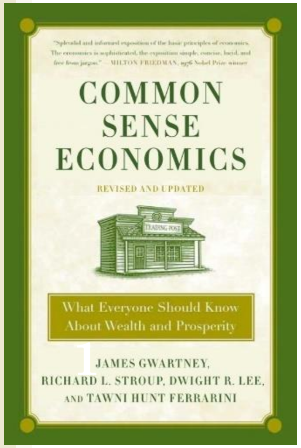
Part 1: Twelve Key Elements of Economics



Common Sense Economics ~
What Everyone Should Know About Wealth and Prosperity

http://CommonSenseEconomics.com/

Turn on the learning light!

Introduction to PowerPoint Slides

- The PowerPoint slides for the Common Sense Economics (CSE) electronic package provide an overview of the most important points covered in the text. Students should read the text, watch the assigned videos, and listen to the podcasts prior to reviewing the slides.

- The PowerPoint slides are organized by module, which reflects the approximate amount of material most instructors will cover weekly during a regular school term. The 15 core modules cover all of the CSE text. Modules 1, 2, 3, and 4 covering part 1 of CSE are presented here. The slides for each module are organized as follows: (1) module title and list of concepts covered, (2) highlights and explanation of text material, including the CSE elements covered by the module, and (3) questions for thought.

- Some instructors may want to use the PowerPoint slides for classroom instruction. The slides will provide students with a comprehensive set of notes and explanatory material for the CSE text.

The Twelve Key Elements of Part 1 will

- Provide a bridge between common sense and basic principles of economics,
- Help you begin to "think like an economist," and
- Provide important insights with regard to how the world really works.

Module 1: Basic Concepts

- CSE Part 1, Elements 1, 2, and 3
- Concepts Covered:
  - Incentives
  - Scarcity
  - Opportunity costs
  - Marginalism

Element 1. Incentives matter.

- Changes in benefits and costs will influence choices in a predictable manner.
  - When the cost of an action increases, individuals will be less likely to choose it.
  - When the benefits of an action increase, individuals will be more likely to choose it.
  - This simple idea, sometimes called the basic postulate of economics, is a powerful tool because it applies to almost everything that we do.

What are Incentives?

- Incentives are the rewards and penalties associated with choices.
- Changes in incentives alter the behavior of people.
- Incentives influence choices of individuals in all areas—personal, business, and political.

Incentives, Prices, and Coordination of the Actions of Buyers and Sellers

- Price alters the incentives confronted by both buyers and sellers.
  - Higher prices will encourage buyers to purchase less.
  - Higher prices will encourage sellers to supply more.

- If consumers want to buy more than sellers are willing to supply, the price will rise.

- The higher prices will reduce the quantity purchased and increase the quantity supplied until the two are brought into balance.

Incentives, Prices, and Coordination of the Actions of Buyers and Sellers

- What will happen if producers are supplying more than consumers are willing to purchase?

- Price will decline causing suppliers to produce less and consumers to purchase more.

- As price declines, quantity supplied will fall and quantity demanded will increase until the two are brought into balance.

Incentives and Political Action

- Incentives affect political as well as market choices.
- Voters will consider how the expected actions of candidates will affect their personal well-being.
- Politicians will consider how their positions will affect their chances of being elected (and re-elected).
- Why do people run for office? Make political contributions? Volunteer for political campaigns?
- Incentives provide the answers in all cases.

Incentives, Greed, and Altruism

- Some people think that incentives matter only when people are greedy and selfish. This is false.

- Changes in costs and benefits will influence the actions of both the altruistic and the greedy.
  - Both the selfish and the altruistic will be more likely to attempt to rescue a child in a shallow swimming pool than in the rapid currents approaching Niagara Falls.
  - Both are more likely to give a needy person their hand-me-downs rather than their best clothes.

Element 2. There is no such thing as a free lunch. Goods are scarce and therefore we have to make choices.

- **Scarcity:** The reality of life on our planet is that productive resources are limited, while the human desire for goods and services is virtually unlimited.

- A resource is scarce if it has alternative uses.

Opportunity Cost

- Because we are constantly faced with scarcity, we must make choices.

- Your choice to do one thing involves giving up the opportunity to do other things.

- **Opportunity Cost:** The highest valued alternative good or activity that must be sacrificed as a result of choosing an option.

- When choosing, we constantly make trade-offs in our decisions.

Opportunity Cost

- Costs involving money are common.
  - Money spent on one purchase is money that is not available to spend on other things.

