 1	Country 2	Total
Product A	24	0	24
Product B	0	4	4
Total	24	4	28

Trade with Comparative Advantage, Partial Specialization

	Country 1	Country 2	Total
Product A	18	2	20
Product B	3	3	6
Total	21	5	26

Trade with Opposite of Comparative Advantage

	Country 1	Country 2	Total
Product A	0	8	8
Product B	12	0	12
Total	12	8	20

Figure 7

Country 2 somewhat cheaper than Country 1 in Product A
Country 2 somewhat cheaper than Country 1 in Product B
Country 1 cheaper in Product B than Product A
Country 2 cheaper in Product B than Product A
Each country has production units whose total cost = 60.
Total production unit cost for both countries = 120.

	Country 1	Country 2
Cost of Product A	6	4
Cost of Product B	5	3

Trade with Comparative Advantage, Complete Specialization
Total Cost = $10 \cdot 6 + 20 \cdot 3 = 60 + 60 = 120$, with 30 made, the most.

Trade with Comparative Advantage, Partial Specialization
Other Cost = $5 \cdot 6 + 6 \cdot 5 + 6 \cdot 4 + 12 \cdot 3 = 60 + 60 = 120$, with 29 made.

Trade with Comparative Advantage, Partial Specialization
Other Cost = $10 \cdot 6 + 0 \cdot 5 + 12 \cdot 4 + 4 \cdot 3 = 60 + 60 = 120$, with 26 made.

Trade with Opposite of Comparative Advantage
Other Cost = $12 \cdot 5 + 15 \cdot 4 = 60 + 60 = 120$, with 27 made.

Figure 8

Country 2 takes much less time than Country 1 to do or make Product X
 Country 2 takes somewhat less time than Country 1 to do or make Product Y
 Country 1 takes less time to do or make Product Y than Product X
 Country 2 takes less time to do or make Product Y than Product X
 Each country has 12 units of time.

	Country 1	Country 2
Product X Time Units	12 (2:1)	4 (2:1)
Product Y Time Units	6 (1:2)	2 (1:2)

Trade with Comparative Advantage, Complete Specialization
 Total = $12/12 + 12/2 = 1 + 6 = 7$, the most.

Trade with Comparative Advantage, Partial Specialization
 Other = $6/12 + 6/6 + 6/4 + 6/2 = 0.5 + 1 + 1.5 + 3 = 6$.

Trade with Comparative Advantage, Partial Specialization
 Other = $8/12 + 4/6 + 8/4 + 4/2 = 0.67 + 0.67 + 2 + 2 = 5.33$.

Trade with Opposite of Comparative Advantage
 Other = $12/6 + 12/4 = 2 + 3 = 5$.

factor price equalization

Trade tends to make production-factor prices more equal {factor price equalization theory}, because factor marginal returns are more equal.

fair trade

Governments control international markets to make them voluntary, available, unrestricted, fair, safe, and viable {fair trade}|.

free trade

International trade can involve no tariffs or quotas {free trade}|.

International Monetary Fund

International organizations {International Monetary Fund} (IMF) can lend money to countries and regulate international financial and currency markets.

most favored nation

In trade relations, countries reciprocate tariff reductions, to help both countries. Countries have reciprocal agreements {most favored nation status}| to give each other lowest tariffs.

North American Free Trade Agreement

USA, Canada, and Mexico have few tariffs and few trade restrictions {North American Free Trade Agreement} (NAFTA).

terms of trade

Extra output from trade depends on price ratio {terms of trade} {international trade terms} between two traded products. Higher price ratio makes more output.

trade balance

National economies have difference {trade balance}| {balance of trade} between export values and import values.

SOCI>Economics>Macroeconomics>International Trade>Exchange Rate**exchange rate**

Currencies have prices in terms of other currencies {exchange rate}| {monetary exchange}. Currency-value changes can restrict money flow.

foreign exchange

World economies trade currencies in special markets {foreign exchange market} {foreign exchange}|.

adjustable peg

Countries can try to keep exchange rates stable but can change rates if necessary {adjustable peg system}. Countries can maintain exchange rate and maintain certainty for businesses, but this does not allow monetary policy. Countries can let exchange rate float freely and independently use monetary policy, but this causes uncertainty for businesses.

currency board

Colony or state currency can be a multiple of another country's currency {currency board}. Colony or state must have enough other-country currency in reserve to cover all outstanding currency.

Exchange Stabilization Fund

USA has money {Exchange Stabilization Fund}, to buy and sell in foreign-exchange markets.

gold standard

Formerly, world economy transferred gold to back currencies {gold standard}|.

SOCI>Economics>Macroeconomics>International Trade>Restrictions

embargo

Countries can block another country's trade {embargo}.

quota in trade

Import amounts can have restrictions {quota, trade}.

tariff

Countries can tax imports {tariff}, to protect national industries. Tariffs allow keeping prices high, but this hurts consumers.

SOCI>Economics>Macroeconomics>International

bumiputra

Malaysia "son of the soil" program {bumiputra} gave preferences to Malays.

carry trade

Hedge funds can borrow cheaply in Japan and other low-interest countries and lend in high-interest countries {carry trade}.

chaebol

Korean conglomerate {chaebol}.

foreign aid

Richer countries can send money and expertise {foreign aid} to poorer countries. Aid can require loans or purchases. Foreign aid must be long-term to make exports increase. Foreign aid has little effect if receiving country has political trouble or management and work skills are low. Savings rates must be high, and capital yields must be great. Aid can help give countries whose economy has contracted.

keiretsu

Major Japan banks have allied companies {keiretsu}, which own each other's stock. Banks supply money for investment and affect stock price or short-term profits. Ministry of Finance and Ministry of International Trade and Industry direct economy.

maquiladora

Mexico allows factories {maquiladora}, which make exports, near north border, to have financing from abroad to employ Mexican workers.

Third World

During Soviet-Union period, many countries {Third World} were non-aligned. After that, Third World refers to countries with poor, undeveloped economies that are agricultural and labor intensive.

yakuza

Japanese gang {yakuza}.

SOCI>Economics>Macroeconomics>Theories

capital controversy

In 1960's, economists found neoclassical aggregate-production function too simple {capital controversy} {Cambridge capital controversy} and now use multi-sectoral models, such as those of Leontief and Schraff. New classical economics uses aggregate-production functions.

neoclassical synthesis

Macroeconomic policy can maintain employment levels in free-market economies {neoclassical synthesis}.

new Keynesian macroeconomics

A macroeconomics school {new Keynesian macroeconomics} combined microeconomic and macroeconomic models to modify Keynesian macroeconomics.

SOCI>Economics>Macroeconomics>Theories>New Classical

new classical macroeconomics

In 1970's, new macroeconomics school {new classical macroeconomics} (NCM) {new classical economics} built macroeconomic models from individual and company microeconomic behavior, in opposition to Keynesian macroeconomics.

history

Robert Lucas, Jr., Finn E. Kydland, and Edward C. Prescott developed New-Classical models {Real Business Cycles}, based on John Muth's ideas.

assumptions

NCM assumes that behavior maximizes utility and uses rational expectations and that markets can reach equilibrium through free exchange of prices and wages {market clearing}.

model

New classical economics can use representative-agent models. Agents, such as average consumer or producer, always optimize and have rational expectations. If productivity changes, business has cycles. Agent does not work if productivity and wages decline, waiting until they rise again, so government intervention does not work, since agents have full information.

representative agent

Consumers or producers {representative agent} optimize. Agent optimizations determine economy demand or supply curves. Composition fallacy and Sonnenschein-Mantel-Debreu theorem of Kirman [1992] critically examine representative-agent models.

SOCI>Economics>Macroeconomics>Theories>Monetary Theory

Cambridge equation

In monetary theory, money supply equals ratio, between money holdings and total income, times total income {Cambridge equation}. In this theory, money-supply increase increases prices. However, this theory is false.

Fisher equation

In monetary theory, money supply times money transaction velocity equals physical output times average price index {Fisher equation} {quantity equation} {exchange equation}, because total spending equals total price. In this theory, money-supply increase increases prices, because demand increases. However, this theory is false.

Social Credit movement

In monetary theory, economy output increases faster than purchasing power increases, causes high inventories, and then causes recession and unemployment {Social Credit movement}, so government needs to add purchasing power early in cycle, to balance output and demand.

SOCI>Economics>Microeconomics

microeconomics

Businesses must analyze market prices and quantities {microeconomics}. Cooperation includes sharing among all to maximize results for all, having informed consumers and sellers who know that each depends on the other and help each other to succeed, and free-flowing information designed to align supply and demand with no discontinuities. Markets can do better with cooperation.

lottery

People can buy ticket with number and hope that the number will win predetermined payment {lottery}.

sliding scale

Prices, taxes, or salaries can depend on cost-of-living index or on income {sliding scale}.

SOCI>Economics>Microeconomics>Goods

consumer good

Households {consumer} demand and consume products {consumer good}.

durable good

Produced goods {durable good} | {hard good} can be long lasting.

public good

Goods or services {public good}, such as air, can be publicly available and so have no price.

government

Government provides public goods, such as public education and health-and-safety information, to make better citizens, better consumers, or better-trained workers {external effect, goods}. Government provides public goods, such as parks, if politically necessary. Government must provide needed but unprofitable goods and services, such as vaccinations and insurance, because businesses do not provide them. Governments can provide valuable goods or services to small numbers of people, when making them is unprofitable, or can pay businesses to provide them. Governments can provide or demand large good or service amounts, to save costs {economies of scale, government}.

analysis

Governments can analyze no-price and no-set-price goods and services by cost vs. benefit analysis or least-cost production method analysis.

satisficer

Optimal good or service amount {satisficer} | can meet need, though there are more costly goods or services.

soft good

Produced goods {soft good} can be for short time use.

staple good

Goods {staple, good} can be necessities.

SOCI>Economics>Microeconomics>Money

money

Governments have legal tender {money}, for paying taxes and all debts public and private.

demand

People need money for money transactions, as precaution against future, and as substitute for security speculation. Businesses need money to purchase materials and invest in capital.

interest rate

The money market sets interest rate, based on savings supply and investment demand. Demand from people and businesses raises money interest rate from lenders. Higher saving by people and businesses lowers interest rate.

savings

Savings grow if people and businesses choose future consumption over current consumption. If people and businesses choose future production over current production, they make investments. Savings are available for investment.

