

# Exploring Economics

Ray Notgrass

*Exploring Economics*

Ray Notgrass

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*French Market, New Orleans, Louisiana (c. 1910)*

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*Hunter Plant in Castle Dale, Utah, is a coal-fired power generation station.*





*Gray's General Store, Little Compton, Rhode Island (2008)*

## Introduction

A factory closes in your town. Three hundred people lose their jobs because the company has decided to move its production to Mexico. What will all of those former employees do for work?

You are thinking about applying for a summer job at a new clothing store because they carry attractive but modest apparel. However, it is the seventh clothing store in the same shopping area. If it doesn't stay in business, you may be out of work for the rest of the summer. What should you do?

A family that lives down the street is moving to a less expensive house. The mother in that family had to have surgery for a brain tumor, and they are having a hard time paying all of the medical expenses. What economic issues are they are facing?

In the early 1960s, gasoline cost twenty-five or thirty cents a gallon. Today, gasoline prices change constantly and can go from two dollars a gallon to four dollars a gallon and back again in a year. What causes these changes?

The promises that a presidential candidate makes regarding economic policy sound good—but the promises of another candidate sound good also, even though they embody the opposite policy priorities. Which candidate should you support? Are either candidate's proposals realistic?

You hear people at church talking about an increase in taxes that the government is considering.

They say that it will be a one percent increase. That doesn't sound like very much. What's the problem?

Every day the news reports some statistic: the unemployment rate, new housing starts, a change in the Consumer Price Index, the Dow Jones average. What do all of these numbers mean?

You want to be a good steward of the resources, including the money, that God provides for you. You want to live, work, and think about the world around you in a way that will honor God. What do you need to understand in order to accomplish these goals? All of these are reasons you need to study economics.

## Goals and Purpose

*Exploring Economics* provides a thorough survey of the basic terms and concepts of economics. However, our goal has been not just to assemble the required definitions, statistics, and charts, but to provide an understanding of what economics is, what it means to you now, and what it will mean to you in your adult life.

Some of you who study this course will go on to take an economics course in college. Probably very few of you who study this curriculum will become economists. But everyone who studies this course will face economic issues and decisions. Having a grasp of the basic issues in the field will be helpful.

If you shop for clothes or groceries or gasoline, if you buy imported goods, if you start a business, if you read the headlines, if you support and vote for political candidates, economics will affect you. If you are ignorant of the subject, people who have all sorts of agendas can mislead you. The danger of ignorance is real in many areas of life, but it is especially dangerous when it comes to your money.

## Content and Structure

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This curriculum begins with an overview of economic terms and concepts and some of the more important economic theories. Two units (ten lessons) are devoted to what we call God's Economics: what the Bible says about economics, business, and wealth; a survey of economic ideas in church history; and economic issues that Christians face today. One unit (five lessons) provides a brief survey of the economic history of the United States to put our present situation in context. Eight units (forty lessons) present economic ideas, terms, and realities in greater detail. Two units then discuss vital economic issues that confront America today and show how the ideas presented earlier in the curriculum relate to these issues.

We hope to make the field of economics more clear by this three-fold presentation: brief overview, detailed discussion, and application to contemporary issues. The final unit in the curriculum puts all of what we discussed on a personal level by presenting economic priorities and decisions that affect individuals and families.

## Our Perspective

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We approach the subject of economics from a perspective of faith in God and a reliance on the Bible as God's infallible Word. Since issues involving money are so important and can have such a huge impact on a person's walk with the Lord, the teachings of the Bible are essential to a proper understanding of economics.

We believe in the strengths of the capitalist free-market system. We believe that the free market system has done more than any other economic system to help people live well in material terms; to provide outlets for them to use their God-given talents and resources; and to enable them to know personal, political, and economic freedom. By contrast, command economies that central government bureaucrats run have proven to be an inefficient and sometimes destructive way to guide the economic life of a country.

At the same time, we recognize the imperfections of capitalism. Capitalists are humans, and humans are sinners. Capitalists can be greedy, unjust, and exploitative. Sometimes people take advantage of a free system to do wrong for personal gain, just as those who are committed to or involved with a socialist or government-planned economy can do wrong and be selfish. Sometimes, for any number of reasons, the free market does not work completely smoothly. As a result, economic difficulties occur.

The human factor is why some government regulations are necessary even in free-market economies. However, unreasonable or ineffective government regulations that go too far are hurtful and counterproductive. The dynamic of imperfect people seeking to live by (and sometimes work around) economic principles makes economics fascinating and leads to lively debates.

