Understanding the Economics Standards
for teachers in grades 9–12

Economics studies how people, acting as individuals or in groups, decide to use scarce resources to satisfy wants. This fundamental economic concept of scarcity is at the core of the discipline. There are never enough natural resources, human resources, or capital resources (man-made goods such as tools, equipment, machinery, factories) to produce everything society wants. Therefore, choices must be made on what to produce, how to produce, and for whom to produce. Choices must also be made at a personal level. There never seems to be enough money or time to have or to do everything one wants.

Economics is a way of thinking, a science of making choices. Economists examine the decision-making processes of individuals, businesses, markets, governments, and economies as a whole.

An understanding of economic principles helps people to:

- Consider not only the short-term effects of a decision, but also its long-term effects and possible unintended consequences;
- See the connections between personal self-interest and societal goals in order to understand how individual and social choices are made in the context of an economy;
- Analyze how social goals, such as freedom, efficiency, and equity, impact public policies.

Because of increasing interdependence and globalization, everyone in the United States needs to be aware of the issues in the global economy, their role in that system, and be able to respond to changes so that they can effectively maintain or raise their standard of living.

Goal Statements for the Economics Standards:

- Students will learn to examine the relationship between costs and benefits, and the values associated with them.
- Students will understand economic principles, whole economies, and the interactions between different types of economies to comprehend the movement and exchange of information, capital, and products across the globe.
- Students will be able to assess the impact of market influences and governmental actions on the economy in which they live.
- Students will make personal economic choices and participate responsibly and effectively in social decision making as citizens in an increasingly competitive and interdependent global economy.

ECONOMICS STANDARD ONE: Students will analyze the potential costs and benefits of personal economic choices in a market economy [Microeconomics].

Enduring Understandings

Students will understand that:

- Due to scarcity, individuals as producers and consumers, families, communities, and societies as a whole must make choices in their activities and consumption of goods and services.
- Goods, services, and resources in a market economy are allocated based on the choices of consumers and producers.
- Effective decision making requires comparing the additional costs of alternatives relative to the additional benefits received.

How societies survive physically with a limited set of resources is the foundation for the discipline of economics. Because there are not enough resources to satisfy people's wants, decisions have to be made regarding how resources are going to be used and distributed. By learning to analyze how these decisions are made, students have greater knowledge that will allow them to use their own and society's resources to achieve the efficient use of resources and the maximizing of benefits relative to costs.

When economists refer to cost/benefit analysis, they mean comparing what one gains and what one gives up when making a choice. The term that describes this process is a **tradeoff.**[1] What is given up is the **opportunity cost**.[2] Gains and losses are not only monetary but also have psychological components based on what individuals and societies value. Every person beginning early in life has to make decisions about how to spend time, income, and energy. If one only has enough time to read or watch TV and chooses to watch TV, then the opportunity cost is reading. When people choose one activity rather than another, the next best thing they could have done with these resources is called the opportunity cost.

On a societal level, productive resources available are land, labor, and capital. Understanding that scarcity requires that choices be made and that for every choice there are costs means that people and society can be more deliberate about what to produce, how to produce, and for whom to produce. An economy requires everyone in a society to engage in activities that involve the pulling together of productive resources, the organizing of work, the generating of income, and the allocating and distributing of goods and services. In the United States' **mixed market economy**,[3] these questions are answered through the interaction of consumers, producers, and government. Prices send signals and provide incentives that influence the decisions of both consumers and producers.

[1] **Tradeoff** means giving up one thing to get something else.

[2] **Opportunity cost** is the second best alternative given up when scarce resources are used to choose one action over another.

[3] **Mixed market** is an economic system which answers the basic economic questions of what, how, and for whom to produce by individual decisions and some government involvement.

Economics Standard One 9-12a: Students will demonstrate how individual economic choices are made within the context of a market economy in which markets influence the production and distribution of goods and services.

Essential Questions:

- How does economic self-interest (individual consumers and producers) contribute to the greater good?
- Does competition ensure efficiency?
- How do government policies affect markets?