GNP

Interest rate varies directly with GNP, because businesses want to invest more if GNP is high.

money supply

Interest rate varies inversely with money supply, because, if more money is available, money value goes down, by marginal-utility principle.

wealth

People can accumulate savings, capital ownership, or natural-resource ownership {wealth}. People have labor value, depending on education, training, natural ability, and labor-supply restrictions. People can benefit from taxation policy, by paying lower taxes, receiving subsidies, receiving benefits, or avoiding expenses. Wealth, labor, and tax policy are the three income sources. Income is price for wealth or labor use. Income varies by supply and demand, as does price.

currency

Money {currency} is a good that people can exchange at any place and time {complete liquidity}.

equity as value

Corporation property, minus outstanding bonds and preferred stock, is corporation net value {equity capital} {stockholders' equity}.

profit

Premiums are for taking risks, or rewards are for innovation {profit}. Profit can be justifiable. Demand increase or cost decrease before market returns to equilibrium can cause accidental profit.

risk premium

Guaranteed return and probable return have different interest rates {risk premium}.

saving

Not purchasing consumer goods or services {saving}, rather than consuming, can accumulate money for future purchases or security.

vested interest

Business actions or court decisions can cause people to gain or lose money {vested interest}.

penury

poverty {penury}.

mammon

wealth as evil {mammon}.

SOCI>Economics>Microeconomics>Money>Investment**investment by business**

Businesses have expected return rate {marginal efficiency of investment} (MEI) on latest dollar invested {investment}. Current interest rate, profit availability, and business-cycle changes affect MEI. Purchasing capital, rather than consumer, goods can make more money in future.

depreciation

Capital decreases value over time {capital depreciation} {depreciation}, as it wears out, becomes obsolete, or requires repairs. Businesses must replace capital, or capital supply decreases over time. Net capital formation is gross capital formation minus depreciation.

tontime

In France, people can invest in an annuity fund, and, if a member dies, his or her shares distribute to the other members {tontime}.

SOCI>Economics>Microeconomics>Money>Price**price index**

Prices are relative to base price {price index}. Capital-good prices are relative to base price {wholesale price index}. Consumer-good prices are relative to base price {consumer price index}. Price index tends to increase over time.

valuation

price {valuation}.

SOCI>Economics>Microeconomics>Property**personal property**

People own goods and services {personal property, economics} {property}. Property can be things, land, minerals, people, labor, capital, and products. Property rules give rights to people and prescribe methods to acquire, transfer, and lose rights. People acquire rights by first use, claim, gift, bequest, and exchange.

communal property

States or associations can own property {communal property}.

private property

People typically can do whatever they want with what they own {private property}|, with no interference from state, as long as it does not affect others' rights.

SOCI>Economics>Microeconomics>Property>Rents

closed-end lease

Leases {closed-end lease}| can have definite end date.

lend-lease

Party can loan property for set period to another party {lend-lease}| and can defer payments.

licensing

Others can pay to use inventions {licensing, rent}|.

open-end lease

Leases {open-end lease}| can have no definite end date.

quasi-rent

Businesses account for short-term returns on capital stock {quasi-rent}|.

SOCI>Economics>Microeconomics>Market

market

Goods and services gain more value if they can exchange for something else {market}|. Therefore, economy establishes places or situations in which to exchange goods and services. Main markets are for money, labor, producers, and retail sales. Price is same throughout one market. Low transportation costs and standardized goods and services allow bigger markets. Government services and goods, paid for by taxation, can have no market.

competition in market

In markets, sellers compete {competition, market}| to sell similar goods or services.

price

Competition forces sellers to lower prices and profits to the lowest level that still allows them to keep selling goods or services. If one seller has lower price, everyone buys from that seller, until supply finishes. Other sellers must lower prices to sell anything.

If price is so low that seller cannot make profit, seller leaves market. This lowers supply and so raises price, allowing other sellers to profit more.

If price is too low, sellers lower production, and make something else, because profit is low for that good or service. Supply becomes less, and price rises.

If price is too high, all sellers have good profit. Existing sellers increase supply. Price lowers. New sellers can enter market to try to earn profit, thus raising supply and reducing price.

expenses

At lowest price, sellers that have higher expenses make less profit. They cannot raise price, because then they can sell nothing. They can only lower expenses.

expenses: cost

For sellers, trying to increase supply raises costs and trying to sell more requires lower prices. Ideally, price equals cost, and businesses make and sell optimum quantity.

effects: good

Competition can increase pressure to lower prices and lower costs. Competition can increase pressure to improve goods and services.

effects: bad

Competition can increase pressure to cheat, use unethical selling practices, and use unethical buying behavior. Competition can cause too many failed enterprises, caught in business cycles. Competition can cause non-productive expenditures, such as for advertising, image-making, or financial maneuvers. Competition can cause distribution, production, and demand inefficiencies. Competition can emphasize greed and winning at all costs. Economies based on winning can encourage monopoly, substandard products, and production values based on inessential factors, such as sex and power. Competition can make differential pricing.

price discrimination

The same product can have different prices in different markets {price discrimination}}, if one market has higher demand elasticity.

transaction exchange

In market, exchanges {transaction}} are voluntary and honest, so more exchanges happen, which increases efficiency. Encouraging exchanges allows maximum satisfaction.

SOCI>Economics>Microeconomics>Market>Period

market period

Periods {market period}} exist in which supply remains same and price depends only on demand.

short period

Periods {short period}} exist in which plant capacity is constant, but sellers can vary output.

SOCI>Economics>Microeconomics>Market>Structure

market structure

Number of sellers and product type determine market nature {market structure}. Many sellers can sell standardized product in pure competition.

Many sellers can sell small amounts of differentiated product {monopolistic competition}, which emphasizes product design and publicity, because brand name, variety, prestige, and habit affect consumer. Price is higher but equals extra value to consumer. Monopoly and oligopoly can lead to more-efficient management and better technology, which can lower costs. Monopoly and oligopoly markets typically depend on prestige or high sales, rather than profit.

black market

Markets {black market}} dealing in illegal or illegally priced goods and services can develop.

oligopoly

If market has few businesses {oligopoly}}, monopolistic practices can develop.

SOCI>Economics>Microeconomics>Market>Structure>Monopoly

monopoly

Competition in some markets {natural monopoly}, such as public utilities, can be socially confusing or bad. If market has only one business {monopoly}} {monopolization}, business can fix prices and use pricing and other devices to keep others out of market. Governments can outlaw agreements to fix prices or outputs and attempts to exclude competition from markets.

collusion

Monopolistic practices {collusion}} can be agreeing to fix prices, split market, or otherwise restrain trade.

foreclosure in monopoly

Monopolistic practices {foreclosure, distribution}} can be trying to curtail competitive product or service distribution.

predatory pricing

Monopolistic practices {predatory pricing}| can be selling product below cost to drive competitor out of the market.

tying in buying

Monopolistic practices {tying}| can be forcing people to buy other products when they buy product.

SOCI>Economics>Microeconomics>Market>Restrictions**price ceiling**

Laws {price ceiling}| or government payments to companies {subsidy} can keep price too low. People's demand rises but is unsatisfied, because businesses do not make more low-priced items.

quota in production

Producers can limit production {quota, production}| {production quota, market}.

rationing

People can receive fixed good or service amounts {rationing, market}|.

surplus

Businesses can make more high-priced items, and some do not sell {surplus}|, because public does not have that demand. Government or business keeps surplus in storage {warehouse} {grain silo}.

SOCI>Economics>Microeconomics>Supply And Demand**demand**

People need and want {demand}| physical objects {good, economics}, to consume or use, and actions {service, economics}, to have something done for them. To acquire goods and services, people have to exchange something. People like to have money itself. Money provides security, prestige, and ability to make future purchases. People exchange their work/time for money. People value time for vacation and leisure. They must choose between work and free time.

supply

For goods and services {supply}, limiting production {production quota, supply} or allotting fixed amounts to people {rationing, supply} makes cost and price rise.

elasticity of price

Demand and supply change with price {elasticity, economics}|.

demand

Demand can change greatly with price, if substitute product is available, if product is not necessary, or if consuming that product is not a habit. Demand can change little with price, if no substitute product is available, if product is necessary, or if consuming the product is a habit.

elasticity

Percentage change in quantity demanded divided by percentage change in price {price elasticity} can be greater than one {elastic demand} or less than one {inelastic demand}.

revenue

Total revenue is price times quantity. Total revenue is greatest if elasticity equals one. Because costs minimize at maximum quantity, and price maximizes at minimum quantity, highest revenue has equal price and quantity change.

income

Percentage income change affects product quantity demanded {income elasticity}.

substitution

Related-product price changes {substitute product} {complementary product} affect demand for product {cross-elasticity}.

factors

Production-factor demand {derived demand} depends on demand elasticity, substitute availability, and percentage of total cost.

supply

Supply elasticity changes with new production methods, varying production-factor prices and quantities, and production expansion or contraction difficulty.

price

Goods and services cost money {price}.

demand and supply

In free markets, demand and supply determine price, and price determines supply and demand, by a sort of invisible hand.

High price makes low demand, and low price makes high demand. On graphs, demand curve has negative slope. See Figure 1.

High price makes high supply, and low price makes low supply. On graphs, supply curve has positive slope.

demand and supply: value

Relative good or service {resource, supply} price measures supply and demand. People choose money, time, goods, or services to maximize their or their family's satisfaction, following their self-interest. Choices involve money, time, good, or service exchanges, so people must weigh costs and benefits. People can consider other alternatives, such as making no choice. People and situations have different good, service, time, and money optimum choices. Ideally, people can exchange until whole group has optimized member satisfaction.

Perceived demand for goods and services stimulates their production, because they can sell. People change jobs to work at places with more profit and higher pay. Production creates good and service supplies. Thus, businesses supply more-valuable goods and services more. Ideally, trend always increases total satisfaction.

price

Price is where supply amount equals demand amount {price equilibrium}.

Increasing good or service price causes people not to choose that thing and perhaps choose another similar thing. This lowers good or service demand and makes price fall. See Figure 1. Price returns to where it was before.

Decreasing good or service price increases demand and makes price rise. See Figure 1. Price returns to where it was before.

price: equilibrium

Demand and supply are equal at only one point, at moderate price, demand, and supply. At this point, supply equals demand. This point sets actual price {equilibrium price} and quantity sold {equilibrium quantity} in market.

price: demand

Price increases with demand. If quantity demanded is high, value is high. If quantity demanded is low, value is low.

Increased good or service demand, caused by advertising, innovation, cultural changes, or perceptions, not by price change, shifts demand curve to right. It makes demand higher at same price. It makes demand the same at higher price. See Figure 2.

Decreased good or service demand, caused by counteradvertising, other-product innovation, cultural changes, or perceptions, not by price change, shifts demand curve to left. It makes demand lower at same price. It makes demand the same at lower price. See Figure 2.

price: supply

Price decreases with supply. If quantity supplied is low, price is high, because fixed costs spread over fewer items. If quantity supplied is high, price is low, because fixed costs spread over many items.

Decreasing good or service supply, by decreased production, transportation problems, natural disaster, or war, shifts supply curve to left. It makes supply lower at same cost. It makes supply the same at higher cost. See Figure 3.

Increasing good or service supply, by increased production, increased efficiency, or increased transportation, shifts supply curve to right. Supply is higher at same cost. Supply is the same at lower cost. See Figure 3.

price: disturbances

In short term, demand curve does not change, and supply curve does not change. After price disturbance, price returns to former equilibrium value. After disturbance to price equilibrium, price and quantity converge back to equilibrium by successive stages of price change, then supply change, then price change, and so on {cobweb theorem}. See Figure 1.