- Opportunity costs also often involve time.
  - For example, going to a football game, watching television, or walking on the beach all involve an opportunity cost of time.

Opportunity Cost

- It is often said that some things are so important that we should do them without considering the cost.

- But, once it is recognized that costs are about forgone alternatives, it is obvious that this opinion is nonsensical.

- Saying that we should do something without considering the cost is really saying that we should do it without considering the value of the alternatives.

Opportunity Cost

- Politicians often speak of free education, free healthcare, and free housing, but this terminology is deceptive.

- The provision of all these goods requires scarce resources.

- Governments can shift costs, but they can cannot eliminate them.

Element 3. Decisions are made at the margin: If we want to get the most out of our resources, options should be chosen only when the marginal benefit exceeds the marginal cost.

- To get the most out of our resources, actions should be undertaken when the marginal benefit exceeds the marginal cost and rejected when the marginal cost exceeds the marginal benefit.

- This principle of sound decision-making applies to individuals, businesses, government officials, and society as a whole.

Marginalism

- Few, if any, decisions are "all-or-nothing."
- Marginal means additional.
- Marginalism is seldom ignored in our personal decisions, but frequently in our conversations and in politics.
- To get the most out of our resources, we should only take an action when the marginal benefits are greater than the marginal costs.

Examples of Marginal Decision-making

- How clean is your house?
  - Do you clean 100% of the dirt away?
- How about when company is coming?
- How about when selling your house?
- In each case, you clean to the point where the marginal costs outweigh the expected marginal benefits.

Module 1: Questions for Thought

1. What impact will higher wages have on the labor force participation of women? How will this affect the birth rate?

2. A restaurant offers an "all you can eat" lunch buffet for $10. Jim has already eaten three servings, and is trying to decide whether to go back for a fourth. Describe how Jim can use marginal analysis to make his decision.

Module 1: Questions for Thought

3. Maria wishes to buy gasoline and have her car washed. If she buys 9 gallons of gasoline at $2.50 per gallon, the car wash costs $2, but if she buys 10 gallons of gasoline, the car wash is free. For Maria, the marginal cost of the tenth gallon of gasoline is
   a) Zero
   b) 50 cents
   c) $2.00
   d) $2.50

Answer: 50 cents (=$2.50 - $2.00)

Module 2: Trade and Markets

- CSE Part 1, Elements 4, 5, and 6
- Concepts Covered:
  - Comparative Advantage
  - Gains from trade
  - Transaction costs
  - Demand and supply
  - Market equilibrium

ELEMENT 4. TRADE PROMOTES ECONOMIC PROGRESS.

- The foundation of trade is mutual gain.

- Trade is mutually advantageous: In order to for an exchange to occur, the trading partners must agree. Trade is a win-win activity.

Three Major Sources of Gains From Trade

- Trade moves goods from people who value them less to people who value them more.
- Trade makes larger outputs and higher consumption possible as a result of specialization.
- Trade makes larger outputs and higher consumption possible because it facilitates gains from the lower per-unit costs that often accompany large scale production.

Comparative Advantage and Gains from Trade

- **The Law of Comparative Advantage:** Trading partners can produce a larger joint output if each specializes in the production of items for which they are the low opportunity cost producer. This law applies to individuals, businesses, and nations.

- Each trading partner gains when they specialize in the production of items for which they are a low opportunity cost producer and trade for items that they can produce only at a high opportunity cost.

The Scope of Trade Is Broad

- Going to a movie
- Shopping at a grocery store
- Having a garage sale
- Renting a house or an apartment
- Buying imports from China and Mexico

The Importance of Trade In Our Modern World

- Trade makes it possible for us to consume a bundle of goods and services far beyond what we would be able to produce for ourselves.
  - Imagine the difficulty involved in producing your own housing, clothing, and food, to say nothing of computers, television sets, dishwashers, automobiles, and telephones.

- Countries that impose obstacles to exchange—either domestic or international—reduce the ability of their citizens to achieve gains from trade and to live more prosperous lives.

Element 5. Transaction costs are an obstacle to trade.

- Transaction costs reduce the volume of trade and the gains it generates.

- Lower transaction costs will increase the volume of, and the gains from, trade.

Transaction Costs

- **Are resources spent on**
  - Searching out trading partners
  - Searching out product information
  - Negotiating terms of trade
  - Closing sales

Why do we experience transaction costs?

- Physical objects: Can’t get there from here!
- Lack of information: Finding sellers and best deals.
- Political obstacles: Taxes, tariffs, licensing requirements, regulations, etc.