Consumers, businesses, and government must make choices in their activities when consuming and producing goods and services because the resources available to satisfy wants are limited. The availability of these resources, their quality, and their quantity, impacts consumer demand, technology, costs, and government involvement. Where prices act as the rationing device for answering the question "who gets the goods and services," the freedom of individual consumers and producers to decide how best to use their resources and for what purposes drives the economy. Costs and benefits are associated with these choices. Acting in their own best interests, the interaction of the consumers and producers, represented by demand and supply, drives markets towards efficiency (**equilibrium price**[4] and equilibrium quantity). Efficiency is getting the most out of one's resources at the least cost. In this manner, resources are allocated to their most highly valued use. When resources are under allocated or over allocated to producing a good or service, shortages and surpluses exist and those conditions are signals for price changes that seek to establish equilibrium.

The dynamics of the market assume that **perfect competition**[5] occurs under the following conditions:

- Unlimited number of buyers and sellers;
- Costless entry and exit;
- A standardized product;
- Perfect knowledge of price; and
- Perfect economic decisions.

If any or many of these conditions are not present, efficiency will be harder to achieve and there will be under or over allocation (waste) of resources in the production and consumption of the good or service. The closest products to perfect competition are agricultural goods like corn, wheat, or other grains. At the other extreme is a market where only one firm makes the good and there are significant costs to starting a rival business. Electric companies in a specific location fall into this category. The results of a monopoly are less production of the good and higher prices. As one moves along a continuum from perfect competition to pure monopoly, the firms become more inefficient, prices rise, and the good is under produced. To determine how to categorize the market structure of an industry, one must consider the following criteria:

[4] **Equilibrium price** is the price at which quantity demanded equals quantity supplied.

[5] **Perfect competition** is when a market exists that meets the following conditions: the presence of large independently acting buyers and sellers who have free entry and exit operating in a market for a specific good or service. The products are homogeneous and no one firm can influence the market price.

- Number of sellers;
- **Barriers to entry**;[6]
- **Influence over price**,[7]
- **Differentiated products**;[8] and
- Advertising**.**

Market Structure	Number of Sellers (Firms)	Barriers to Entry	Influence over Price	Differentiated Products (Goods and Services)	Advertising
Perfect Competition (e.g., truck farming)	Unlimited	None, almost costless	None	None	None
Monopolistic[9] Competition (e.g., toys, cosmetics, clothing)	Many	Some	Some	Much	Significant
Oligopoly[10] *Regular* (e.g., aluminum, steel, tires, copper)	Few	A lot	Much, with a price leader	None	Little
Differentiated (e.g., cereal, autos, colas, cigarettes, washers, dryers, light bulbs)				Significant	A lot
Pure Monopoly[11] (e.g. electric companies)	One	Almost total	Total	Little	Little

Factors that determine **demand** for specific goods and services are:
- Tastes and fads;
- Income;
- Price and availability of substitutes and complements;
- Number of buyers; and
- Future price expectations.

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[6] **Barriers to entry** – How easy or difficult it is for a business to become a competitor in the market.

[7] **Influence over price** – The extent to which one firm can set the price of a good or service in a market.

[8] **Differentiated products** – The extent to which products vary.

[9] **Monopolistic competition** – A market has many firms that sell differentiated products that are not perfect substitutes and into which there is relatively easy entry for new firms and one firm has some control over price. Considerable non-price competition exists.

[10] **Oligopoly –** A market for a specific standardized or differentiated product that has few firms and in which entry and exit is difficult. The firm's control over price is limited by mutual interdependence and in which there is a great deal of non-price competition.

[11] **Pure Monopoly** – A market in which the number of sellers is so small that each seller is able to influence the total supply and price of the good or service.

Price changes determine the quantity consumers are willing and able to purchase of a specific good at a specific time. When prices rise, people buy less. If prices fall, they buy more.

From the producers' perspective, factors that determine how much they will **supply** to the market include:

- Price and availability of land, labor, and capital;
- Number of sellers;
- Technology;
- Price of other goods that they could produce; and
- Government policies.

As in demand, price changes determine the quantity that will be supplied for a specific good at a specific time. When prices rise, producers make more of the good. If prices fall, producers make less available.

In addition to consumers and producers, the other major player that influences market outcomes is the government. In the United States, all levels (federal, state, and local) of government affect the economy. The United States Constitution provides for the government to:

- Promote the general welfare;
- Provide public goods and services;
- Tax;
- Protect property rights;
- Regulate interstate commerce; and
- Provide a money system.

Congress is charged to make all laws "necessary and proper" for executing all previous powers. This has led to laws that:

- **Provide public goods and services**;[12]
- **Protects property rights**;[13]
- **Ensure competition**;[14]
- **Regulate businesses**;[15]

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[12] **Public goods and services** are goods or services from which a person who did not pay for them cannot be excluded from their benefits and the government provides because these goods and services yield benefits to society. Examples include national defense, roads and highways, postal service, public education, national parks, and police and fire protection.