For example, if small company goes bankrupt, supply decreases slightly. Price goes up slightly. Other suppliers want to make more. They make more, cost goes down per item, and price is lower. Price returns to equilibrium.

If small company enters market, supply increases slightly. Price goes down slightly. Other suppliers want to make less. They make less, cost goes up per item, and price is higher. Price returns to equilibrium.

If population increases slightly, demand increases slightly. Price goes up slightly. Suppliers want to make more. They make more, cost goes down per item, and price is lower. Price returns to equilibrium.

If population decreases slightly, demand decreases slightly. Price goes down slightly. Suppliers want to make less. They make less, cost goes up per item, and price is higher. Price returns to equilibrium.

price: government

Artificial demand can keep price too high.

Price supports can keep price too high. Businesses make more high-priced items, and some do not sell, because public does not have that demand.

Government or business can keep surplus in storage. Note: Goods on hand are not surplus, but just stock {stock, good} {in stock} for use by retail stores as inventory.

Figure 1

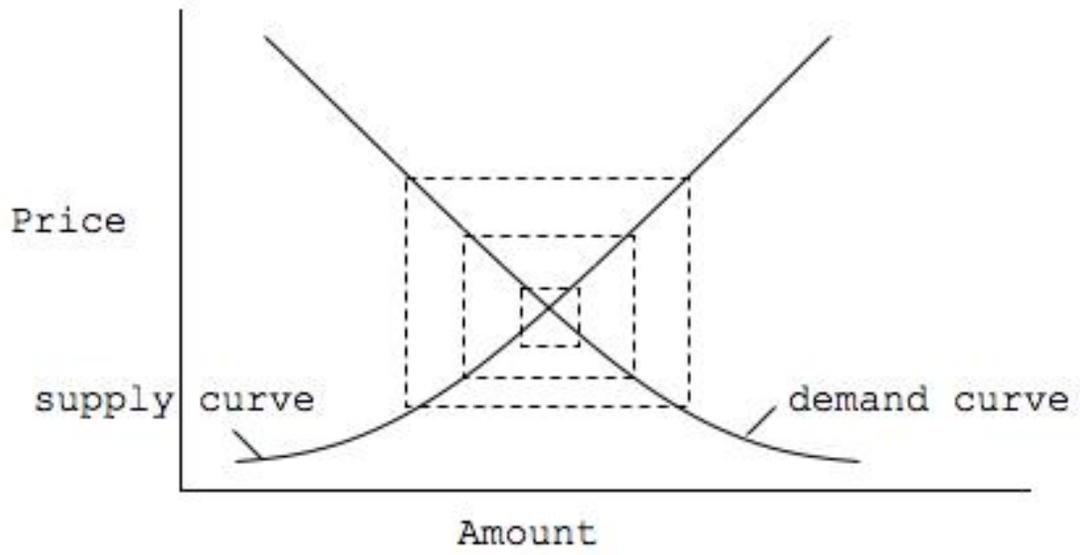


Figure 2

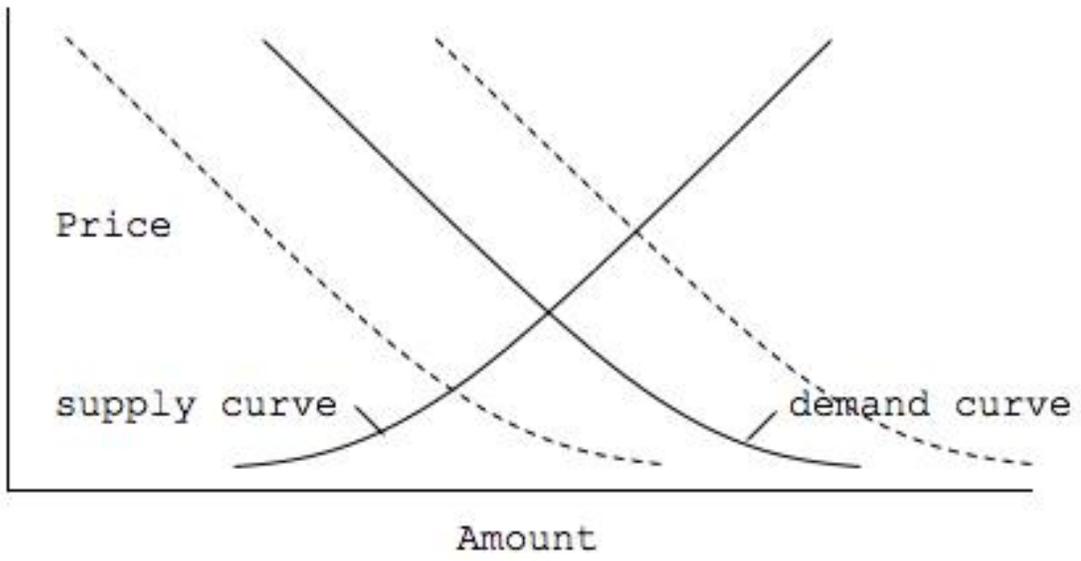
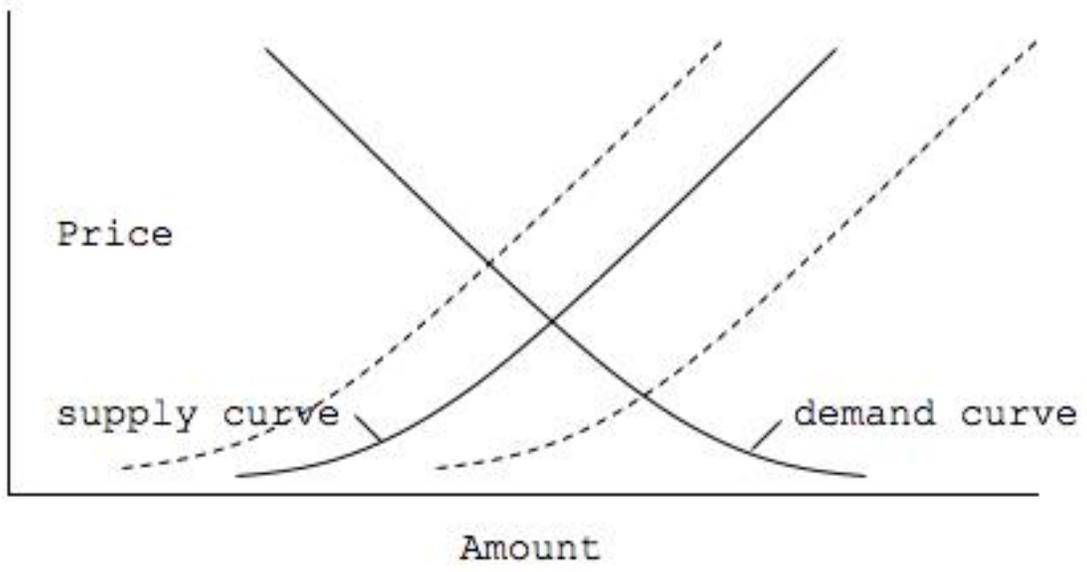


Figure 3



SOCI>Economics>Microeconomics>Business

business

Individuals, partners, or corporations can buy labor, capital, and materials and produce goods and services {business}.

legal structure

Businesses include sole proprietorship, partnership, corporation, limited liability company (llc), personal service corporation (psc), or family business.

processes

Businesses have processes {business process}: operations, transfers, inspections, and storage. Distances, times, delays, and buildings affect processes.

system

Businesses have inputs, processes, and outputs. Processes start, stop, and require decisions. Businesses create, move, inspect, modify, handle, and store forms.

system: costs

Businesses have labor, capital, and material costs.

system: revenue

Businesses have revenue from selling goods and services.

structure

Businesses have structure by departments and jobs. Businesses have authority levels and responsibilities.

structure: distribution

Businesses send goods and services around market.

structure: marketing

Businesses try to create demand for their goods and services.

structure: sales

Businesses close deals for their goods and services.

structure: personnel

Businesses manage employees.

structure: finance

Businesses manage cash flow and assets.

buying business

Buyers need good credit and enough money. Buyers evaluate their skills and experience and choose the best business. They have advisors, organize financing, evaluate disclosure documents, evaluate business, check market, determine fair price, and create business plan. Buyers can manage the business or hire manager.

Existing businesses have business system, customers, equipment, inventory, suppliers, employees, facilities, and immediate revenue. Existing businesses can have market, financial, liability, or debt problems. New owner typically needs previous-owner experience and personal relationships for a while.

starting business

In USA, starting businesses is risky, because probability of survival for two years is one half and for five years is one-fifth. Starters must risk their own money and can have trouble getting financing. Income is low for long period. Starters must have many skills, including people skills.

private enterprise

Businesses {private enterprise} can be non-governmental.

enterprise

business {enterprise}.

entrepreneur

People {entrepreneur} can start businesses. Entrepreneurs exhibit individualism, work diligently, spend little, have self-discipline, want wealth, have personal initiative, and follow self-interest.

outsourcing

Businesses can have work done by contractor companies {outsourcing}. Businesses do not have to hire workers. The hired company is expert at doing that job, has knowledge of all laws and regulations, and can do the job cheaper and better.

offshoring

Businesses can have work done by overseas contractor companies {offshoring}. Because of the Internet, high-quality phone and data lines, cheap communications, and the availability of communications equipment in all countries, companies can hire another company in another country. The hired company and country typically have low wages, few regulations, little unionization, and large numbers of workers with good English, and they encourage overseas investment and partnerships. Tax laws allow tax exemptions for companies operating overseas if funds are kept overseas, and this promotes outsourcing and offshoring.

SOCI>Economics>Microeconomics>Business>Administration

administration theory

Administration theories {theory of administration} {administration theory} can use ideas by Henri Fayol {rationalistic theory}; F. W. Taylor {scientific management theory}; Argyris, Bennis, Likert, McGregor, William H. Whyte, Roethlisberger, and Zaleznik {organizational behavioral theory}; and Herbert Simon, J. G. March, and R. M. Cyert {systems theory} {decision theory, economics}. Good administration relates responsibility amount to authority amount. Good administration has only one supervisor for each worker, and supervisors control six or seven workers.

Black-Scholes model

Models {Black-Scholes model}, based on thermodynamic equilibrium equations, predict stock-price volatility.

break-even analysis

Business analysis {break-even analysis} can determine risk-of-loss range and out-of-pocket range. Risk-of-loss range includes time product sells at loss less than renting. Out-of-pocket range includes time that owning costs are less than renting costs.

feasibility study

Business planning involves possibility study {feasibility study}. Feasibility study determines fixed costs, variable costs, equipment choices, profits, sales, market factors, outside factors, housing, buildings, employee number, employee quality, efficiencies, alternatives, capital, renting needs, and buying needs.

logistics

Businesses or armies must procure and distribute supplies {logistics}.

planning in business

Businesses can use past experience {forecasting}, models, simulations {simulation, economics}, computer graphics, optimizations, game playing, heuristics, adaptive problem solving, and trial and error {planning}.