Middlemen, Gains From Trade, and Transaction Costs

- Middlemen reduce transaction costs. This is why people value their services.

- For Example:
  - real estate agents
  - stockbrokers,
  - automobile dealers
  - grocers
  - and a wide variety of merchants.

Technology and Transaction Costs

- In recent years, internet technology has reduced the transaction costs of numerous exchanges.
- With just a few swipes on a touch screen one can shop for movies, clothing, and household goods, locate a hotel room, obtain tickets for a major concert or big football game, and even hail a taxi.
- Reductions in transaction costs have increased the volume of trade and enhanced our living standards.

ELEMENT 6. PRICES BRING THE CHOICES OF BUYERS AND SELLERS INTO BALANCE.

- The market price of a good reflects the forces of demand and supply.

- This price will tend to bring the quantity demanded and quantity supplied into balance.

Demand Side of a Market

- The demand curve represents the response of buyers (consumers) to a change in price.

- **Law of Demand:** There is an inverse relationship between the price of a good and the quantity that buyers are willing to purchase when other things are held constant.
  - As the price of a good increases, consumers purchase less of the good.
  - As price decreases, consumers will purchase more.

Supply Side of a Market

- The supply curve represents the response of sellers (producers) to a change in price.

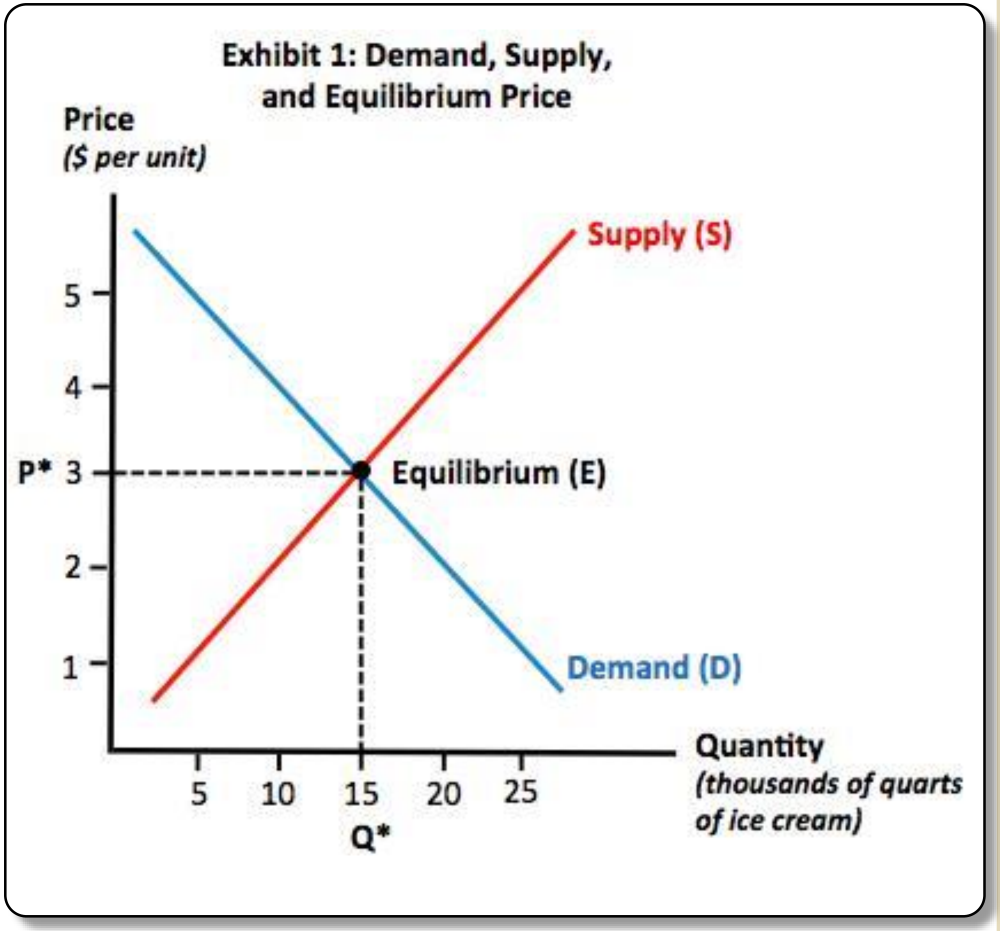
- **Law of Supply:** There is a positive relationship between the price of a good and the quantity that sellers are willing to supply when other things are held constant.
  - As the price of a good increases, sellers are willing to supply more of the good.
  - As price decreases, sellers will supply less.