[13] Government **protects property rights** by making laws that enforce contracts, patents, copyrights, and trademark protection for intellectual property and prevent damage to real property.

[14] Government **ensures competition** by making laws that prevent firms from dominating a market thus reducing competition to the detriment of the consumer (i.e., Sherman Antitrust Act).

[15] Government **regulates businesses** by making laws, regulations, and rules for businesses that are designed to protect consumers, employees, and the general public (i.e., FDA, FCC, FAA, OSHA, ICC, DA, FTC, CPSC, boards of health, departments of education, licensure boards).

- **Redistribute income**;[16] and
- **Correct for market externalities (inefficiencies)**.[17]

All of these activities influence and impact both markets and the economy as a whole. Antitrust laws, copyright and patent guarantees, environmental protection, enforcing of contracts, and tax policy are just a few examples of the legal structure the government has placed on the economy of the United States. Public policy decisions made with cost/benefit analysis leads to more efficient use of resources.

[16] Government **redistributes income** using the tax system. The government attempts to provide more equity with regards to resources by taking income from one or more groups and giving it to others (i.e., aid to families with dependent children, food stamps, Medicare, veterans' benefits, WIC—Women, Infants, and Children's Program).

[17] Government **corrects for externalities** through rules, regulations, tax policies, and subsidies designed to correct for overproduction or underproduction of goods and services. An externality exists when some of the costs and benefits associated with production and consumption falls on someone other than the producers or consumers of a product. To correct for these market failures, the government can regulate or tax the production and/or consumption of products that generate negative externalities and subsidize the production and/or consumption of products that generate positive externalities. Too much of a product will be produced when spillover costs (negative externalities) are present, because producers will not have to pay to cover those costs. Too little will be produced when there are significant positive spillover benefits (positive externalities), because the people who receive the spillover benefits did not pay to get them. If they had paid, producers of these goods and services would have been willing to produce more of them. An example of a negative externality is pollution of all types. An example of a positive externality is vaccinations which lower chances of catching the disease even among those who are not vaccinated.

ECONOMICS STANDARD TWO: Students will examine the interaction of individuals, families, communities, businesses, and governments in a market economy [Macroeconomics].

Enduring Understandings

Students will understand that:

- A nation's overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government, and trading partners.
- Because of interdependence, decisions made by consumers, producers, and government impact a nation's standard of living.
- Market economies are dependent on the creation and use of money, and a monetary system to facilitate exchange.

Unlike the study of individual markets, the total economy is the sum of all markets in a society. Understanding involves the ability on the part of the students to analyze how changes in one market will impact others. In a market economy, there are three major players in the economy: households, businesses, and government. What the society produces generates income for households. Households sell their productive resources (land, labor, capital, and entrepreneurship) to businesses in exchange for income (rent, wages, interest, and profit). Household income is spent, taxed, or saved. The money spent for private goods and services returns to businesses, while the taxes paid to the government fund public goods and services. Savings is money households do not spend on goods and services. Most households place this income with financial intermediaries such as banks and brokers. These financial institutions transfer the savings through businesses borrowing from banks, the buying and selling of corporate stocks and bonds, the funding of mortgages, and the buying of insurance. Businesses, from small to large, borrow to expand. This requires buying more productive resources from households, which in turn creates more household income. Additionally, goods and services are exported and imported by American households and businesses causing increases in consumption and production within the United States. Economists measure these activities by calculating the gross domestic product and measure a nation's standard of living by computing gross domestic product per capita.

<u>Economics Standard Two 9-12a</u>: Students will develop an understanding of how economies function as a whole, including the causes and effect of inflation, unemployment, business cycles, and monetary and fiscal policies.

Essential Questions:

- Why is our economy interdependent?
- How might government policy decisions affect the stability of the economy?

When either the consumption or production decisions are added up for a year, the information tracks the health of an economy. Economists have come to refer to these changes in economic activity over time as the business cycle. The length of the cycle varies and reflects the decisions consumers, producers, and governments make and the impact these decisions have on an economy. The Great Depression can be used in classrooms as the "ultimate business cycle" against which all others are compared.