SOCI>Economics>Microeconomics>Business>Administration>Tests

benchmarking

Businesses test applications to check efficiency and scheduling {benchmarking}.

program evaluation and review

Business plans can evaluate {program evaluation and review} (PERT).

SOCI>Economics>Microeconomics>Business>Administration>Projects

project planning

Business leaders find resources, set goals, and assign activities to connect resources and goals {project planning}.

critical path

In networks, paths {critical path}| from beginning to end can take longest time. All extra effort is for critical-path tasks. Business plans can concentrate on critical path {critical path method}.

SOCI>Economics>Microeconomics>Business>Inventory

inventory of business

Businesses have some unsold, but ready to sell, goods {inventory, business}|.

just-in-time

Manufacturing can keep only enough inventory on hand to meet current production needs {just-in-time production}|. This system requires high-quality parts, reducing need for extra parts. This system requires that parts go to precise locations on exact schedules linked to production.

SOCI>Economics>Microeconomics>Business>International

globalization

High-wage countries can transfer capital and technology to low-wage countries {globalization}, to employ cheaper workers. Globalization results from better telecommunication, cheaper air transportation, political stability, better infrastructure, better legal systems, and reduced tariffs.

offshore

Businesses can incorporate in another country {offshore}, which has no business regulations.

SOCI>Economics>Microeconomics>Business>Department

advertising

Business departments {advertising}| can create communications to aid sales. Ideally, advertising involves honesty, fairness, genuine needs, high quality, functionality, simplicity, fair labor practices, and modest profit. Really, advertising faces pressure to do the opposite.

consulting

Businesses typically ask for help, mostly from outside company. People with skills and experience can contract for projects {consulting}|.

effects

Consultants have flexible schedules, more independence, low financial investment, and higher potential income. Consultants typically have low income at first, must work alone, must risk own money, and have many clients instead of one boss.

planning

Potential consultants evaluate their people skills and experience. They define consulting niche, market, competition, fees, business plan, and business processes. Starting consultancy has low risks and is easier than setting up business.

accounting

Business departments {accounting}| can track expenditures and revenues, record financial transactions and prepare financial statements.

human resources

Business departments {human resources}| {personnel} can hire, promote, provide benefits to, and terminate employees.

management

Business leadership {management} coordinates production units, trying to have optimum profit, sales, efficiency, or other goal. Management is production factor. Management is like labor, because it is service, but is not a production unit.

marketing

Business departments {marketing}| can predict sales, investigate how to improve sales, and create material to aid sales. Ideally, marketing involves honesty, fairness, genuine needs, high quality, functionality, simplicity, fair labor practices, and modest profit. Really, marketing faces pressure to do the opposite.

SOCI>Economics>Microeconomics>Business>Department>Sales

sales

Business departments {sales department} can convince customers to buy {selling}. Ideally, selling involves honesty, fairness, genuine needs, high quality, functionality, simplicity, fair labor practices, and modest profit. Really, selling faces pressure to do the opposite.

window dressing

Store window displays {window dressing} can make good appearance.

SOCI>Economics>Microeconomics>Business>Department>Sales>Charges

cost-plus

Price can reflect cost plus small percentage {cost-plus}|.

cover charge

Amount or percentage {cover charge}, for snacks or entertainment, can add to bill at bar or nightclub.

surcharge

Taxes or extra amounts {surcharge}| can add to cost, for extra service.

SOCI>Economics>Microeconomics>Business>Department>Sales>Customers

carriage trade

wealthy customers {carriage trade}.

clientele

luxury-store customers {clientele}.

SOCI>Economics>Microeconomics>Business>Department>Sales>Practices

discount

Deductions {discount} from regular prices can help sales.

hard sell

Selling or advertising can use product features and perceived need {hard sell}|, not sex, glamour, personality, or humor.

loss leader

Stores often use low-priced item {loss leader}| to get customers to come to the store, and hope they buy other things.

rebate

Returns {rebate} of part of payment can induce sales.

sharp practice

deceptive selling {sharp practice}.

shell game

switching situation or goal to deceive {shell game}.

skin game

cheating {skin game}.

soft sell

Selling or advertising can use sex, glamour, personality, or humor {soft sell}|, not product features and perceived need.

SOCI>Economics>Microeconomics>Business>Department>Sales>Documents**bill of exchange**

Orders {exchange bill} {bill of exchange}| can be to pay money to people.

bill of fare

menu {fare bill} {bill of fare}.

bill of lading

goods-received list {lading bill} {bill of lading}|.

bill of sale

Written statements {sale bill} {bill of sale}| can transfer property rights in exchange for money.

blue book

Books {blue book}| can list important people. Empty bound books are for examination answers.

chit

Notes {chit} list cost for food and drinks.

invoice

Lists {invoice}| can show delivered goods or services and their prices.

letter of credit

Bank documents {letter of credit}| {credit letter} can authorize loans up to stated amount.

rain check

Authorizations {rain check} can purchase something at later date at today's price.

voucher

Documents {voucher}| can pay for good or service, such as school tuition.

SOCI>Economics>Microeconomics>Business>Department>Sales>Sale**sale**

Stores often use low-priced loss leader to get customers to come to the store and hope that they buy other things {sale}.

clearance sale

sale {clearance sale} designed to reduce inventory.

rummage sale

used-item sale {rummage sale}.

white sale

linen sale {white sale}|.

SOCI>Economics>Microeconomics>Business>Document**articles of incorporation**

Corporation founding document {articles of incorporation} states date, name, corporation type, purpose, agent for service of process, and signature. It is notarized.

business letter

Letters {business letter} can state sender address, date, recipient address, salutation, thanks or purpose, enclosures, instructions or clarifications, closing, and signature.

bylaws

Corporation procedures {bylaws} state name, purpose, offices and officers, membership if any, board of directors, director election and removal, meetings, committees, fiscal year, contracts, bank accounts, amendments, and signature.

employee handbook

Employee rules and regulations {employee handbook} state date, employment types, and employee duties, responsibilities, rights, and privileges. It states technical details of employment and education. It discusses equal opportunity, relatives, citizens and residents, recruitment and staffing, part-time employment, resignation, disabilities, reimbursement, transportation, registration, references, solicitation, policies, discipline and corrective action, harassment, drugs, attendance, smoking, compensation, promotion, overtime, incentives, insurance, holidays, sick leave, vacation, benefits, emergencies, leave of absence, severance, and safety.

employment contract

Contract types {employment contract} can state date, agreement type, laws of state, venue, requirements, indemnity, release of liability, publicity, rights and claims, losses, supervisor, management structure, disability, project termination, work description, and signatures.

loan contract

Contract types {loan contract} can state date, lender, borrower, loan amount, amount due, due date, finance charge, annual percentage rate, prepayment, security, default, late charges, right of offset, collection fees, and acceptances.

performance review

Yearly employee evaluation {performance review} states date, name, performance period, department, job title, supervisor, goals, accomplishments, results, rating, awards, committees, and goal setting methods.

registration form

Signup sheets {registration form} state date, requirements, liability disclaimer, procedures, representation, use of name, management structure, schedule, and signatures.

sales contract

Contract types {sales contract} can state date, object type, object description, laws of state, venue, buyer, seller, price, closing date, financing, costs, disclosures, conditions, time period, dispute resolution, prations, indemnity, and acceptances.

straw man

first proposed solution {straw man} {strawman} for discussion.

use case

business situation description {use case}.

white paper

Governments, consultants, or other authorities can write technical reports {white paper} about a problem category.

wire frame

line drawing {wire frame}.

SOCI>Economics>Microeconomics>Business>Document>Plans

business plan

People can make management, marketing, financial, and structural analyses {business plan}, to present to lenders, vendors, lawyers, accountants, and consultants.

type

You can consult, franchise, buy, or start.

legal

Business can be sole proprietor, partnership, or corporation.

factors

You must consider business structure, taxes, contracts, copyrights, and liability.

parts

Business-plan title page has business name, date, version number, confidentiality statement, proprietary statement, address, and telephone number. Business plans have table of contents. Business plans include executive summary, present-situation statement, vision statement, goals statement, timetable, task schedule, market analysis, customer profile, competition analysis, risk statement, product analysis, process statement, pricing, fees, philosophy, marketing plan, communications with customers and others, management team, staff, functions to perform, legal structure, financial projection, capital needed, contingency plans, and conclusion. Goals statement has products/services, image, market, and income. Marketing plan is advertising, media, and referrals.

financial plan

Plans {financial plan} can show startup, legal, survey, marketing, capital, travel, communications, office, compensation, and professional services costs. Communications are Internet, telephone, fax, pager, and publications. Office has materials, utilities, and insurance. Professional services are banker, accountant, and lawyer. Plans can show capital expenditures for office space, office equipment, software, and office furniture. Office space has carpet, paint, and lighting. Office equipment is computer, printer, scanner, fax, and shredder. Software is for accounting, contacts, and documents. Office furniture is filing cabinets, shelves, chairs, and table. Plans can show yearly revenues for products and services, have cash-flow statement, and have balance sheet.

operational plan

Plans {operational plan} can show hours worked at task types each month.

SOCI>Economics>Microeconomics>Business>Sectors

agriculture

Raising and processing food {agriculture} {farming, business} is a high-risk business. Weather and seasons cause farm prices to be unstable over short terms. Farmers typically need loans to plant and till, which they pay back after harvest. This situation increases risk. Small farms typically have low productivity and low income. Farmers typically expand production to take advantage of good years, resulting in too much food and thus lower prices.

construction

Businesses {construction} can produce buildings.

manufacturing

Businesses {manufacturing} can produce goods.

numismatics

coin collecting {numismatics}|.

placer mining

People can search river or glacier sand or gravel for minerals {placer mining}|.

public utility

communication, electricity, or natural-gas companies {public utility} {utility, business}.

real estate

Businesses can deal in land and buildings, plus property improvements, such as electricity, water, sewer, and telecommunications connections {real estate, business}|.

realty

real estate {realty}|.

service trade

Service trades {service trade} provide services.

telecommunications

telegraphy, telephone, radio, television, and Internet {telecommunications}|.

telegraphy

People can send messages, coded into long and short ones separated by dashes, over wires {telegraphy}|.

telemetry

People can send messages, coded into long and short ones separated by dashes, by radio {telemetry}|.

wire service

News organizations send articles, movies, and photographs over radio to subscribers {wire service}|.

SOCI>Economics>Microeconomics>Business>Sectors>Finance**finance**

banking and stock markets {finance, sector}.

bank

Institutions {bank}| hold and lend money. Money is in checking or savings accounts.

savings and loan

Institutions {savings and loan}| {credit union} can have members who save money and receive loans.