Economics is not the study of business administration, although business activity is a vital part of the economy. You will not learn about the best way to organize a business, how to hire and motivate employees, good bookkeeping and accounting practices, or other matters related to running a business.

Economics is also not a study of personal finance. You will not learn how to balance a checkbook or how to shop wisely. These are important topics, but you can learn about these and other such issues in a course on consumer math. This course considers personal financial matters in the context of broader economic activity.

## The World of Economics Today

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We live in a time when economic events and government policies have challenged the classic definitions of economics. For instance, the communist nation of China, which has a history of central economic planning, is promoting capitalist enterprises within its borders (the Chinese call it socialism with a Chinese flavor). At the same time, the traditionally capitalist United States has seen a great increase in government involvement in economic planning and oversight in recent decades. Understanding the classic definitions is important, but we must also understand the changing economic realities of today.

Economic developments are constantly in the news. The times in which we live should encourage your generation to realize that a study of economics is relevant and vital. We hope that this curriculum will help you understand current economic realities while you gain an insight into topics that have long been associated with the study of economics.

In addition, please note that the websites and specific Internet sources cited in the text were current when this curriculum was written. Websites change and sources can be taken down at any time. We do not control the content accessed through these links, and a link to any site does not imply our endorsement. Please use care and discretion while browsing the Internet, and let us know if any of the links are outdated or inappropriate.

## Acknowledgments

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The materials we publish are always family projects. We have all had a hand in helping this curriculum come to fruition. John and Charlene Notgrass provided essential input on lesson content. John also did the graphic design of the book layout and helped with the editing of the volume of original sources. Nate McCurdy produced the charts and graphs. Mary Evelyn McCurdy designed the covers. Charlene reworked the review and test questions from the first edition. Bethany Poore developed the literature component and the lesson assignments and activities.

We have also benefited from the work of others. Ellen Petree, who is state certified in economics, reviewed the first edition and offered valuable insights. Larry Raper, who understands economic issues well because of his career with a major insurance company, also read the lessons and made many helpful suggestions. I am grateful for the help that these and other people have provided, but any errors and shortcomings are mine.

May we all be wiser stewards (the Greek word is *oikonomoi*, from which we get the English word economics) of the great gifts God gives us, and may He be honored through this curriculum.

*Ray Notgrass  
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December 2016  
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Clothing factory in Bangladesh (2012)

## How to Use the Curriculum

*Exploring Economics* is a one-semester high school course that helps students understand economic terms and issues that have an impact on the United States and its citizens. This course introduces both microeconomics and macroeconomics. In states where a year-long course is considered one high school credit, the economics and English components count as one-half credit each. In states where a year-long course is considered two high school credits, each course is counted as one credit.

To earn credit for both economics and English, the student should:

- Read the lessons in the text.
- Read the assigned documents in *Making Choices*.
- Complete a project for each unit (see explanation below).
- Read the four assigned books.
- Read the literary analysis for each book in the *Student Review*.
- Complete the assignments found at the end of the literary analysis for each book.
- **Optional:** Complete daily review questions, quizzes, and exams in the Student Review Pack.

If you do not wish to use *Exploring Economics* for English credit, you can omit half of the projects

and the four assigned books, but we encourage you to include them because they greatly enhance your student's understanding of economics.

**Unit Projects.** Our design for students earning one-semester credits in both economics and English is for the student to complete one project per week as suggested in the unit introductions. The student can choose to do *either* a writing assignment or a hands-on project. For students completing the one-semester English credit, we recommend that the student choose the writing assignment at least six times during the semester.

**Time Required.** A student should complete each day's assignments, listed at the end of each lesson, on that day. The actual time a student spends on a given day might vary, but you should allow your student about one hour each day for economics and one hour for English. If you are using the *Student Review* material, the work for the last day of each unit includes the unit quiz, which will require a few more minutes that day. Three days in the semester will include taking an exam over the previous five units, so you should allow some more time for this activity.

**We Believe in You.** We believe that you are in charge of your child's education and that you know how best to use this material to educate your child. We provide you with tools and instructions, but we encourage you to tailor them to fit your child's

interests and abilities and your family's situation and philosophy. Being able to do this is one of the benefits of homeschooling!

## Course Descriptions

You can use the following course descriptions as you develop your school records, produce a high school transcript, or report grades.

**Economics.** The student will receive an introduction to Biblical teaching related to economics, economics in church history, and the economic history of the United States. The student will then explore the basics of macroeconomics and microeconomics, learning about markets, money, trade, business organization, and labor. The student will also learn how government is involved in the economy and look at modern economic challenges. The student will read a significant number of original source documents and essays about economics while studying the lessons.