Equilibrium

- Equilibrium occurs at the price where the amount of the good demanded by consumers is just equal to the amount sellers are willing to supply.
- The choices of buyers and sellers will move the market toward equilibrium.
- Consumers will purchase only units that they value more than price. Similarly, producers will supply only units that can be produced at a cost less than price.
- In equilibrium, all mutually advantageous exchanges will occur.

DEMAND, SUPPLY, AND EQUILIBRIUM PRICE

- Here we illustrate the impact of price on ***quantity demanded*** and ***quantity supplied***.
- There is an inverse relationship between price and ***quantity demanded***.
- There is a positive relationship between price and ***quantity supplied***.
- As shown here, price will tend to move toward the equilibrium, where ***quantity demanded*** and ***quantity supplied*** are equal.



What Determines If a Good Will Be Produced?

- In a market economy, firms will search for the opportunity to produce goods for which sales revenue exceeds their costs.

- Firms will continue to produce a good or service only if consumers are willing to pay a price that is greater than or equal to their per unit costs.

DEMAND CURVE SHIFTERS

- The following will lead to a change in demand (a shift in the entire curve):
  - Changes in consumer income
  - Change in the number of consumers
  - Change in the price of a related good
  - Changes in expectations
  - Demographic changes
  - Changes in consumer tastes and preferences

Changes in Demand and Quantity Demanded

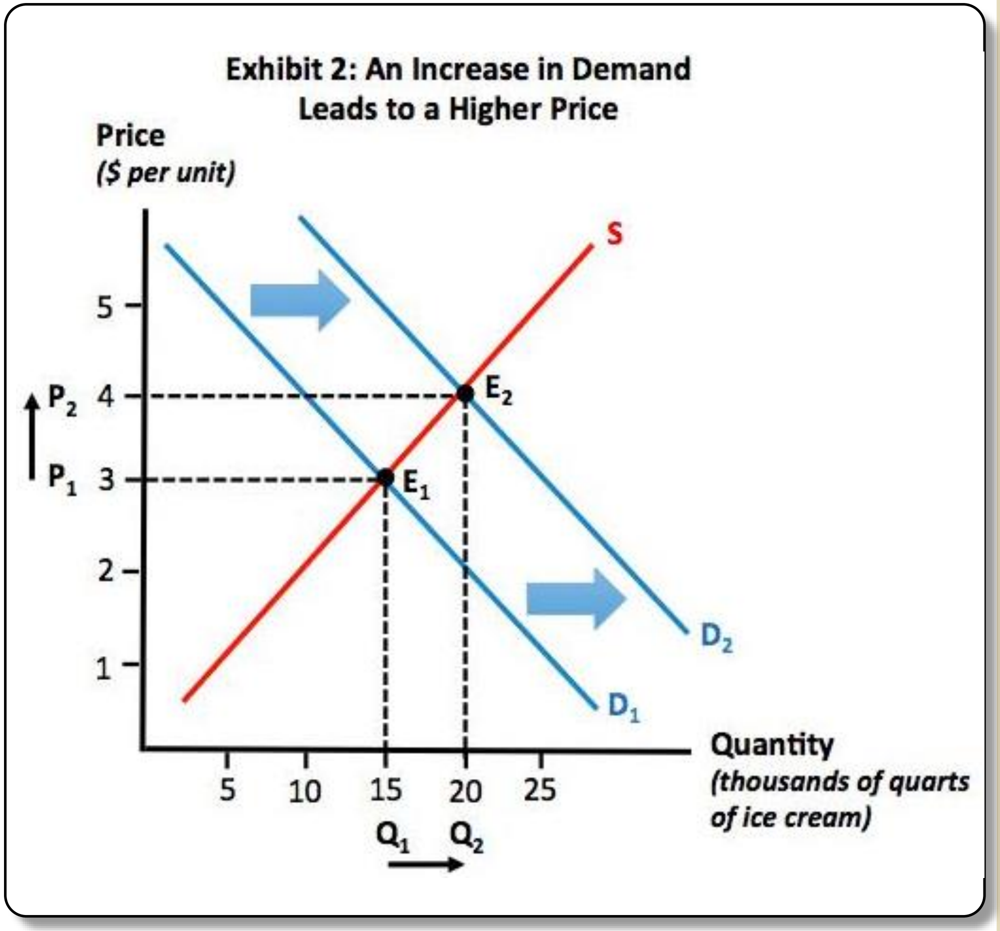
- **Change in Demand:** a shift in the entire demand curve.