SOCI>Economics>Microeconomics>Business>Kinds**business types**

Production and supply involves different goods and services {business types}.

factors

Businesses must have capital supply, buy labor and resources, and produce output. Businesses have expenses for investment, labor, resources, land, capital, interest payments, and taxes. Businesses receive revenue for production-unit output. Businesses hope to have positive difference between revenue and costs. Profit provides incentive for owners to have business, satisfies owners' desire for reward, and provides money for capital.

large businesses

Large businesses have resulted from several factors. Technical developments require large plants. Computers and business theory aid management. Mergers eliminate competition and inefficiencies. Financiers encourage mergers and bigness. Expensive advertising requires large budgets. Complex and expensive patent laws require large legal staffs. Strong unions balance big companies.

chain store

large retailer {chain store}|.

concession

Business can obtain exclusive right {concession}| to sell product or service in political region.

franchising

Business can be local branches {franchise} of a regional business. Business {franchisee} can buy right to sell product or service {franchising}| from company {franchiser}.

franchiser

Franchiser can license franchisee to sell product or service and provide training, advertising, communications, and operating advice or techniques {business format franchise}, such as for fast-food restaurants and convenience stores.

Franchiser can sell franchisee trademarked or brand-name products or services {product franchise} {trade name franchise}, such as for beer distributors and car dealerships.

franchise

Established franchises have market for the product; assist with financing, training, advertising and promotion; and provide business model.

franchise: value

Limiting competition, typically by licensing, makes franchise value increase.

franchisee

Franchisees typically have higher income sooner but have higher starting costs and pay franchise fees, royalties, or gross-sales percentage. Franchisees must follow franchiser rules. Franchisees evaluate their skills and experience and choose the best business. They can have advisory boards, organize financing, evaluate franchises, check markets, and create business plans.

home office

Offices {home office}| in homes need quiet and comfort.

properties

Office is not near kitchen, TV, and other activities. Colors are neutral. Office has windows for fresh air and good furniture. Office has telephone, filing cabinets, bookshelves, computer, Internet modem, printer, fax machine, scanner, copier, adding machine, cell phone, desk lamp, radio, and safe.

effects

Home officers have flexible schedules and no commute. They can deduct home office expenses. There is little risk, because no rent or lease. Working at home can cause friction with spouse or children. There can be many distractions. You work alone. Clients can be worry about home businesses. Zoning laws can prevent home businesses.

merger

Company combinations {merger}| can eliminate competition and inefficiencies. Financiers encourage mergers and bigness.

small business

Businesses {small business} can result from market growth, cheap and widespread transportation, available electric power, substitute availability, invention, low import tariffs, government small-business aid, and anti-monopoly laws.

sole proprietorship

Businesses {sole proprietorship}| can have one owner {single proprietor}. Sole proprietors are single persons or married couples. Independent contractors and all self-employed people are sole proprietors. USA has 15 million to 20 million sole proprietorships, 80% of all businesses. Sole proprietorship is typically the easiest and fastest way to start business and is the cheapest and most common way to start. Owner, not business, files tax return. Owner must pay estimated income tax, Social Security tax, and Medicare tax quarterly.

turnkey

People can acquire and operate systems in few steps {turnkey}|.

SOCI>Economics>Microeconomics>Business>Kinds>Group

cartel

Business groups {cartel}| can control production and prices.

conglomerate business

Businesses {conglomerate, business}| can grow by buying other businesses.

syndicate

Investment banks {syndicate}| can jointly underwrite company.

SOCI>Economics>Microeconomics>Business>Kinds>Partnership

partnership

Two or more people can start business {partnership}| and share profits and losses. Partners share responsibility for liabilities.

types

In most partnerships {general partnership}, partners have equal involvement in the business and can make contracts and perform all business transactions. Partnerships {limited partnership} can have separate managers and investors, who must register with state securities-regulating agency.

tax

Business does not file tax return. Partners must file, but can assign profits and losses differently. Changing partnership relation typically causes tax liability. Terminating partnership typically causes tax liability for all partners.

family limited partnership

Business is sole proprietorship if one person or married couple owns the business, even if family runs the business. Otherwise, it is partnership, limited-liability company, or corporation. Family can form limited partnership {family limited partnership}| (FLP) to minimize estate taxes. For partnership, lowest-income person claims profits.

SOCI>Economics>Microeconomics>Business>Kinds>Corporation

corporation business

Businesses {charter} {corporation}| can be legal entities allowed by states and have ownership shares.

profit

Corporation profits go to stockholders. Corporations can use profits to pay dividends {earnings per share} or to expand capital.

startup

Writing incorporation articles and bylaws and applying to state cause higher costs for forming corporations. Corporations pay annual fee to state.

taxes

Owners do not file tax returns and have no personal liability. Profit-making corporations can be C or S corporations.

dividend

Corporations can pay profits to stockholders. Company reports profit per stock share {dividend, stock}|.

limited liability

Stockholders are responsible for corporation debt only up to stock value {limited liability}|.

SOCI>Economics>Microeconomics>Business>Kinds>Corporation>Kinds

C corporation

Corporations {C corporation} can file tax returns. Owners are employees and do not file. Small C corporations typically do not pay taxes, because profits are for inventory or growth.

close corporation

Some corporations {close corporation}| do not trade stocks.

holding company

Companies {holding company}| can own other corporations.

limited liability company

Corporations {limited liability company} (llc) can file tax return but not pay taxes. Owners file tax returns but have no personal liability. State typically closely regulates limited liability companies.

personal service corporation

Corporations {personal service corporation}| (PSC) {professional corporation} can have license and have close regulation by state. They are only for health, law, engineering, accounting, actuarial science, performing arts, and consulting professionals, who cannot otherwise incorporate. Personal service corporations file tax returns. Owners do not file tax returns but have limited personal liability. Personal service corporations typically have lower taxes because they allow untaxed fringe benefits.

S corporation

Owners can file tax returns, not their corporations {S corporation}. Owners have individual tax rates. Owners assign profits and losses. Profits cannot be for inventory or growth. S corporations are typically good for businesses that expect to lose money during first years, because owners can report losses on tax returns.

SOCI>Economics>Microeconomics>Business>Kinds>Corporation>Stock

preferred stock

Corporations issue ownership certificates {preferred stock}| that have first rights to profits and repayment.

share

Corporations issue ownership certificates {share}| {common stock, share} for percentage of corporation, to get money to start, expand, or pay expenses.

SOCI>Economics>Microeconomics>Business>Kinds>Customer Types

retail

Businesses {retail, business}| can sell goods to consumers.

wholesale

Businesses {wholesale, business}| can sell goods to distributors.

SOCI>Economics>Microeconomics>Agriculture

agricultural policies

Government {agricultural policies} can guarantee food prices by price supports. Government can buy and store farm surpluses to support farm prices.

agrology

Soil science {agrology}| helps grow crops.

agronomy

agricultural science {agronomy}|.

soil bank

Government can pay farmers not to use their land {soil bank}|, to increase prices and conserve natural resources.

SOCI>Economics>Microeconomics>Banking

bank statement

Statements {bank statement} can indicate bank deposits and payments.

clearinghouse

Organizations {clearinghouse}| receive checks or orders from member banks or market traders and arrange and disburse payments among members efficiently.

demand deposit

Money {demand deposit}| can be in checking accounts.

deposit insurance

Government can insure deposits {deposit insurance} in banks that it regulates. Banks pay fees to provide insurance.

discount window

Commercial banks can get credit from Federal Reserve {discount window}|.

loan by bank

Banks use checking-account money to sell money {loan} to people and businesses. Checking-account holders have right to withdraw money.

reserves

In case checking-account holders withdraw money, banks must keep a reasonable or regulated percentage of checking-account money on hand. Banks do not need all checking-account money, because only a percentage of customers need only a percentage of money. Banks like to loan all the money they can {loaned up}. Getting more customers adds to reserves. Loan repayments add to bank reserves, allowing more loans.

reserves: percentage

If reserve percentage is 25%, bank can loan four times amount it has in reserve ($1 / 0.25 = 4$).

reserves: government

Government can reduce demand by increasing reserve ratio.

reserves

Banks have checking accounts with national or central bank and only keep enough money {reserves, bank} {bank reserves} to meet expected demand from checking-account customers, because it is unlikely that all people will demand their money at once. By law, reserves must be a percentage, typically 25%, of bank demand deposits. When bank receives checking-account deposits, it places some money in reserves and has the rest available to make loans.

run on the bank

Depositors can demand their money back, which can cause others to demand it, in fear money will run out {run on the bank}. Panic of 1873, Panic of 1907, and bank runs in 1930, 1931, and 1933 are examples. Panic of 1907 was a run on trusts, which managed estates, speculated in real estate and stocks, had deposits, had little regulation, and had lower reserves. New York trusts did not belong to New York Clearinghouse group of national banks.

traveler's check

People can buy drafts {traveler's check} to take to other countries, where banks and merchants accept them.

SOCI>Economics>Microeconomics>Banking>Banks**central bank**

USA Federal Reserve System [1913], European Central Bank, and Bank of Japan {central bank} can raise and lower interest rates, loan money to banks, and require different percentages of reserves.

commercial bank

Banks {commercial bank}, created by Glass-Steagall Act, can accept deposits and must have deposit insurance.

investment bank

Banks {investment bank}, created by Glass-Steagall Act, do not accept deposits and so do not have classic bank runs.

World Bank

An international bank {World Bank}, supported by member contributions, loans money, with conditions, to troubled economies.

SOCI>Economics>Microeconomics>Banking>Shadow**shadow banking system**

Investment banks, hedge funds, and the like {shadow banking system} perform banking functions. Instruments include auction-rate securities, structured investment vehicles, tender option bonds, variable-rate demand notes, and asset-backed commercial paper.

auction rate security

People can long-term lend {auction-rate security} to institutions, which weekly auction right to replace current lenders, to set interest rate, which holds until next auction. If no auction transaction happens, interest rate goes higher. Institution can have long-term financing, and investors can get in and out.

collateralized debt obligation

Mortgage pools {collateralized debt obligation} (CDO) have shares, some with priority {senior share}.

hedge fund

Funds {hedge fund} can buy short and buy long.

long

Buying long means to buy now and wait for asset to rise in price.

short

Buying short means to borrow stock from owner, by using small down payment. Then sell stock at current price to someone else to get difference of price and down payment. Then buy stock from someone on or before due date. Then sell back to owner at specified price on specified date. Buying short expects price to fall, so future price is lower than current price. However, short sellers that have big losses can be unable to buy back stock.

margin call

Creditors can demand payment from borrowers {margin call}, typically when borrower's asset value or collateral value decreases, worrying creditors. Borrowers must then pay more down payment or sell asset to pay creditors. Selling makes asset values decrease and so can affect other creditors' confidence.