**English (Economics in Fiction and Non-Fiction).** The student will read two novels, one book about the global economy, and one autobiography (see list below). The student will read literary analysis of the books and discuss them in writing. The student will also complete a project each week, either an essay or another creative project related to the study of economics.

## Student Review Pack

The *Student Review Pack* has material that you might find helpful for increasing your student's understanding of the course and for giving you a way to know and grade your student's grasp of the content. It is an optional supplement that contains the following three components.

The *Student Review* includes review questions on each lesson, literary analysis of the books assigned in the curriculum, and essay questions on the books. The literary analysis is also available at [notgrass.com/ee](http://notgrass.com/ee).

The *Quiz and Exam Book* has a quiz to be taken at the end of each unit that is based on the lesson review questions. In addition, after every five units, it has an exam that is based on the quizzes from those five units. This makes a total of fifteen quizzes and three exams over the course of the semester. The lesson review questions can serve as a study guide for the quizzes, and the quizzes can serve as a study guide for the exams.

The questions at the end of the literary analysis for the four books provide the material needed for grading English.

The *Answer Key* contains answers for the lesson review questions, literary analysis questions, and the quizzes and exams.

### Assigned Literature

Assigned Literature		
Units 1-3	<i>Silas Marner</i>	George Eliot
Units 4-7	<i>The Rise of Silas Lapham</i>	William Dean Howells
Units 8-11	<i>The Travels of a T-Shirt in the Global Economy</i>	Pietra Rivoli
Units 12-15	<i>Mover of Men and Mountains</i>	R. G. LeTourneau



# 05

## Choices

Economics involves the need and the opportunity to make choices regarding alternative uses of limited resources. Choices have consequences, sometimes unintended ones. The need to make choices means that we must perform cost-benefit analysis of the alternatives before us. Most economic choices involve marginal decisions, which means deciding to a little more or a little less of something. Producers make choices about what and how much they produce. Factors such as incentives, substitute goods, and utility or satisfaction influence consumers' choices. People in government make choices based on their goals or ideals.

Lesson 21 - Chocolate or Vanilla?

Lesson 22 - Economic Choices

Lesson 23 - Producers Choose

Lesson 24 - We Choose

Lesson 25 - Uncle Sam Chooses

## Books Used

The Bible  
*Making Choices*  
*The Rise of Silas Lapham*

## Project (choose one)

- 1) Write 300 to 500 words on one of the following topics:
  - Write a short story about a choice that had significant impact.
  - Write about your ideas for what you will do after you finish high school. You can discuss one plan or multiple possibilities. Write about the costs and benefits. Write about the motivations behind your goals and dreams.
- 2) Make a photo essay of at least twenty photos illustrating economic choices that are an everyday part of your family's life, both the ones you make and the ones that are made for you. Write captions for the photos.
- 3) Create a children's book with the title "Choices." Illustrate it yourself in the medium of your choice (photography, painting, drawing, etc.). The book can have words to accompany the pictures, or only pictures. Create a cover and at least 20 pages.



# 21

## Chocolate or Vanilla?

*Did You Ever Have to Make Up Your Mind?*

— song by *The Lovin' Spoonful* (1966)

God has endowed us as human beings with the ability to consider alternatives, to make choices, and to realize that we are making choices. Sometimes having to make a choice is agonizing, but the ability to make choices is a blessing.

### We Get to Make Choices

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Think about some of the choices you can make. Every morning you have a choice about what you will wear. When you go to a restaurant, you have many choices of what you can eat. You have a choice about the type of work you will go into as an adult. When you are old enough to vote, you will have a choice about which candidate you will support in an election.

Beyond these matters, you have choices about significant issues in your life. You can decide to believe in God. You can decide what your attitude will be, even in hard circumstances. You can decide how you are going to treat other people.

You should always remember this fact: You do not have to live as a victim. Regardless of how

much you feel hemmed in or limited by your circumstances, you do not have to live your life as a victim. When you think of yourself as a victim, you are putting a limit on what you can accomplish and how successfully you can live. When you live as a victim, you are making a choice. You are choosing to let circumstances control your life.

Not all possible choices are open to everyone. Previous choices can limit future choices. If you choose not to be trained in medicine, you cannot legally write prescriptions and sign your name with the letters M.D. after it. Despite some limitations on the choices you can make, you can choose to make the most of your situation despite these limitations.

### We Have to Make Choices

---

Not only do we have the ability and opportunity to make choices, but we also have the responsibility to make choices about many things. No one has the time or money to do absolutely everything he or she would like to do, so he or she has to make choices. The richest person in the world can only be in one place at 9:00 on Monday morning.