- **Change in Quantity Demanded:** a movement along the same demand curve in response to a change in its price.

THE IMPACT OF AN INCREASE IN DEMAND

- Here we illustrate the impact of an increase in ***demand*** (shift from D_1 to D_2) for ice cream such as would result from higher income levels or higher prices for frozen yogurt, a substitute for ice cream.

- The increase in ***demand*** leads to a higher equilibrium price ($4) for ice cream and an increase in quantity exchanged.



Effects of a Change in Demand

- **When demand decreases:** the equilibrium price and quantity will fall.

- **When demand increases:** the equilibrium price and quantity will rise.

Supply Curve Shifters

- The following will cause a change in supply (a shift in the entire curve):
  - Changes in resource prices
  - Changes in technology
  - Elements of nature and political disruptions
  - Changes in taxes

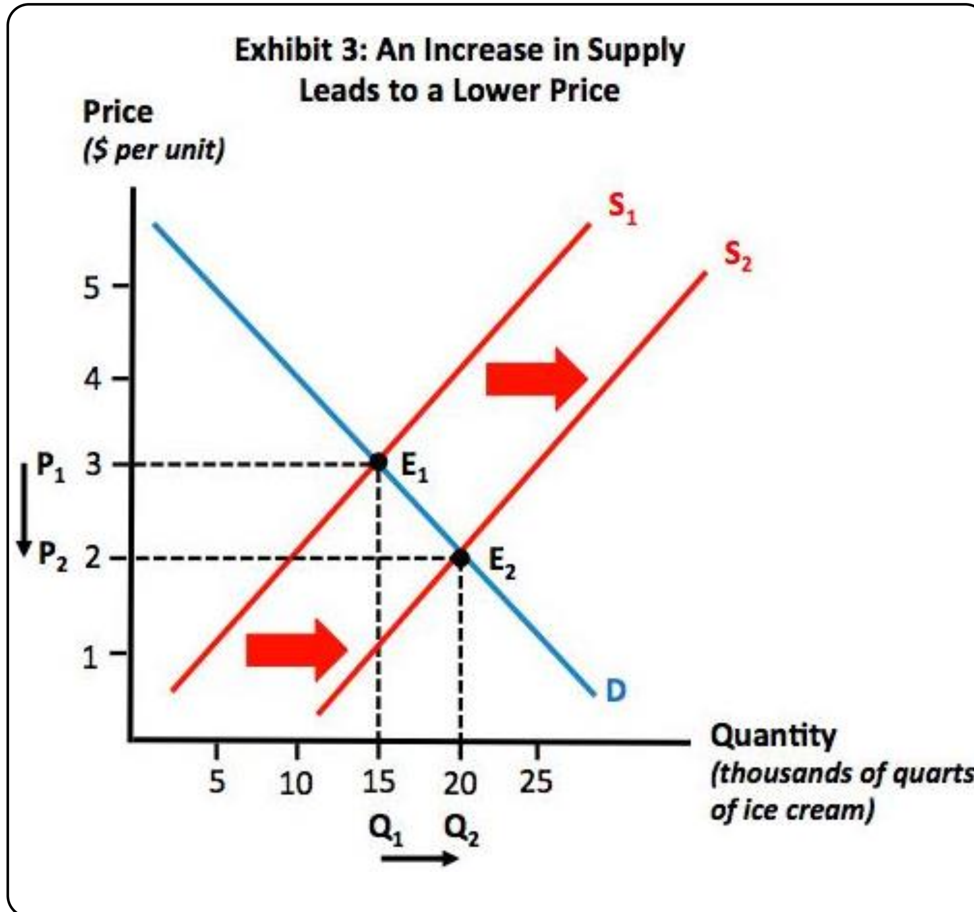
Changes in Supply and Quantity Supplied

- **Change in Supply:** a shift in the entire supply curve.

- **Change in Quantity Supplied:** movement along the same supply curve in response to a change in its price.

The Impact of an Increase in Supply

- Initially, the demand (*D*) and supply (S_1) of ice cream resulted in an equilibrium of $3.
- The ***supply*** curve reflects the cost of producing the product. Suppose the initial equilibrium was disrupted by an increase in ***supply*** (shift from S_1 to S_2) for ice cream such as would result from lower prices of milk, cream, and sugar (ingredients used to make ice cream).
- The increase in ***supply*** leads to a lower equilibrium price ($2) for ice cream and an increase in quantity exchanged.