There are four parts to any **business cycle**[18] (using the Great Depression as an example):

- Peak – The highest point **Gross Domestic Product**[19] (GDP) achieves. (The economy hit its peak in October 1929. The peak and the trough can only be determined in retrospect after the recession or expansion has begun.)
- Recession – The period during which GDP declines. There must be at least six consecutive months of decline in the GDP to be called a recession. It can also be called a contraction.
- Trough – The lowest point GDP hits before economic growth begins for the next phase. (The economy hit its lowest point in 1933.)
- Expansion **–** An increase in GDP for a specific time period. Growth may increase slowly as in the 1930s or rapidly as in the 1990s.

Within a business cycle, the economy will show symptoms of instability, fluctuating between periods of **unemployment**[20] and **inflation**.[21] For the most part, the unemployment rate rises during a recession and declines during an expansion. In the 1970s, the United States experienced almost a decade of a condition known as "stagflation" during which both unemployment and inflation occurred at the same time. Since then, the cycles have reflected normal patterns.

What causes unemployment to rise above the 5% rate that is considered full employment? What does it mean to be unemployed? How are unemployment figures calculated? To be unemployed, a person has to be willing, able, and looking for work but cannot find it. The Bureau of Labor Statistics calls 64,000 households a month and asks a series of questions to determine the unemployment rate. It is not related to the number of people collecting unemployment payments. Consequently, many economists believe that the rate is really higher due to the methods used to collect information and the fact that there are discouraged workers who have given up looking for a job. Unemployment is categorized by five different causes:

- Cyclical unemployment is a result of overall decreased demand for goods and services, causing a downturn/recession in the economy that is reflected in the business cycle.
- Structural unemployment refers to people that do not have the skills to match the job openings that are available. Demand for the skills they have decline. Businesses trying to reduce costs eliminate jobs. Time is required for many workers to retrain and find new jobs.
- Frictional unemployment refers to workers who are between jobs. Examples of this range from those who have just graduated from high school or college to someone who has been transferred and has not yet found a new job to someone who was unhappy in their previous job and quit before having another one lined up.

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[18] **Business cycle** – Fluctuations in the overall rate of economic activity in a nation as measured by the real gross domestic product.

[19] **Gross Domestic Product** is the total dollar value of all final goods and services produced in a country in a year. Real Gross Domestic Product is the total dollar value of all final goods and services produced in a country during a year, adjusted for inflation.

[20] **Unemployment** is the condition in which anyone over 16 years of age is willing, able, and looking for a job but cannot find one.

[21] **Inflation** is an increase in the overall general level of prices in an economy in a given year, under 5% is considered somewhat acceptable.

- Seasonal unemployment is a result of demand for workers declining because of the type of job they have. For example, landscapers have to find alternatives during the winter months, or summer resorts close down in September and other jobs are not available there. Construction workers and farm labor have to contend with the weather as a factor in whether or not they are employed. Knowing that the weather will change and that the season comes around yearly cause workers in these fields to find other intermittent employment or to live off savings during the off season.
- Technological unemployment refers to technological change and innovation creating new goods and services that can make skills obsolete. Some workers have difficulty responding to the changes their companies implement. For many, retraining is necessary to find jobs that will allow them to maintain their standard of living. Some might choose not to retrain.

Unemployment reduces household income, which creates less demand for goods and services. More people may be laid off and there is another round of decreasing income to households. Less income creates less tax revenue, which may result in a lower level of public goods and services and the jobs related to their delivery.

During an expansionary phase of the business cycle, characterized by economic growth, the possibility of inflation exists. Defined as an increase in the overall level of prices, inflation affects consumers, producers, and government differently. When the inflation rate rises above 5%, real purchasing power in the economy declines for many people. Two root causes of inflation are demand pull and cost push. In the first scenario, the economy is considered to be overheated and that “too much money is chasing too few goods.” What does this mean? Productive resources in an economy are being used to their fullest capacity and choices are made by markets as to how to use them, so there is upward pressure on prices to determine who will get the goods and services. Incomes are higher than the amount of goods and services available so prices rise. In the cost push scenario, the costs of productive resources rise, pushing up the cost of production. Producers cut back on the amount they can supply so prices for the final goods and services rise. A good example of this was the inflation of the 1970s caused by the rapid increase in oil prices. Not only did gasoline prices increase for consumers, but the cost of transporting goods rose quickly. Since oil is also the base for many other products like plastics, fibers, pharmaceuticals, etc., their cost increased. Consumers whose incomes did not keep pace with the price increases found their real purchasing power declining.