The person with no work responsibilities only has the same 24-hour day that the busy person has. A person has the responsibility to choose some way to provide food for himself or herself; otherwise he or she is choosing to starve or to depend on someone else. The most important choice that a person has to make is whether or not to confess and obey Jesus Christ as Savior and Lord.

When you decide to live as a Christian and be faithful to that calling, you cannot also choose to live any way you want. Jesus said that following Him involves serious choices every day. You must choose whether or not you will love your enemy (Matthew 5:44). You must choose how you pray (Matthew 6:5-15). You must choose whether to store up treasure on earth or treasure in heaven (Matthew 6:19-20). You must choose not to judge others (Matthew 7:1-5). You must choose whether you will go through the narrow gate of life or the wide and popular gate of destruction (Matthew 7:13-14). You must decide whether you are merely going to listen to Jesus or whether you will act upon His words (Matthew 7:24-27). The point of the parable of the sower (Matthew 13:1-9, 18-23) is to challenge the listener to choose what kind of soil he or she is going to be.

## How to Make Good Choices

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The choices you make are not a coin toss or a blind shot in the dark. Some decisions will be difficult, and the best alternative might not be absolutely clear to you. Still, you can take steps that will help you make the best decisions possible.

You can seek to determine if at all possible what God's will is in a particular situation. You will need to study Scripture to see what God has said that will inform your decision. If He has directly spoken on a topic in Scripture, the choice that a Christian should make is clear. If God has not directly spoken on a certain topic in Scripture, you have to apply Biblical

principles and use the best-informed and most God-oriented discernment you can.

You need to decide what will bless others the most. Decisions that a person makes out of a selfish heart are not good decisions.

You need to decide what will best accomplish the goals that God has for you. To recognize and accept goals but then to make decisions that are contrary to attaining those goals is unwise.

You need to decide what will be best in the long run. Decisions that a person makes with only the immediate or short-term consequences in mind are usually not wise.

You need to get wise counsel. Other people have probably faced the same or similar decisions, and their experience can help you see a little further into the fog.

You need to pray about decisions. James told us to pray for wisdom and to pray in faith that God will answer (James 1:5-6). Jesus said that if we ask, seek, and knock, we will receive (Matthew 7:7-8).

## Realities About Choices

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Actions have consequences. Ideas have consequences. Choices have consequences. The reason that choices are so important is that they make a difference. They really matter. Here are some ways in which this is true.

Bad choices make good choices harder to make and result in fewer good options before you. When you decide to go down the wrong road, turning around and going back to where you can make a better choice is difficult. You have to admit that you were wrong, which can be hard. Sometimes you have to deal with the consequences of the bad choice even after you decide to start doing what is right.

Having made bad choices might mean that you have to start over by taking the time to get more training before you can get a job, or pay off some debt that you have accumulated by making bad choices,



*Ice cream shop in Hatyai, Thailand*

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or take a lower-paying job for a while, or appear in court to answer for mistakes you have made, or do other things to rectify the mess you have made. Paul said that we reap what we sow (Galatians 6:7). You have a choice about what you sow, but you do not have choices about what you reap as a result of what you have sown.

Choices have more at stake the longer you go through life. A child's choice between chocolate and vanilla ice cream is not an earth-shaking matter (unless he is allergic to chocolate!). By contrast, whom a person decides to marry will have consequences that last a lifetime and even longer. Deciding whether to start a career or go to college is a big decision; deciding whether to go to work or go to graduate school can be an even bigger decision. The longer you live, the more you become responsible for. Bigger responsibilities mean that your choices

tend to affect more people. You should get into the pattern of making good choices early in your life.

Choices often have unintended consequences. You should think through the consequences of your decisions as clearly and as carefully as possible, but even then you will likely be surprised. When you decide to eat more than you should, you don't mean to give yourself a stomach ache or to gain weight; but that is what can happen. The framers of the Treaty of Versailles following the Great War in the early twentieth century did not intend for the harsh treatment of Germany to lead to another world war, but most historians believe that World War II was at least partly the result of the terms of that treaty. The people at lending institutions who approved loans that were larger than what customers could afford to pay back did not mean to contribute to a worldwide economic meltdown, but their actions did play a part in the Great Recession.

Making choices is a big part of life. Many of the choices that you, the people around you, people in business, and people in government make have

to do with economics. Joshua encouraged Israel to make a good choice in the most important decision they had before them.