Effects of a Change in Supply

- **When supply decreases:** the equilibrium price will rise and the equilibrium quantity will fall.

- **When supply increases:** the equilibrium price will fall and the equilibrium quantity will rise.

The Market Adjustment Process

- The market adjustment process does not occur instantaneously. It will take time for both consumers and producers to adjust fully to a change in market conditions.

- In a dynamic world, the adjustment process is continuous. The impact of changes in demand and supply and factors that underlie shifts in these curves are central to the understanding of the market process.

Module 2: Questions for Thought

1. Why do you trade for things rather than produce them yourself? Would you be better off if you did not buy so many things from others? Would Americans in general be better off if they did not buy so many things from others?

2. How have the following influenced the volume of trade: a) the internet, b) the interstate highway system and c) tariffs on goods purchased from sellers in other countries?

Module 2: Questions for Thought

3. What impact would each of the following have on the demand (or supply) of beef and the market price of beef?
   - Lower pork prices
   - Higher consumer income
   - Higher prices of feed grains used to feed cattle

Module 3: Markets and Earnings

- CSE Part 1, Elements 7, 8, and 9
- Concepts Covered:
  - Profit and loss
  - Helping others and receipt of income
  - Jobs versus the creation of wealth

Element 7. Profits direct businesses toward productive activities that increase the value of resources, while losses direct them away from wasteful activities that reduce resource value.

- If we are going to get the most out of the available resources, projects that increase value must be encouraged, while those that use resources less productively must be discouraged.

- This is precisely what profits and losses do.

Business and Production of Goods

- Businesses purchase resources (labor, capital, and entrepreneurial talent) in order to produce goods and services.
- In a market economy, producers will have to bid resources away from their alternative uses because the owners of the resources will supply them only at prices at least equal to what they could earn elsewhere.
- The producer's opportunity cost of supplying a good or service will equal the payments required to bid the resources away from their other potential uses.

Economic Costs vs. Accounting Costs

- Economic costs include the costs of all resources required to produce a good, including the opportunity costs of assets owned by the firm.
- Accounting costs omit the opportunity costs of assets owned by the firm.
- Accountants focus on net income, which is slightly different than economic profit.
- The firms net income will overstate profit as measured the economist.

Measurement of Profit

- Total Revenue = Price x Quantity (summed for each of the goods sold)

- Total Cost = The opportunity costs of all the resources required for the production of the good.

- Profit = Total Revenue – Total Cost

What is the Function of Profit and Loss?

- Profit is present when the value of the good (as indicated by the price that consumers are willing to pay), exceeds the value of the resources required for its production.

- Profit is a reward for transforming resources into something of greater value.

- Losses are just as important. They penalize businesses that produce goods and services that consumers value less than their unit cost.

The Role of Profit and Loss: An Example

- Suppose a business can produce 1,000 t-shirts at a total cost of $20,000.
  - What is the profit or loss if the shirts can be sold for $22 each?
  - How does the value of the t-shirts compare with the value of the resources used?
  - Is this a productive activity?

  - Now, suppose the t-shirts can be sold for only $17 each? What is the profit or loss?
  - In this case, how does the value of the t-shirts compare with the value of the resources used?
  - Is this a productive activity?

Element 8. People earn income by providing others with things they value.

- Even people who are motivated mostly by the desire for income, will have a strong incentive to develop skills and take actions that are valuable to others.

- Moreover, people seeking high earnings will have a strong incentive to pay close attention to what others value.

Earning Income by Helping Others

- People are different in many ways. We have different productive abilities, preferences, specialized skills, attitudes, and willingness to take risks.
- Differences in income arise because our differences affect the value of goods and services we help create and supply.
- There is a direct link (ceteris paribus) between helping others in ways that they value and the income we earn.
- If you want to earn a high income, figure out how to help others a great deal.

Incentives Matter, Again.

- The direct link between providing others with things they value and our personal earnings provides each of us with a strong incentive to develop our talents and skills.
  - College students are rewarded for improving their knowledge and skills.
  - Star athletes and entertainers are rewarded for their special skills.
  - Entrepreneurs are rewarded for their strategic risk-taking.

Higher Income and Living Standards

- Income and living standards cannot increase without an increase in the availability of goods and services that people value.

- Question: Can you think of anyone with substantial earnings who is not providing a good or service that others value highly?

Element 9. Production of goods and services people value, not just jobs, provides the source of high living standards.

- If jobs were the key to high incomes, we could easily create as many as we wanted.
- All of us could work one day digging holes and the next day filling them up.
- We would all be employed, but we would also be exceedingly poor because such jobs would not generate goods and services that people value.