There are gainers and losers during an inflationary spiral. If one is a saver, the value of savings declines if the interest rate received does not stay ahead of the inflation rate. A person with a fixed income, such as a retiree or welfare recipient, loses purchasing power. A creditor loses because he is being paid back in dollars that will buy less than when he lent the money. On the other hand, a borrower gains because they have received the goods or services at the lower price and they pay back in dollars worth less.

People whose income rises faster than the inflation rate gain, as do those whose assets increase in value faster than the inflation rate.

To combat the instability of inflation and recession, the Federal Reserve System (also known as “the Fed”) and the federal government use the tools of monetary and fiscal policy, respectively. The goals of the Fed are to promote economic growth, full employment, and to achieve price stability. Since inflation is caused by having too much money in circulation, the Fed uses

monetary policy[22] to control and stabilize the money supply. Acting as "the banker's bank," the Fed increases or decreases the money supply by providing incentives for banks to make (or not make) loans to businesses and households.

The tools which the Fed uses to accomplish these goals include setting:

- Reserve requirements**:** The reserve requirement is the percentage of deposits a bank must keep as cash in their vault or on deposit at the Fed. Rarely is the reserve requirement altered because the impact of changing the money multiplier would be too great.
- Discount rate: To encourage or discourage banks from lending, the Fed sets the discount rate —the interest rate banks must pay the Fed for short-term borrowing at the discount window. (The Federal Reserve also sets the **federal funds** interest rate as a target rate. This is the interest rate banks charge each other for short-term loans.)
- Open market operations: The most often used tool of monetary policy is open market operations with which the Fed buys and sells government securities to increase or decrease the money supply.

If the economy is in recession, the Fed will take steps to increase the money supply by buying government securities, lowering the discount and/or federal funds rate, and possibly lowering the reserve requirements. If there is a recessionary environment, increasing the money supply provides the banks with more lending capability so that they can make more loans, increasing demand for goods and services. During inflationary times (above 5%), there is too much money in circulation, so the Fed decreases the money supply by selling government securities, by increasing the discount rate, by increasing the target for the federal funds rate, or by increasing the reserve requirement.

While the Federal Reserve is responsible for monetary policy, the executive and legislative branches of the federal government utilize **fiscal policy**[23] to combat the ups and downs of the business cycle. The two tools that the President and Congress can use are taxing and spending policies. When faced with a recession, the fiscal policy suggested by this condition is to reduce taxes, increasing household and business income which in turn increases households' ability to purchase goods and services. If done when the problem exists, this policy can encourage economic growth. If consumer and producer demand is still sluggish, the government can increase government spending by purchasing goods and services from businesses, which then need to hire additional productive resources including labor. When an inflationary spiral is affecting the economy, fiscal policy actions indicate that taxes should be increased and cuts should be made in government spending. The consequence of this policy is to decrease overall demand so that prices will stabilize.

See the DSTP webpage for more items and sample, annotated student responses.
http://www.doe.k12.de.us/aab/social_studies/Social_Studies_item_samplers.shtml

[22] **Monetary Policy** refers to decisions made by the Federal Reserve that can affect the volume of money and credit available in the economy and the price of credit—interest rates.

[23] **Fiscal Policy** refers to taxing and spending decisions made by the Congress and the President in response to recessionary or inflationary pressures in the economy.

Economic Stability, an instructional unit for the Delaware Recommended Curriculum that measures Economics Standard Two 9-12a, can be found at http://www.doe.k12.de.us/infosuites/staff/ci/content_areas/social_studies/standards/pilot.shtml.

ECONOMICS STANDARD THREE: Students will understand different types of economic systems and how they change [Economic Systems].

Enduring Understandings

Students will understand that:

- Because resources are scarce, societies must organize the production, distribution, and allocation of goods and services.
- The way societies make economic decisions depends on cultural values, availability and quality of resources, and the type and use of technology.
- Changing economic systems impact standards of living.

Different economic systems—**traditional, command, market,** and **mixed market**[24]—have evolved over time. Each of these systems has costs and benefits for its citizens. Students will be more empowered when they comprehend how interdependent the world has become and what their role in the economy is.