---

*. . . choose for yourselves today whom you will serve . . . .*  
*Joshua 24:15*

## Assignments for Lesson 21

**Making Choices** Read "Free to Choose: A Conversation with Milton Friedman" (pages 39-47).

**Literature** Continue reading *The Rise of Silas Lapham*. Plan to finish it by the end of Unit 7.

**Project** Choose your project for this unit and start working on it.

**Student Review** Answer the questions for Lesson 21.





# 22

## Economic Choices

*You can't have your cake and eat it too.*

— *American Saying*

### Choices about Scarce Resources

---

**W**e said in Lesson 1 that economics involves a study of the choices that people make regarding the production, distribution, and consumption of products and services made from scarce resources for which alternative uses exist. People in a society—including producers, consumers, and people in government—make choices about three basic economic issues:

**What goods and services, and in what quantities, will an economy produce?** In other words, what goods and services do potential consumers value and desire? Producing goods and services is pointless if no one wants them or is willing to pay for them. Once producers decide what to make, the quantity part of the question involves determining how much of that product the market will bear. It is poor economic planning to produce more than what people want or to produce less than what people want if the producers are capable of producing more.

**How will people produce goods and services?**

This question involves determining the nature and quality of the raw materials that will go into goods. It also involves the standard of training for those who provide services: do we expect nurses, accountants, and electricians, for instance, to receive training and certification? Another production issue involves determining whether domestic businesses will produce the goods and services or if foreign sources will provide them.

**How will people distribute the goods and services across the population?**

Will a producer find it worthwhile to pay for national marketing and distribution, or does the producer want only a local or regional market? Will the goods or services only be available to people who are able to pay for them, or will the government make them available by paying for them through tax revenues (as happens with public education and, for many people, with health care)? Or will the government subsidize production—that is, pay for part of the cost—so that the goods and services will be available at a lower cost to consumers? This is what happens with mass transit and the production of ethanol.



*Ethanol plant in West Burlington, Iowa*

You might think that at least some of these choices are simply business decisions, a discussion of which might be more appropriate in a course on business. However, remember that in Lesson 4 we said that the knowledge about how the economy works is held in small bits by billions of people who participate in the market. The choices we have described are business decisions, but they reflect economic realities that we discuss in this curriculum, such as:

- The demand and supply for goods and services that people might produce,
- The availability of resources to produce the goods and services, and
- The role of labor and government in the economy.

## Scarcity or Abundance: How Do We Act?

We face economic choices because we have limited resources. We do not have an unlimited supply of gasoline, food, clothes, or any other product or service. Nor do we have an unlimited supply of time and money that would allow us to do and to have everything we might want. Producers cannot produce and consumers cannot consume anything and everything. This is why we have to make choices. The way we make those choices has an impact on our economic life.

We admit the reality of scarce resources in general; but in practical terms, people often do not think or act with an assumption of scarcity. In one sense this is good, and in another sense this is not good.

First, the good part. We believe that sufficient resources exist in the world for everyone to have a decent standard of living. We believe that as the population grows, creative people come up with new ideas to help more people meet their basic needs. People have the potential to make good choices, and the economy can expand to provide what people need. The land of the United States once fed, clothed, and housed only a few million people; it now feeds, clothes, and houses over 300 million people. More importantly, as we discussed in Lesson 6, God has promised to supply all the needs of His people.

People generally believe that the market for goods and services is large enough for people to start a new business or expand an existing business. People have found ways to make the economic pie larger. A healthy way to make economic decisions regarding limited resources involves believing that there is enough of the pie for me if I work hard and live responsibly. Thinking that there is only a limited economic pie that people can divide into only so many pieces is thinking on the basis of fear.

Second, the bad part. Some people do make irresponsible decisions about limited resources. Those who do not want to make hard choices about how to use the limited resource of their money buy more than they should and go into debt. They are trying to buy a bigger piece of the pie with borrowed money, hoping that they will earn enough later to pay off the debt. This approach often gets them into financial trouble.

Many families have saddled themselves with thousands of dollars in credit card debt. Many college students, some of whom do not even graduate from college, accumulate tens of thousands of dollars in student loan debts. In 2008 after many people bought houses that were more expensive than they could afford, this mindset contributed to the entire economy going into recession when millions of people could not make their mortgage payments.

Believing that the Lord of abundance will provide does not mean going deeply into debt for material things and then trusting that the Lord will provide the money for the payments. Economic responsibility means making wise choices about your scarce resources.

## Cost-Benefit Analysis

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One step in making wise economic decisions is doing a *cost-benefit analysis* of the choices you face. This involves making a list of the costs and the benefits of taking a particular step before you take it. You want to determine if the benefits outweigh the costs, making the choice worthwhile.