SOCI>Economics>Microeconomics>Finance**actuary**

People {actuary} calculate insurance premiums based on risks.

amortize

People can pay off debt in installments {amortize}.

arrears

People can fail to make required payments {arrears}.

balance sheet

assets and liabilities statement {balance sheet}.

bank rate

Central bank has an interest rate {bank rate} charged to banks.

bankruptcy business

Producers can have no more net assets {bankruptcy, business} and fail.

book value

Accounting, not market value, can determine business value {book value}.

brokerage

Organizations {brokerage} can arrange securities trades.

capital account balance

Asset buying and selling have balance {capital account balance}.

capitalization

Businesses calculate capital present value {capitalization}, using interest rate and expected future returns from capital.

capitalized

Businesses can have all needed capital from investors {capitalized}.

carrying charge

installment-payment interest {carrying charge}|.

cost

Businesses have expenses {cost} for investment, labor, resources, land, capital, interest payments, and taxes.

debit

amount owed or lost {debit}|.

derivative

Securities can be in a combined package {derivative, finance}|.

demurrage

Retaining item to ship or empty container to return can incur rent or penalty {demurrage}|.

double entry

Accountants can illegally record financial transactions in two categories {double entry}|.

liquidity

Goods and services have varying exchange ease {liquidity}|.

receiver of property

People {receiver, bankruptcy}| can hold and manage other's property during court proceedings, such as bankruptcy.

remittance

payment {remittance}|.

requisition

Documents {requisition}| can request money to make purchase.

revenue

All products business makes are sold at same market price {marginal revenue} {revenue}|. To obtain maximum profit, quantity produced must make marginal cost equal price. This is true in both competitive and monopoly markets, but price will be higher in monopoly. Businesses calculate total costs and total revenues at different prices and outputs {break-even chart}, to find the one equal point {break-even point}. Price-setting methods {average cost pricing} can add percentage of average total cost to average total cost.

sinking fund

Money {sinking fund}| can be in reserve to pay debt.

venture capital

Investors can use their wealth {venture capital}| to start businesses.

windfall

Unusual market conditions can cause people to receive extra money or goods {windfall}|.

working capital

Capital {working capital}| can earn return.

SOCI>Economics>Microeconomics>Finance>Securities

security for finance

Bonds and stocks {security, money}| trade in stock or bond markets. Buying and selling establishes business or corporation actual and perceived value. Securities have probabilities {risk, loss} that they will have no dividend or interest or that they will lose market value.

bond as security

Businesses, including corporations, issue indebtedness certificates {bond, finance} to obtain money, without ownership rights. Bondholders loan money to businesses. Business property is security lien for bond-debt principal and interest. Preferred stocks are also liens against company. Business property value minus outstanding-bond value is business net value.

capital gain

Securities can increase in market value {capital gain}. Securities can lose market value {capital loss}.

growth stock

Corporations can emphasize rapid capital expansion {growth stock} or emphasize dividends.

price-earnings ratio

Yield can divide into market value {price-earnings ratio} to establish security value.

return on bond

Bonds have interest rates {return}.

yield on securities

Stocks can have dividends {yield from stock}.

SOCI>Economics>Microeconomics>Finance>Securities>Value

market value

Stocks and bonds have value {market value} determined in the market.

par value

Stocks and bonds have specified value {par value} at issue.

SOCI>Economics>Microeconomics>Finance>Stock Market

bear market

Securities markets can have average price going up {bear market}.

bull market

Securities markets can have average price going down {bull market}.

SOCI>Economics>Microeconomics>Finance>Stock Market>Kinds

board of trade

Markets {board of trade} {trade board} can be for exchanging commodities.

bourse

French securities market {bourse}.

SOCI>Economics>Microeconomics>Finance>Scale

economies of scale

Costs can decrease in expansion, if people can buy more quantities more cheaply {external economies} {economies of scale, finance}, plants can specialize, or plants approach full capacity.

isoquant

Businesses calculate different factor combinations that can produce same amount {isoquant}.

optimum scale

Businesses calculate average total cost compared to business size, find size {optimum scale} with lowest average total cost, and choose output rate {capacity, output} with lowest total cost.

planning curve

Businesses calculate average total cost compared to business size {planning curve}, find size with lowest average total cost, and choose output rate with lowest total cost.

production possibilities

The same production units can produce different good or service amounts {production possibilities curve} {production frontier}.

productivity in business

Businesses calculate demand for production factor {productivity, business}|.

value added

Businesses calculate output value minus material cost {value added}| for production steps.

variable proportions law

Factor marginal product decreases if quantity increases relative to other factors {variable proportions law} {law of variable proportions}.

SOCI>Economics>Microeconomics>Finance>Margins**marginal cost**

Businesses calculate cost of adding one more output unit {marginal cost}|. Marginal costs decrease with increased production, at low output levels. Marginal costs level off as production reaches normal plant capacity. Marginal costs rise as plant nears production capacity and rise markedly when plant expands.

marginal product

Businesses calculate additional output produced by adding one production-factor unit {marginal product}|. Revenue derived from extra output {marginal revenue product, price} equals price and marginal cost. Factor increases in marginal product if other factors increase, quality increases, new technology works with that factor, factor is important in overall economy, or factor has limited amounts. Factors can have fixed supply and be capable of only one use: houses, zoned land, and people with unique talents.

marginal productivity

When businesses produce goods or services, the most-recent ones have production rates {marginal productivity}|. Marginal productivity diminishes as time spent increases, because labor tires, capital wears, and natural resources and land are harder to exploit. Production units can produce good or service, in given time with given resources and technology.

SOCI>Economics>Microeconomics>Freight**freight**

Cargo or goods {freight} are in vehicles or vessels.

common carrier of freight

transportation company {common carrier}|.

free alongside

no extra charge for shipping and unloading {free alongside}| (FAS).

free on board

no extra charge for shipping and leaving in container {free on board}| (FOB).

lading

freight {lading}|.

manifest list

Lists {manifest}| can show passengers or freight.

registry of ships

Ships officially belong to country {registry}|.

SOCI>Economics>Microeconomics>Manufacturing**byproduct**

Secondary goods or wastes {byproduct} can appear while manufacturing another good.

job lot

Miscellaneous items can sell as set {job lot}|.

lot

land plot or set of items {lot}|.

mass production

Technology has enabled businesses to assemble many products continuously {mass production}|.

SOCI>Economics>Microeconomics>Production**production in business**

Labor, machines, factories, land, and natural resources make goods or perform services {production, economics}. Businesses {producer} supply goods or services. Households demand and consume products.

output in economics

To produce consumer goods and services {output, economics}| {economic output}, businesses must use production units. Production units make goods or services.

SOCI>Economics>Microeconomics>Production>Technology**technology**

Automation {technology} can result in greater production at less cost, with less labor and higher paying jobs.

automation

In many tasks, capital can substitute for labor {automation}|, resulting in greater production at less cost, with less labor but higher paying jobs.

standardization

Mass production makes each good the same way {standardization}|, which allows interchangeable parts.

SOCI>Economics>Microeconomics>Production>Factors**production factor**

Goods and services {factor of production} {production factor}| {productive resource} can be for business production. Labor is a production factor.

capital

Business assets {capital, business}| can be actual equipment {real capital}, existing capital {capital stock}, or money {money capital} that can be for investment. Businesses add new capital each period {capital flow}. Capital has a percentage return per year on cost {marginal revenue product, capital}. Investment in capital is wise if capital marginal revenue product is higher than interest rate. Ideally, interest rate equals national capital average marginal revenue product.

capital good

Produced goods {capital good}| can be production factors. Goods and services, such as education, can be both capital and consumer goods.

opportunity cost

Good or service production factors can produce other goods or services that have value {opportunity cost}|. If all markets are working correctly, actual good or service cost equals opportunity cost. If costs are different, market makes more low-cost good, its price decreases, other-good price increases, and finally prices and costs are equal. If two costs are equal, true good-or-service value is price.

production unit

To produce consumer goods and services, businesses must use labor, capital, land, and natural-resource coordinated sets {production unit}|.

natural resource

Land and raw materials {natural resource}| can be production factors. Raw materials can be production factors if process requires them, they require discovery, and/or they require extraction. Abundant and easily available natural resources are not production factors. Producers typically waste them.

scarcity

Production means are natural resources, land, labor, and capital and have limited amounts {scarcity}|. Therefore, making goods or services prevents making something else.

SOCI>Economics>Microeconomics>Production>Factors>Labor

labor

Jobs {labor} are essential to workers, but employers actually do not need that particular worker.

competition

Economies typically have surplus labor. Employers can hire and fire at will. Employer agreements can restrict competition for labor. Workers typically have limited knowledge of other available jobs. Governments and non-profit agencies can create job clearinghouses {unemployment office}|. Governments, businesses, and non-profit agencies provide vocational training.

compensation

Manual laborers, semi-skilled workers, and skilled workers usually get wages. Managers and white-collar workers usually get weekly, monthly, or yearly salaries. Professionals get fees for services.

rules

Jobs have work rules, such as break times, regular hours, overtime rules, retirement, and temporary layoff periods. Jobs also have safety rules, promotion policies, and grievance procedures.

benefits

Many companies provide benefits, such as health insurance, eye insurance, dental insurance, life insurance, and accident insurance. Other benefits are vacations, sick leave, and bereavement leave.

labor problems

Problems with work are boredom, powerlessness, no craft, meaninglessness, isolation, and alienation.

human relations movement

Besides physical conditions, work-group structure and supervision style affect productivity {human relations movement}|.

SOCI>Economics>Microeconomics>Production>Factors>Labor>Union

union for workers

Workers can unite into organizations {union, worker}|. Unions participate in collective bargaining, politics, and labor-force control and strive for job protection, equal justice, better wages, and better working conditions. Law allows laborer associations. Large unions can have local branches {local union}|. Unions {industrial union} can be industry-wide. Unions {trade union} can be for specialized workers.

checkoff of dues

Unions can deduct union dues from paychecks in advance {checkoff}|.

collective bargaining

Union representatives and management representatives negotiate contract between labor and management {collective bargaining}|.

shape-up

Daily gatherings {shape-up} of unionized longshoremen allow boss to choose that day's workers.

right-to-work law

States can allow open shop, using laws {right-to-work law}| that guarantee open shops.

SOCI>Economics>Microeconomics>Production>Factors>Labor>Union>Shop

union shop

States can require unionized businesses to hire only union members {union shop}| {closed shop}.

open shop

States can allow businesses to hire any worker {open shop}|.

SOCI>Economics>Microeconomics>Production>Factors>Labor>Strike

strike by workers

States allow workers to refuse to work {strike, worker}| without being fired, for just cause. Workers have right to refuse to work until they have better conditions.

walkout

Workers can strike {wildcat strike} {walkout} without union authorization.

scab as strikebreaker

Businesses can hire non-union members {scab, strikebreaker}| {strikebreaker}, to work in place of striking workers to try to break strike.

SOCI>Economics>Microeconomics>Production>Factors>Labor>Job

absenteeism

regular absence {absenteeism}|.

boondoggle

Work can have no useful result {boondoggle}.

calling

vocation {calling}|.

layoff

temporary no work and no pay periods {layoff}|.

leisure

Worker time {leisure} can be not on production.

lockout

Businesses can refuse to let workers work {lockout}|.

nepotism

Businesses can have favoritism toward relatives {nepotism}|.