Underlying the choices and decisions for every economy are the goals of **efficiency, equity, freedom, growth, security**, and **stability**.[25] Understanding how a society uses its limited resources to achieve these goals involves understanding that tradeoffs have to be made. For example, in the United States, political debates about universal health care, social security, and environmental issues revolve around how people value the economic goals. Economic analysis of these issues examines benefits received and costs incurred. Economists utilize dollars and cents to quantify tradeoffs related to the use of productive resources. However, some goals, such as freedom and equity, are not easily quantified; yet, have to be considered when making these decisions. Therefore, elected representatives choose based on what they or their constituencies value.

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[24] In a **traditional economy** the basic economic questions of what, how, and for whom to produce are answered by custom—the same way they have always answered them, and no one has ownership of the productive resources.

- In a **command economy** the basic economic questions of what, how, and for whom to produce are answered by government central planners and government has ownership of the productive resources.
- In a **market economy** the basic economic questions of what, how, and for whom to produce are answered through the interaction of consumers and producers with price acting as the rationing device. Resources are owned by individuals.
- In a **mixed market economy** the basic economic questions of what, how, and for whom to produce are answered through individual decisions of consumers and producers with some government involvement.

[25] **Efficiency** – Refers to how well scarce productive resources are allocated to produce the goods and services people want and how well inputs are used in the production process to keep production costs as low as possible.

Equity – Fair distribution of resources, goods, and services. The problem is that "fair" is differently defined by many individuals and groups.

Freedom – Owning, controlling, and making decisions about how to use one's own resources.

Growth – Overall increase in the production of goods and services in an economy during a specific period of time (measured by gross domestic product adjusted for inflation).

Security – Knowing that one has a job and can support oneself and family (measured by the unemployment rate).

Stability – Overall general level of prices remains about the same (measured by the inflation rate).

<u>Economics Standard Three 9-12a</u>: Students will analyze the wide range of opportunities and consequences resulting from the current transitions from command to market economies in many countries.

Essential Questions

- Why do some economies in transition experience success and others fail?
- Why might citizens of a society question whether an increase in the standard of living improves the quality of life?

During the 20th century, countries around the world experienced major systemic changes in their economies. Because of revolutions in transportation, communication, and information processing, the world has shrunk and interdependence has become greater. The shifts from **command**[26] to **market**[27] systems since the early 1990s have changed the way national economies function and have had major impact on those countries making the transition as well as the countries that already had a market structure in place. All economic systems attempt to address goals for their economies. Because of scarcity, tradeoffs have to be made among the six primary goals—efficiency, equity, freedom, growth, security, and stability.

- **Efficiency** – Getting the most of one's resources for the least cost. For the consumer, this means acquiring wants while giving up the least amount of income and time. For the producer, this means paying the lowest possible price for land, labor, and capital and then maximizing the value of output.
- **Equity** – Fair distribution of resources, goods, and services. The problem is that "fair" is differently defined by many individuals and groups.
- **Freedom** – Owning, controlling, and making decisions about how to use one's own resources.
- **Growth** – Overall increase in the production of goods and services in an economy during a specific period of time (measured by gross domestic product adjusted for inflation).
- **Security** – Knowing that one has a job and can support oneself and family (measured by the unemployment rate).
- **Stability** – Overall general level of prices remains about the same (measured by the inflation rate).

To get more of any of these goals requires trading off one or more of the others. For example, to get a fairer distribution of resources to increase equity, it is necessary to fund this goal by increasing taxes which reduces the freedom of people to make decisions regarding their income. Economic growth is realized when more and more of the available productive resources in the society are being used. To get resources such as labor to respond to new demand, employers have to pay higher wages to cause them to switch jobs. This increases the cost of production and puts upward pressure on prices which decreases price stability.

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[26] In a **command economy**, the basic economic questions of what, how, and for whom to produce are answered by government central planners and government has ownership of the productive resources.

[27] In a **market economy**, the basic economic questions of what, how, and for whom to produce are answered through the interaction of consumers and producers with price acting as the rationing device. Resources are owned by individuals.

In command systems of the 20th century, the productive resources were owned and controlled by the government who had central planners deciding what to produce and how to produce it. The goals which these systems emphasized were equity and security. The former command systems guaranteed everyone would have a job so there was no unemployment as defined by a market economy. This meant that, in many instances, inefficient use was made of labor, capital, and materials. Although housing, education, pensions, and healthcare were provided by the state, an individual had little choice in how they accessed and acquired these services. Nor could one have any influence over the quality of the goods and services. Many productive resources were spent and consumed by and for the military which meant little attention was given to consumers wants. Consequently, the standard of living as measured by real gross domestic product per capita in the command economies fell far short of that in the market systems.