Many times a day we conduct a cost-benefit analysis unconsciously. Is the benefit of more sleep worth the cost of being late for work? Is the benefit of saving a few moments by turning into the line of traffic now worth the risk of an accident, or would it be better to wait until there is more room in the lane? Is the benefit of talking to my friend now worth the cost of having to do my chores later in the evening?

---

*Sign advertising foreclosure home sale (2009)*





*Candy shop in Tokyo, Japan*

Here are three examples of cost-benefit analysis related to consumer purchases. Remember that a cost can be something other than money.

Buying a candy bar carries a cost. The benefit is being able to enjoy eating the candy bar. However, if you do this too often, you might gain weight or have other health problems that result from eating too much sugar. Does the benefit of enjoying this candy bar outweigh the financial and potential health costs for you?

Buying a coat involves a cost. The benefit is that you can have protection from cold weather, so that you can go places in the cold and so that you will not run the risk of becoming ill. Do those benefits outweigh the financial cost of the coat?

Both saving and spending have a cost and a benefit. If you have a certain amount of money, you need to decide what are the relative benefits of

spending it on something now compared to saving it so that you can buy something of greater value later.

Businesses have to do cost-benefit analysis of their plans. Will the benefit of increased sales outweigh the cost of creating a new product (costs such as paying for planning and engineering, creating production facilities in which to make the product, and so forth)? Will the cost of an advertising campaign result in the benefit of more sales? Might the company find that the advertising that it plans to do will not influence most potential customers?

People in government should engage in cost-benefit analysis of programs and proposals. Do they have sufficient evidence that, if a city or a county buys property for an industrial park, owners of industries will want to build there and generate enough tax revenue to recoup the cost of the land? Sometimes the benefit of a decision by people in government is not a financial benefit, but the benefit is real

nonetheless. If government leaders are thinking about expanding the public library, they might want to survey library patrons and the general public to see if the community will see a benefit from having more educational resources available.

Failing to do a cost-benefit analysis can result in significant losses. If a person does not do cost-benefit analysis before purchasing items, that person can wind up with a lot of stuff that he or she does not really need and not enough money to achieve more important goals. If people in a business fail to do cost-benefit analysis, they might wind up with a big warehouse with nothing to fill it or with significant losses from buying too much equipment. Elected officials sometimes do not want to conduct a cost-benefit analysis of a proposed or existing program if the program is politically popular. However, when government funds a program without a cost-benefit analysis, the government might spend money for something that is not worth the expense.

## Margins

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In economics, a *margin* is a small step that makes a big difference in an action being taken. Few decisions that we make are all-or-nothing decisions. Most of the time we make choices about doing a little more or a little less of something. For instance, once you have decided to exercise, you have to decide whether you have the time and energy to jog one more lap around the block. That is a marginal decision. Economists spend a great deal of time studying margins because that is where important economic decisions are made. One way to think of margin is the next one: the next worker hired, the next dollar earned, the next unit of a product consumed. What are the consequences or effects of the next one?

The owners of a widget-making business know that they can make and sell 5,000 widgets with the workers and machinery they have. To make the 5,001st widget, they would have to hire an additional worker or buy more machinery. Would

that additional expense be worth it? With another worker, they could make an additional 1,000 widgets, but could they sell enough of the widgets to make hiring the additional worker worth the expense of producing them? Determining the point where a change in behavior occurs (such as hiring an additional worker to make more widgets) is a marginal cost-benefit decision. *Marginal benefit* is the change in total benefit that results from an action. *Marginal cost* is the change in total cost that results from an action. All else being equal, it is better to take the action if the total benefit is greater than the total cost.

Economists refer to the *marginal propensity to consume*, which is the fraction or decimal part of extra income that an individual or household is likely to spend instead of save. For instance, if the marginal propensity to consume is .6, this means that the public, on average, will spend 60 cents of every dollar of extra income and save 40 cents. This statistic is helpful in estimating the effect of additional income, such as that which might come from higher wages or working overtime, on the economy as a whole.

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### *Clothing manufacturer in Oromia, Ethiopia*



We are going to look at economic choices that producers, consumers, and people in government make involving scarce resources, cost-benefit analysis, marginal thinking, and other economic realities that influence our choices.

Jesus reminds us that we have an important choice to make regarding Who or what will be our master. This is not a marginal decision involving just the next step, but it is a basic decision about the direction of a person's entire life.