Peter Principle

In hierarchies, employees rise until they reach jobs that they are unable to do {Peter Principle}.

preferment

promotion {preferment}|.

seniority

employment length {seniority}|.

time-and-motion study

Jobs have motions that take time {time-and-motion study}.

turnover of labor

Switching jobs {turnover, job}| happens often in modern business.

vocation

job {vocation}.

walking papers

termination notice {walking papers}.

SOCI>Economics>Microeconomics>Production>Factors>Labor>Job>Kinds**assembly line**

Unfinished goods can move on conveyor belts or movable platforms {assembly line}|, where workers can add parts.

continuous process technology

Automatic product flow {continuous process technology}| needs only maintenance and repair, with little labor.

corvee

Local governments can require citizens to perform needed tasks, such as repairing roads, for small or no compensation {corvée}. Labor can substitute for paying tax. Feudal-estate lords had the right to require vassals to work free for one day.

craftwork

Hand-made goods {craftwork}| use labor less efficiently.

impressment

Governments can confiscate objects. Navies can make people work in navy by force {impressment}|.

moonlighting

People can choose to have more income by working at two or more jobs at once {moonlighting}|.

piecework

People can receive pay for items {piecework}| {piece good}.

practical art

skill in trade {practical art}.

SOCI>Economics>Microeconomics>Production>Factors>Labor>Job>Shift**swing shift**

People can work at night or evening {swing shift}|.

split shift

People can work hours on two different shifts {split shift}|.

SOCI>Economics>Microeconomics>Production>Factors>Labor>Job>Money

emolument

compensation {emolument}.

gratuity

tip {gratuity}.

honorarium

lecture fee {honorarium}|.

kickback

People who arrange transactions can get part {kickback}| of profits.

minimum wage

Most states require minimum hourly wage {minimum wage}|.

payola

Presenters can receive payment {payola}| to present someone's work.

rake-off

bribe {rake-off}.

salary

Managers and white-collar workers usually get weekly, monthly, or yearly pay {salary}.

stipend

service payment {stipend}|.

valuable consideration

Value {valuable consideration} can exchange for performing contract.

wage

Manual laborers, semi-skilled workers, and skilled workers usually get hourly pay {wage}.

SOCI>Economics>Microeconomics>Production>Factors>Labor>Job>Benefit

annuity

Investments {annuity}| can pay investor regularly after maturity.

expense account

Businesses can pay expenses using account {expense account}|.

fringe benefit

Most companies pay for insurance, vacations, and so on {fringe benefit}|.

leave

People can get permitted absence from work for long period {leave}|.

pension

Many companies pay workers after retirement {pension}|.

severance pay

Employers can pay money {severance pay}| when terminating employees.

unemployment compensation

Governments often pay unemployed people until they find a job {unemployment compensation}|.

SOCI>Economics>Microeconomics>Philanthropy**philanthropy**

People can pay for others' charitable activities {philanthropy}|, such as assisting poor people, educating people, promoting artistic endeavors, or providing better health.

community chest

Communities can establish foundations {community chest}| into which people can contribute money to disburse for community good.

endowment

Charitable institutions can keep money {endowment}| contributed in the past and only spend interest or value increase.

SOCI>Economics>History**economics in history**

economics

Earth

1800 to 2007

Economics includes business administration, macroeconomics, and microeconomics.

SOCI>Economics>History>Administration**Frank Bunker Gilbreth [Gilbreth, Frank Bunker]/Lillian Moller Gilbreth [Gilbreth, Lillian Moller]**

engineer

USA

1904 to 1924

He lived 1868 to 1924. She lived 1878 to 1972. They studied industrial production methods and quality controls. He studied job-task times and motions {time-and-motion study, Gilbreth}. He analyzed motions into elements {therblig}.

Frederick M. Taylor [Taylor, Frederick M.]

economist

USA

1906 to 1929

Some Chapters on Money [1906]; Principles of Scientific Management [1911]; Guidance of Production in a Socialist State [1929]

He lived 1855 to 1932, advocated market socialism, and studied management {Taylorism}. He studied job-task times and motions {time-and-motion study, Taylor}.

Henri Fayol [Fayol, Henri]

sociologist

Paris, France

1916

General and Industrial Management [1916]

He lived 1841 to 1925 and discussed rational and efficient business administration, including central control, labor division, hierarchical command, ordered and stable processes, and initiative. He had five principles: forecasting and planning, organizing, commanding, coordinating, and controlling. He stated 14 management principles: labor specialization and division, authority with corresponding responsibility, discipline, unified command, unified direction, individual-interest subordination to general interest, staff remuneration, centralization, scalar authority chain, order, equity, tenure stability, initiative, and esprit de corps.

Chester I. Barnard [Barnard, Chester I.]

businessman

USA

1938

Functions of the Executive [1938]

He lived 1886 to 1961 and wrote about the ideal administrator. Good administration depends on analysis, authority, communication, decision-making, expansion, goals, motivation, and purpose.

Business analysis requires looking for process critical, limiting, and strategic factors and making decisions to address these factors. Then further analysis finds new critical, limiting, and strategic factors. Good analysis uses past experience, connects decisions, analyzes decision-making process itself, and facilitates limiting options.

To have authority to lead, executive must be moral and qualified. Authority depends on subordinate acceptance of executive. The moral code defines authority levels, emphasizes loyalty to organization purposes, and sets goal to strive for excellence.

Communication is official, is only for employees, comes from communication center through accepted channels, goes through all proper stages, preferably only one stage, comes from authority, is authenticatable, and comes from someone responsible.

Executive decisions mostly limit choices. Consequence anticipations and results after previous actions limit choices. High-level decisions involve purposes and personnel. Middle-level decisions involve technical, economic, and social problems. Low-level decisions involve means to ends. Executives can protect themselves against decision criticism, by documentation and superiors' approval. Executives can ensure that authorities make decisions and take responsibility.

Organization must expand to gain more incentives for workers.

Organization has two main goals, which executive leads and to which organization adapts. The first goal is to reach organization purpose. The second goal is to motivate individuals. Meeting both goals requires willingness to cooperate among all employees, communication between all employees, and accepted purpose for organization. Purpose must be relevant to customers or environment, be attainable given resources and people, and fit with employee desires and hopes. Executive can motivate by distributing rewards in the most-efficient way, based on people's powers, wishes, needs, and abilities, to keep people satisfied. Direct incentives alone are not enough to satisfy employees. Propaganda, education, and training can persuade people. Technology, education, and opportunities to do more are other rewards. Executive must remember that people can always think about doing something else instead. Social relations can contribute to success but must be compatible with organization purposes.

As for motivation, best results happen if people have high pay and then give full value in return. Return value typically seems small to person giving it.

Purposes about family, religion, or country are personal, but business purposes are impersonal. All intentions, acts, and ideas communicate business purposes, to persuade people to accept them. Business purpose has parts that specialists can do, by place, time, other people required, resources, and methods.

Mary Parker Follett [Follett, Mary Parker]

economist

USA

1970

Dynamic Administration [1970]

She lived 1868 to 1933 and invented administration law of the situation.

Jim Collins [Collins, Jim]

sociologist

USA

2001

Good-to-Great: Why Some Companies Make the Leap... and Others Don't [2001]

Level 1 is Highly Capable Individual. Level 2 is Contributing Team Member. Level 3 is Competent Manager. Level 4 is Effective Leader. Level 5 {Level 5 Leadership} is Executive. Good executives are humble or quiet, are strong-willed, require self-discipline, sacrifice self for company, take responsibility, listen to and credit others, work for long-term company gain, and have high standards. They are not outsiders or flamboyant persons. They do not have charisma. They do not impose discipline.

Determine what company can do best, choose best method for cash flow and profits, choose main indicator, and have passion inside {Hedgehog Concept}.

SOCI>Economics>History>Macroeconomics

Thomas Robert Malthus [Malthus, Thomas Robert]

economist/mathematician

London, England

1798

Essay on the Principle of Population [1798]

He lived 1766 to 1834 and said that population increases until limited by environment.

David Ricardo [Ricardo, David]

economist

England

1817

Principles of Political Economy and Taxation [1817]

He lived 1772 to 1823 and studied rents and agriculture and invented labor theory of value and growth. Land scarcity as population increases causes diminishing returns from agriculture, so food prices rise relative to other prices. Workers wages rise and reduce profit rates. With no incentive for investing, output, capital, and labor remain constant from then on. Rising wages cause even higher population and bring wages back down to subsistence level. Rents depend on land agricultural uses.

Alfred Marshall [Marshall, Alfred]

economist

Cambridge, England

1890

Principles of Economics [1890]

He lived 1842 to 1924 and invented equation relating money supply to income, utility and cost pricing {Cambridge equation, Marshall}.

Vilfredo Pareto [Pareto, Vilfredo]

economist/sociologist

Italy

1896 to 1916

Course of Political Economy [1896 to 1897]; Manual of Political Economy [1906]; Textbook of General Sociology [1916]

He lived 1848 to 1923 and studied social stability, talent, and governing class. If people have defined preferences between all good and service pairs, Pareto optimum goods-and-services distribution happens, if no one person can satisfy more preferences while leaving other people the same.

Politics

People's emotions or beliefs {residues}, of which there are six types, cause actions, which people then justify {derivations}. Residues include need to associate with others, need to maintain social groups, and tendency to combine things.

Thorstein Veblen [Veblen, Thorstein]

economist

USA

1899 to 1904

Theory of the Leisure Class [1899]; Theory of Business Enterprise [1904]

He lived 1857 to 1929.

John Maynard Keynes [Keynes, John Maynard]

economist

England

1921 to 1936

Treatise on Probability [1921]; Treatise on Money [1930]; General Theory of Employment, Interest and Money [1936]

He lived 1883 to 1946 and studied marginal propensities. He suggested deficit spending to expand economy.

Epistemology

If alternatives have no known probabilities, they receive equal probability {indifference principle} {insufficient reason principle} {principle of indifference} {principle of insufficient reason}. This principle is not true because, if all probabilities are equal, people cannot learn from experience.

Ragnar Frisch [Frisch, Ragnar]

economist

Norway

1926 to 1965

On a problem in pure economics [1926: began Neo-Walrasian research]

He lived 1895 to 1973 and started econometrics. He invented econometric time series [1927], impulse-propagation business cycles [1933], econometric linear regression analysis [1934], and production theory [1965].

Jan Tinbergen [Tinbergen, Jan]

economist

Netherlands

1930 to 1951

Determination and Interpretation of Supply Curves [1930]; Econometric Approach to Business Cycle Problems [1937]; Econometrics [1951]

He lived 1903 to 1994 and invented first national-economy model [1937].

Wassily Leontief [Leontief, Wassily]

economist

USA

1933 to 1966

Use of Indifference Curves in the Analysis of Foreign Trade [1933]; Structure of the American Economy, 1919-1939 [1941]; Pure Theory of the Guaranteed Annual Wage Contract [1946]; Input-Output Economics [1966]

He lived 1906 to 1999 and studied input-output analysis. USA exports labor-intensive goods and imports capital-intensive goods {Leontief paradox} [1953]. It is because USA had trade surplus.