Market systems place major emphasis on freedom, efficiency, and growth. The proponents of the market believe that, when these goals are realized, security and equity will logically occur since growth creates new jobs for more people. Since Adam Smith wrote *Wealth of Nations* in 1776, the theory that the invisible hand of self-interest would create the greatest good for the greatest number has driven the market systems. Underpinning these systems are the specific characteristics of:

- Private property rights;
- Profit motive that spurs growth;
- A price system for allocating resources, goods, and services;
- Competition;
- Freedom to make individual decisions about how to use resources.

In the market systems, the role of government Adam Smith envisioned was to:

- Protect property rights;
- Ensure competition; and
- Provide public goods and services like roads and national defense.

Over time, many nations have evolved as mixed market systems with government's role expanding to include:

- Regulating businesses;
- Correcting for externalities; and
- Redistributing income.

When moving from a command to a market system, a society experiences a major shift in values and priorities related to its economy. Incentives are altered. A significant change is that each person becomes responsible for his/her own well being through one's own decisions. Employment is no longer guaranteed, and workers must compete for the jobs available. The income of many individuals will not cover the costs of the goods and services once provided by the state. Transitioning economies face such issues as:

- Privatization of resources and industries;
- The necessity for profits to encourage entrepreneurs;
- Elimination of price ceilings on all goods and services;
- A monetary system;

- Unemployment because jobs are no longer guaranteed;
- Corruption by former employees of the state whose insider knowledge allows them to get ahead more quickly than the general population; and
- Shortages of goods which were a result of the price ceilings when government planners kept prices artificially low. The inefficiencies caused by queuing resulted in less output for the whole economy because if one stands in line one is not working. Therefore, the shortages persisted and in many cases became worse.

As command economies make the change to market economies, many experience high rates of inflation when the prices are set by market forces rather than the government. Real purchasing power declines and many people become poorer in the short run while adjustments are made through the markets for goods and services. The challenge for the command economies as they move toward becoming a market economy is to provide the legal framework such as privatization, a stable monetary system, and the use of prices set by market forces to allocate resources to their most highly valued uses. Those countries which have done this successfully have seen increases in the standard of living for their citizens.

ECONOMICS STANDARD FOUR: Students will examine the patterns and results of international trade [International Trade].

Enduring Understandings

Students will understand that:

- Individuals and nations trade when all parties expect to gain.
- Nations with different economic systems often specialize and become interdependent as a result of international trade.
- Government actions that promote competition and free trade among people and nations increase the health of an economy and the welfare of nations.

As specialization and the division of labor have increased, individuals, communities, and nations have engaged in trade which increases the standard of living. By specializing in what one can produce at the least cost and trading that with others, efficient use of resources can be attained and overall benefits increased. Economists call this process comparative advantage. Costs incurred by international trade include unemployment increases in the short run as labor resources are reallocated. Benefits from that trade are lower prices and better quality to consumers whose purchasing power increases. As a result of international trade, people on the planet have become more and more interdependent. Economics as a discipline provides the lens for focusing on how best to use the world's limited resources.

<u>Economics Standard Four 9-12a</u>: Students will analyze and interpret the influence of the distribution of the world's resources, political stability, national efforts to encourage or discourage trade, and the flow of investment on patterns of international trade.

Essential Questions

- How is a nation's standard of living related to its trading patterns?
- How might changes in trading patterns affect the distribution of income and quality of life globally?

Underlying the area of international trade is the concept of why individual consumers and producers trade at all rather than being self-sufficient. Voluntary exchanges occur when trading partners both believe they will be better off after the trade. Nations do not trade; they establish the rules of trade. The individual consumers and producers of different nations make exchanges based on analyzing the costs and benefits of the trade. Historically, trade developed as people realized that some were more efficient engaging in the production of some goods and services while other people could produce other things at a lower cost. If both parties specialized, they could then trade for the others' goods and services, and both would expend fewer resources. Economists call this concept **comparative advantage**.[28] A nation can be the lowest cost (most efficient) producer of many goods or services but, through **specialization**,[29] can increase its consumption and standard of living by trading. When there is competition in markets, prices act as signals that determine consumer buying patterns which, in turn, cause producers to react to

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[28] **Comparative advantage** is the ability of a producer to produce a good or service at a lower opportunity cost than another producer.