The Fallacy of Destroying Goods to Create Jobs

- Politicians and proponents of government projects are fond of bragging about the jobs created by their programs. But, their programs sometimes reduce the availability of goods and services. Consider the following:
  - Agricultural Adjustment Act (AAA) of 1933
    - In an effort to prevent farm prices from falling during the Great Depression, the federal government paid farmers to plough under portions of their crops and slaughter some of their livestock. Potato farmers were paid to spray potatoes with dye, making them unfit for human consumption. Six million baby pigs were killed in 1933 alone.
    - Result: Less goods and services were available for consumption.

The Fallacy of Destroying Goods to Create Jobs

- 2009 Cash for Clunkers
  - Under the Cash for Clunkers program, car dealers were paid to destroy older cars that were traded in for a new automobile.
  - Proponents of this program argued that it would stimulate recovery by inducing people to buy new cars.
  - Result: Consumers spent more on automobiles (both new and used) and therefore less was available for spending on other items.
  - All of this is unsound economics. You may be able to help specific producers by increasing the scarcity of their products, but this will not promote prosperity.

The Fallacy of Destroying Goods to Create Jobs

- While they are more subtle, government actions that increase the opportunity costs of obtaining various good and services are also destructive.
- When more resources are used to produce a good, fewer are available to produce other goods.
- The corn ethanol program provides an example.
  - Production of gasoline with ethanol is more expensive: Ethanol costs approximately $1.50 more than the energy equivalent of a gallon of gasoline.
  - When corn is used to produce the ethanol in gasoline, less is available for other purposes.
  - Result: The ethanol program reduced the supply of corn and other feed grains, causing their prices to soar.

Does Government Spending "Create" Jobs?

- Government spending to create jobs requires either taxes or borrowing. But, this crowds out private sector spending and employment.

- The relevant issue is whether the jobs created by government spending add more to output than the displaced private sector jobs.

Jobs of Value Matter.

- It is not simply more jobs that improve our economic well-being, but jobs that produce goods and services people value and are willing to pay for.

- When this elementary fact is forgotten, people are often misled into acceptance of programs that reduce net wealth rather than create it.

Module 3: Questions For Thought

1. Suppose you decide that it is in your self-interest to establish a computer repair business. Will others be better off or worse off if your business earns a profit? How will the well-being of your customers be affected?

2. How have the actions of high earners, such as Oprah Winfrey, Tom Hanks, Steve Jobs, LeBron James, and Bill Gates impacted the well-being of others? Have you been helped by any of them? Were you harmed by any of them?

Module 3: Questions For Thought

3. Under the 2009 "Cash for Clunkers" program, the government paid auto dealers up to $4,500 per vehicle to destroy 700,000 used cars that were traded in for new ones. Did this program promote the prosperity of Americans? Suppose there was an outbreak of crime that destroyed 700,000 automobiles, would Americans be better off as a result? Why or why not?

Module 4: Progress, Markets, and Sound Economic Thinking

- CSE Part 1, Elements 10, 11, and 12
- Concepts Covered:
  - Sources of economic progress
  - Market prices and the invisible hand
  - Secondary effects and unintended consequences

Element 10. Economic progress comes primarily through trade, investment, better ways of doing things, and sound economic institutions.

- Trade, investments in people and productive assets, technological advancements, and improvements in economic organization enhance our ability to produce goods and services and achieve higher living standards.

What is Economic Progress?

- Americans produce and earn ***thirty times*** as much as they did in 1750.

- Why are Americans so much more productive today than they were 250 years ago?
  - Answer: Economic growth and expansion in the availability of goods and services provides the answer.

Sources of Economic Growth

- Investments in productive assets and discovery and development of resources
  - Tools, machines, human capital, minerals
- Improvements in technology
  - Internal combustion engine, electricity, computers, by-pass surgeries, etc.
- Improvements in economic organization
  - Legal system, competitive markets, etc.

ELEMENT 11. THE "INVISIBLE HAND" OF MARKET PRICES DIRECTS BUYERS AND SELLERS TOWARD ACTIVITIES THAT PROMOTE THE GENERAL WELFARE.

> *Every individual is continually exerting himself to find out the most advantageous employment for whatever capital he can command. It is his own advantage, indeed, and not that of the society which he has in view. But the study of his own advantage naturally, or rather necessarily, leads him to prefer that employment which is most advantageous to society. He intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was not part of his intention.*
>
> —Adam Smith (1776)

What is the "Invisible Hand?"