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*No one can serve two masters;  
for either he will hate the one and love the other,  
or he will be devoted to one and despise the other.  
You cannot serve God and wealth.  
Matthew 6:24*

## Assignments for Lesson 22

**Literature** Continue reading *The Rise of Silas Lapham*.

**Project** Continue working on your project for this unit.

**Student Review** Answer the questions for Lesson 22.



*Quebec, Canada, produces about three-fourths of the world's maple syrup.*

# 23

## Producers Choose

*Would you like fries with that?*

*— a question of economics*

**W**e divide what producers offer in an economy into goods and services. *Goods* are tangible items that companies or individuals produce for consumption, such as cars, computers, clothes, and food. *Services* are intangible duties that people perform for pay, such as house cleaning, child care, legal counsel, and medical care.

People who operate businesses decide what goods and services they want to offer. Decisions about production can take many forms, and they have significant impact. For instance, a farmer has to decide what crops he wants to plant and determine the cost for machinery and seed, as well as what price he can expect to get for his crop. Automakers have to decide what models they think people will want to buy: will the automaker emphasize large, comfortable cars or small, economical cars? Someone who wants to start a home health business has to determine if the community needs such a business, what will be involved in finding and hiring qualified personnel, and how difficult it will be to collect payment for services from individual customers, insurance companies, or government agencies.

People who engage in retail sales have other choices to make regarding the distribution of

goods. A retailer has to decide if he wants to offer his product line in a physical store, from a mobile stand, on the Internet, or through a combination of methods. A store owner has to decide if she is going to concentrate on one kind of product, such as clothes or office supplies, or whether she will open a store that carries many product lines.

### Production Resources

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*Production resources* are the elements that producers use to create goods and services. Also called factors of production, these include material resources, human resources, and capital.

*Material resources* are those things found in nature or processed from things found in nature that people use to manufacture goods. Material resources include petroleum and other mineral deposits, trees, rock, maple syrup, and many other things. People who operate a business have to determine the cost of the material resources that are available for the production of goods. They might obtain the resources themselves, or they might pay someone else for preparing and delivering them.

*Human resources* include labor, creativity, and technology. People provide the labor to produce goods and provide services, and human creativity has generated the technology that makes new products and more efficient production possible.

When we hear the word capital with reference to financial matters, it usually refers to money (as in, “He now has the capital to start his business.”). In economics, however, *capital* refers to the materials used to produce goods, such as machinery and factories. Someone might use the word to refer strictly to money, but remember that money only has worth as it can provide other things. Money does not produce goods and services. Money can buy equipment, land, offices, and factories that people can use to produce goods and services.

People who produce goods and services make many choices about production resources. They decide what materials they want to use, how much they are willing to pay, and how to obtain the materials. Producers decide how many workers they want to hire, what skills they want the workers to have, and how much they are going to pay the workers. They decide about the technology in

which they want to invest to have the most efficient production process they can.

Business owners are also consumers. They choose the property where they want to build a factory or open an office, what machinery they want to purchase, and what other materials they need to start and run their business.

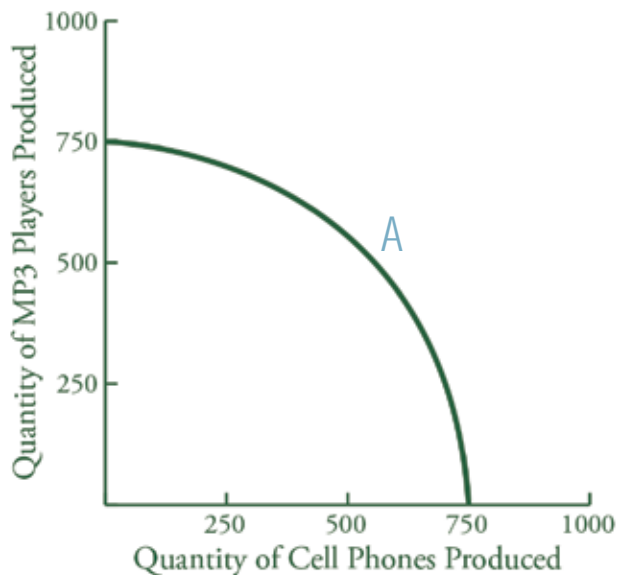
## Production Possibilities

One aspect of production that economists examine is the *production possibilities curve* (or *frontier*). This is the maximum production that an economy can have, given its production resources.