[29] **Specialization** is a situation where a country produces a narrower range of goods and services than they consume.

stay in business. The result of trade for the consumer is lower prices, more choice, and generally higher quality. Patterns of international trade develop and are maintained for many reasons.

Distribution of World's Resources

How the productive resources of land, labor, and capital are distributed globally is based on geography. What a country can produce on its own is directly related to the quantity, quality, and types of resources it has. The quantity and quality of a nation's natural resources, labor, and capital determine what that country produces and what the most efficient methods of production are for those goods and services. Economists refer to a country as land, labor, or capital intensive, meaning that it has a more abundant supply of one of these three productive resources; therefore, the country uses its least cost method in production processes. Some countries have a balance among the three factors of production. When looking at the world's food supply, countries with high population employ labor more than capital for farming because it is cheaper. Therefore, a large proportion of the population is engaged in agriculture, much of which is subsistence. These countries tend to have a much lower Gross Domestic Product per capita than the industrial nations. In countries like the United States, France, Italy, and Canada, using capital goods for farming allows other workers to engage in the production of other goods and services which increases the standard of living. What each nation has the comparative advantage in producing and what goods and services their consumers demand impact trading patterns and trading partners.

Political Stability

Another factor influencing trading patterns is the political stability or the lack of it in countries who want to trade. Many of the poorer countries have problems with their economies not because of a lack of resources but because of government instability, conflicts with neighbors, and civil strife at home. Conflicts among nations and people have resulted from a clash over resources—who has them and who does not. Conflicts not directly caused by a fight over resources are usually settled in favor of who has the most resources and uses them most efficiently. History also often sets the stage for trading patterns based on former colonial relationships and most favored nations trading status.

National Efforts to Encourage and Discourage Trade

Governments of all nations engage in policies that encourage and discourage trade. Free trade, or few barriers to trade, results in the more efficient use of resources, generally increasing the gross domestic product per capita in a country. Distribution of that increase can be a problem politically if citizens perceive that it is not fairly allocated. Erecting and maintaining trade barriers—such as tariffs, quotas, subsidies, embargoes, and standards—generally has short-run, positive effects for the industries, their employees, and the suppliers that are being protected. Barriers are instituted to protect jobs in domestic markets, in industries that are just getting started, or to provide strategic defense. However, the long-run results for consumers in that country are higher prices, less choice, and lower-quality products. Trade barriers erected by one country often lead to retaliatory barriers being placed on their exports by other countries. Therefore, there may be an increase in unemployment or displaced workers in the industries related to exporting, including transportation, while at the same time protecting workers in inefficient industries.

Flow of Investment

Lastly, the flow of investment internationally impacts the patterns of trade. The amount of a nation's demand for imports and exports requires a two-step process. When U.S. firms export goods to Germany, the U.S. exporter wants to be paid in dollars. The German importers have euros and have to exchange them for dollars to complete the trade. This is accomplished through the currency exchange markets. American exports create a foreign demand for dollars, and the payment of this demand means that American banks now have a supply of euros available for American buyers. The U.S. bank is a dealer in foreign exchange. It is in the business of buying and selling for a fee, euros for dollars. That same bank sells euros for dollars to finance American imports (German exports). Since the German exporting firm wants to be paid in euros, the American importer must exchange dollars for euros.

Here is a released item from the Social Studies DSTP that illustrates the assessment of this benchmark. This test item focuses on how the distribution of the world's resources influences patterns of international trade. The item asks students to look at the information presented on the chart (location of petroleum reserves) and to explain how the worldwide distribution of oil has affected both the patterns of international trade and economic interdependence.

Location of Petroleum Reserves (by percentage)	
North America	3.7
Western Europe	1.6
Eastern Europe	5.9
Latin America	12.5
Africa	6.2
Middle East	65.4
Australia	0.2
Asia	4.5
Total	100.0

Explain how the worldwide distribution of oil has affected the patterns of international trade and economic dependence.

A student must provide an answer that gives a valid explanation of the effect of the worldwide distribution of oil on **both** trade and economic dependence. The student should apply the information in the chart that shows the location of oil reserves by percentage to determine the effect that such distribution would have on trade patterns. The item is open-ended which means that there is more than one way to answer this question correctly. However, the answer must reflect an understanding of the relationship between distribution of resources and patterns of trade.

See the DSTP webpage for more items and sample, annotated student responses.
http://www.doe.k12.de.us/aab/social_studies/Social_Studies_item_samplers.shtml