Oskar Lange [Lange, Oskar]

economist

Poland

1934 to 1937

Notes on the Determinateness of the Utility Function [1934]; On the Economic Theory of Socialism [1936 to 1937]

He lived 1904 to 1965 and advocated market socialism.

Joseph Schumpeter [Schumpeter, Joseph]

economist

Austria/USA

1942 to 1951

Capitalism, Socialism, and Democracy [1942 and 1951]

He lived 1883 to 1950 and studied entrepreneurs, innovation, and economic development. Capitalists manage, save, take risks, and supervise. Capitalists can save profits. Capitalists are at risk from business failure or trouble but have ownership as cushion. Capitalists use their social and economic power to get the most rewards and try to minimize rewards to workers. Capital tends to accumulate but has unfair distribution. Management can decentralize. Workers can supervise workers. Workers are at risk from business failure or trouble but have no ownership as cushion and cannot save profits.

Simon Kuznets [Kuznets, Simon]

economist

USA

1948

National Income: A New Version [1948]

He lived 1901 to 1985, found Kuznets business cycles, and studied national income growth.

Paul Samuelson [Samuelson, Paul]

economist

USA

1948 to 1960

Economics [1948]; Balanced Growth under Constant Returns to Scale [1953: with Robert M. Solow]; Complete Capital Model Involving Heterogeneous Capital Goods [1956: with Robert M. Solow]; Linear Programming and Economic Analysis [1958: with R. Dorfman and Robert M. Solow]; Analytical Aspects of Anti-Inflation Policy [1960: with Robert M. Solow, about Phillips Curve]

He lived 1915 to ?.

Kenneth Arrow [Arrow, Kenneth]

economist

USA

1951

Social Choice and Individual Values [1951]

He lived 1921 to ? and invented Arrow social welfare theorem. All markets balance supply and demand if in competitive equilibrium {general equilibrium theory}.

Individuals typically have preference orders among candidates when voting or among products and services when buying. Similarly, groups have preference orders among candidates or products and services. Individuals cannot significantly affect group preferences, because no person has significantly greater wealth, power, or influence than other people. Group preferences typically are sums of individual preferences, because votes or purchases add. Preferences can be independent. If these conditions are true, no method exists that guarantees that group preference order is consistent with sum of individual preference orders {voting paradox, Arrow} {Arrow paradox}.

Gérard Debreu [Debreu, Gérard]

economist

France/USA

1951 to 1975

Theory of Value [1959: Neo-Walrasian theory]

He lived 1921 to ? and studied general equilibrium models {Arrow-Debreu model}, working with Kenneth Arrow [1954]. He worked on First and Second Welfare theorems [1951 and 1954], utility function for preference ordering [1954], quasi-equilibrium [1962], unique equilibria [1970], smooth preferences {differential calculus for economics} [1972], and core convergence rate [1975]. He made core convergence theorem [1962 to 1963], with Herbert Scarf. His market demand functions [1974] resulted in Debreu-Sonnenschein-Mantel theorem.

Milton Friedman [Friedman, Milton]

economist

USA

1953 to 1982

Essays in Positive Economics [1953]; Theory of the Consumption Function [1957]; Optimum Quantity of Money and Other Essays [1969]; Capitalism and Freedom [1982: with Rose Friedman]

He lived 1912 to 2006, studied money supply and free markets, and suggested negative income tax. Capitalism is the most-efficient economic system. Capitalists manage, supervise, assume risks, and save. Capitalism provides individual economic and social freedom.

Robert M. Solow [Solow, Robert M.]

economist

USA

1956

Balanced Growth under Constant Returns to Scale [1953: with Paul A. Samuelson]; Complete Capital Model Involving Heterogeneous Capital Goods [1956: with Paul A. Samuelson]; Contribution to the Theory of Economic Growth [1956]; Linear Programming and Economic Analysis [1958: with Robert Dorfman and Paul A. Samuelson]; Analytical Aspects of Anti-Inflation Policy [1960: with Paul A. Samuelson, about Phillips Curve]; Growth Theory: An exposition [1970]

He lived 1924 to ? and studied growth [1956 to 1970]. He helped make constant elasticity-of-substitution production function [1961]. He studied long-run multiplier [1973].

John Kenneth Galbraith [Galbraith, John Kenneth]

economist
USA
1958 to 1967
Affluent Society [1958]; New Industrial State [1967]
He lived 1908 to ? and studied government social policy.

Robert Heilbroner [Heilbroner, Robert]

economist
USA
1962
Making of Economic Society [1962]
He lived 1919 to 2005.

Amartya K. Sen [Sen, Amartya K.]

economist
India
1982 to 1992
Choice, Welfare and Measurement [1982]; Inequality Reexamined [1992]
He lived 1933 to ?. Value does not depend only on individual preferences {welfarism}. Goodness depends on people's average well-being {outcome utilitarianism}.

George Soros [Soros, George]

economist
USA
1994
Theory of Reflexivity [1994]
He lived 1930 to ? and invented a theory {theory of reflexivity} {reflexivity theory}.

SOCI>Economics>History>Microeconomics

Maria Edgeworth [Edgeworth, Maria]

novelist
Ireland
1800
Castle Rackrent [1800]
She lived 1767 to 1849 and wrote about rent.

William Stanley Jevons [Jevons, William Stanley]

economist/philosopher
England
1862 to 1882
General Mathematical Theory of Political Economy [1862: marginal-utility theory of value]; Coal Question [1865]; Theory of Political Economy [1871]; Principles of Science [1874]; State in Relation to Labour [1882]
He lived 1835 to 1882. He started the marginalist revolution [1871] and developed marginal-utility theory of value. He advocated deductive science based on probability. In logic, he studied inclusive OR and developed logic of similar objects.

Carl Menger [Menger, Carl]

economist
Austria
1871 to 1892
Principles of Economics [1871]; Method of the Social Sciences with Special Reference to Economics [1883]; Theory of Capital [1888]; Money [1892]

He lived 1840 to 1921, started the marginalist revolution [1871], and founded Austrian School. There was Methodenstreit {methodological debate} between German Historical School and Austrian School [1884].

Léon Walras [Walras, Léon] or Marie-Ésprit-Léon Walras [Walras, Marie-Ésprit-Léon]

economist

France

1874

Elements of Pure Economics [1874]

He lived 1834 to 1910, created general equilibrium theory [1874], and founded Lausanne School. His student was Vilfredo Pareto. He contributed to the marginalist revolution.

Walter Dill Scott [Scott, Walter Dill]

economist

USA

1923

Personnel Management [1923: with Robert C. Clothier]

He lived 1869 to 1955 and studied scientific management theory.

James D. Mooney [Mooney, James D.]

economist

USA

1931 to 1939

Onward Industry [1931: with A. C. Reiley]; Principles of Organization [1939: with A. C. Reiley]

He lived 1884 to ? and studied scientific management theory.

Alan C. Reiley [Reiley, Alan C.]

economist

USA

1931 to 1939

Onward Industry [1931: with J. D. Mooney]; Principles of Organization [1939: with J. D. Mooney]

He studied scientific management theory.

Luther Gulick [Gulick, Luther]

economist

USA

1937

Notes on the Theory of Organization [1937]

He lived 1865 to 1918 and studied administrative management theory. His wife was Charlotte Gulick [1865 to 1938]. They started Camp Fire Girls in 1910.

Lyndall F. Urwick [Urwick, Lyndall F.]

economist

USA

1937 to 1955

Making of Scientific Management [1937: with Edward Brech]; Pattern of Management [1955]

He lived 1891 to 1983 and studied scientific management theory.

Peter F. Drucker [Drucker, Peter F.]

economist

Austria/USA

1939 to 1966

End of Economic Man [1939]; Effective Executive [1966]

He lived 1909 to ? and studied non-profit business policy.

Fritz Roethlisberger [Roethlisberger, Fritz]

economist

USA
1941
Management and Morale [1941]
He studied behavior and human relations.

George Bernard Dantzig [Dantzig, George Bernard]

economist
USA
1947 to 1963
Linear Programming and Extensions [1963]; simplex method [1947]
He lived 1914 to 2005 and invented linear-programming simplex method, for operations research.

Tjalling C. Koopmans [Koopmans, Tjalling C.]

economist
USA
1951
Analysis of Production as an Efficient Combination of Activities [1951: editor]
He lived 1910 to 1985 and used activity analysis model, instead of production function.

Abraham Zaleznik [Zaleznik, Abraham]

economist
USA
1951
Foreman Training in a Growing Enterprise [1951]
He studied leadership and organizational behavioral theory.

Warren Bennis [Bennis, Warren]

economist
USA
1957
Changing Organizations [1957]
He lived 1925 to ? and studied leadership.

James G. March [March, James G.]

economist
USA
1958
Organizations [1958: with H. Guetzkow and Herbert Simon]
He studied systems theory or decision theory.

Douglas McGregor [McGregor, Douglas]

economist
USA
1960
Human Side of Enterprise [1960]
He studied organizational behavioral theory.

Richard M. Cyert [Cyert, Richard M.]

economist
USA
1963
Behavioral Theory of the Firm [1963: with R. G. March]
He studied systems theory or decision theory.

Alfred P. Sloan [Sloan, Alfred P.]

economist

USA
1964
My Years with General Motors [1964]
He lived 1875 to 1966 and led General Motors.

Rensis Likert [Likert, Rensis]

economist
USA
1967
Human Organization [1967]
He studied organizational behavioral theory.

Alfred D. Chandler, Jr. [Chandler, Jr., Alfred D.]

economist
USA
1971
Business History as Institutional History [1971]
He lived 1918 to ? and studied actual business policy.

Robert Lucas, Jr. [Lucas, Jr., Robert]

economist
USA
1972 to 1987
Expectations and the Neutrality of Money [1972]; Econometric Policy Evaluation: A Critique [1976: Lucas critique]; Models of Business Cycles [1987]
He reintroduced representative agents. Government-policy, culture, or expectation changes can change relationships between economic variables, so some predictions using historical data are inaccurate {Lucas Critique}. He invented theory of Real Business Cycles, with Finn E. Kydland and Edward C. Prescott, based on John Muth's rational expectations hypothesis [1961].

Chris Argyris [Argyris, Chris]

economist
USA
1976 to 1978
Increasing Leadership Effectiveness [1976]; Organizational Learning [1978]
He lived 1923 to ? and studied organizational behavioral theory {double loop learning theory} [1976].

Thomas E. Copeland [Copeland, Thomas E.]

economist
USA
1979
Financial Theory and Corporate Policy [1979: with J. Fred Weston and Kuldeep Shastri]
He studied actual business-policy stages: understanding problem or situation, deciding on solution, organizing resources, instructing participants, timing actions, and following results.

David Smith [Smith, David]

economist
USA
1987
Rise and Fall of Monetarism [1987]
He studied actual business policy.

Clayton M. Christensen [Christensen, Clayton M.]

economist
USA
1997

Innovator's Dilemma [1997]

He lived 1952 to ? and studied actual business policy.