- The "invisible hand" to which Smith refers is the price system.

- When directed by prices, individuals intend only their own gain, but their actions promote the goals of others, leading to greater prosperity.

- One statistic—the current market price of a particular good or service—provides buyers and sellers with what they need to bring their actions into harmony with the best possible information on the current actions and preferences of others.

Market Prices Summarize Relevant Information

- Friedrich Hayek (1974 Nobel prize winner) stressed: The primary function of markets is to provide information (both to buyers and sellers).
- Market prices reflect information about consumer preferences, costs, and matters related to timing, location, and circumstances—information that in any large market is well beyond the comprehension of any individual or central-planning authority.
- Market prices act like a giant computer network grinding out an indicator that gives all participants both the information they need and the incentive to act on it.

Self-Interest Guided by the Invisible Hand

- When guided by market prices, self-interested individuals will move toward activities that will promote the general welfare.
  - Consumers will purchase goods that they value highly relative to price.
  - Profit seeking producers will produce goods that consumer value highly relative to costs.
  - Because lower costs will mean higher profits, each producer will strive to keep costs down and quality up.
- The cooperation that comes from self-interest directed by the invisible hand of market prices is truly amazing. The combination of self-interest and the invisible hand is a powerful force for economic progress.

Element 12. Too often long-term consequences, or the secondary effects, of an action are ignored.

Sound economics requires that when analyzing a change it is important to "trace not merely the immediate results but the results in the long run, not merely the primary consequences but the secondary consequences, and not merely the effects on some special group but the effects on everyone.

—Henry Hazlitt,
Economics in One Lesson

The Broken Window Fallacy

- Classic story: A boy throws a ball through the window of a shop. Therefore, the shopkeeper hires a glazer to fix the broken window.
- Noting the highly visible employment of the glazer, some argue that the broken window is a good thing.
- This is wrong; it ignores the secondary effects.
  - If the shopkeeper had not spent the funds fixing the window, he would have spent them on other things.
  - Employment in these areas of production would have been larger and the community would have had both the window and the items purchased by the shopkeeper.
  - Once the secondary effects are considered, it is clear that destructive actions such as those resulting from floods, hurricanes, and destructive public policy harm a society and fail to expand net employment.

Why Secondary Effects are Important

- Failure to consider the unintended secondary effects is often a major source of economic error.

- Policy changes often generate unintended secondary effects. Consider the following examples.

Mandated Auto Gasoline Efficiency Standards

- The standards are designed to reduce gasoline consumption, but there are secondary effects.
  - To meet the efficiency standards, manufacturers reduce the size and weight of vehicles and this results in about 2,500 more highway deaths per year.
  - The improved gas mileage causes people to drive more than they otherwise would. Result: Increased congestion and smaller reduction in gasoline consumption.

- Sound economics requires evaluation of these secondary effects.

Tariffs, Quotas, and Other Trade Restrictions

- Trade restrictions are designed to protect industries and their employees from global competition. But, there are secondary effects.
  - Consumers pay higher prices for the products.
  - In the case of resources, the higher prices will increase the costs of the domestic firms using the resource.
    - Example: Trade restrictions lead to higher sugar prices, increasing the costs of U.S. candy manufacturers, causing them to move to other countries.
  - Import restrictions: Because foreigners sell less in the U.S., they have fewer dollars to buy our exports.
- As a result of these secondary effects, employment in the protected industries will expand, but there will be less employment in other industries.

Pencil Stub Story

- A first grade teacher paid students 10 cents for pencil stubs.
- The intent was to discourage students from losing their pencils. But, there were secondary effects.
  - The students quickly sharpened their pencils down to the stubs to get the 10 cent reward.
- Sound economics requires consideration of secondary effects.

Module 4: Questions for Thought

1. What are the primary sources of high per capita income? Why are the incomes of Americans so much higher today than was true 250 years ago?

2. Why are the quantities of apples, bananas, milk, television sets, laptop computers, and thousands of other items available in your hometown approximately equal to the quantities of these items that local consumers desire to purchase?

Module 4: Questions for Thought

3. A few days after the 2001 terrorist attacks on the World Trade Center and the Pentagon, Nobel Prize winning economist Paul Krugman made the statement below. Evaluate his views.
   - "Ghastly as it may seem to say this, the terror attack—like the original day of infamy, which brought an end to the Great Depression—could even do some economic good. The destruction isn't big compared with the economy, but rebuilding will generate at least some increase in business spending."