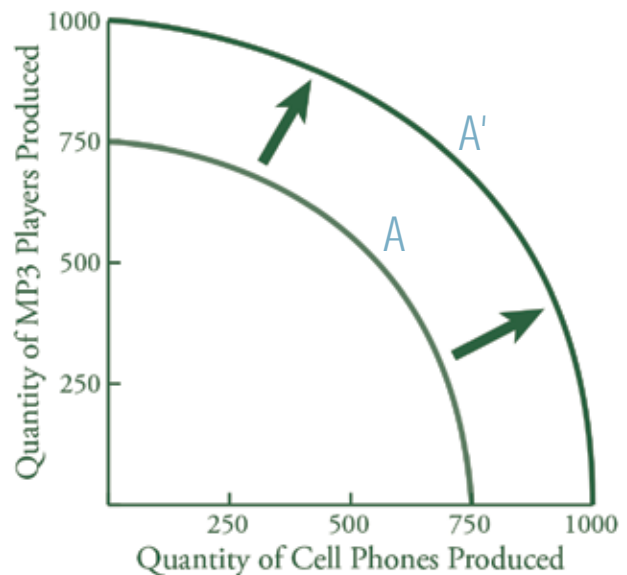
Imagine an economy that can produce only two goods: cell phones and MP3 players. The economy can produce 750 cell phones if it produces no MP3 players, and it can produce 750 MP3 players if it produces no cell phones. If it produces both cell phones and MP3 players, it can produce lesser amounts of both. This is illustrated on Production Possibilities Curve #1.

A production possibilities curve illustrates several key economic concepts. One is efficiency.

### Production Possibilities Curve #1



### Production Possibilities Curve #2







*Robotic manufacture of a cell phone*

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If new technology enables the economy to produce more MP3 players with the same or less labor, the economy becomes more efficient with regard to MP3 players. Another economic concept that the graph shows is that, if the actual production of goods falls somewhere below the curve, the economy is not producing at maximum efficiency.

If new technology enables more of one or both of the products to be produced, the production possibilities curve moves outward or to the right. This is shown by the curve A' on Production Possibilities Curve #2.

Another principle involved in production decisions is opportunity cost. When a person decides to do one thing, he or she is deciding not to do everything else he or she could do. *Opportunity cost* is defined as the greatest benefit that a producer gives up when he makes a choice. When you decide

to visit Aunt Stella from 2:00 to 4:00 on Monday afternoon, you are deciding not to do many other things, such as reading a book or mowing a neighbor's yard during those two hours. When you decide to take an online college class, you are deciding not to do other things during the time it takes to complete the class.

Opportunity cost is the greatest benefit a producer gives up in taking an action. If you decide to sell lemonade and make \$50.00, you are giving up the opportunity to mow a lawn and make \$35.00, bake cookies for a farmer's market and make \$25.00, or babysit and make \$20.00. Your opportunity cost would be \$35.00, the greatest alternative you are giving up. Your opportunity cost would not be \$80.00, the total of the three alternatives, because you could not do all three of the alternatives at the same time.

To take the opportunity to do or make or sell one thing could be the best decision you can make, but in making that decision you are paying the price of not doing or making or selling something else. Wise decision-makers want to make their opportunity cost as small as possible compared to what they gain from the decision.

Still another economic concept illustrated by the production possibilities curve is that of tradeoffs. A *tradeoff* is what you have to accept when you make a decision. If the people in the economy described above decide to focus exclusively on MP3 player production, they face the tradeoff of having to import cell phones or do without them. If producers decide to import oil instead of exploring for domestic sources, they are facing the tradeoff of being dependent on the oil production policies of other countries.

*Printing sugar containers (c. 1915)*



If people in a society decide to minimize environmental restrictions on producers, they are deciding to have less expensive goods but with the tradeoff of possible environmental damage. If the people of that society's government did not consider potential environmental impact when they decided to place as few regulations as possible on producers, the environmental damage could be seen as an *unintended consequence* of the decision.

## Economies of Scale and Scope

*Economy of scale* occurs when the average total cost per item decreases as the number of units produced increases. A print shop usually operates on the basis of economies of scale. If a customer wants 200 copies of a brochure, the printer might charge 30 cents per copy. The cost for the print job would be \$60. However, the printer could produce 1,000 brochures for 20 cents each. The cost for the larger print job (five times as many) would not be five times as much (\$300) but only \$200.

A single small retail clothing store, Mr. Little's Fine Clothing Emporium, might have to pay 38 cents per pound to have a truck deliver garments to his one store. However, if a trucking company delivers goods to many locations in the Big Box Store chain, the chain might only have to pay 20 cents per pound because of the economy of scale in delivering to Big Box. Therefore a shirt will likely cost more at Mr. Little's.

Some tradeoffs would be that Mr. Little would always be there to give personal service and you would be more likely to find a good selection at his store, while Big Box's employees may be hard to find and the merchandise may be largely picked over.

In another illustration, production is cheaper per item if the goods are made in a single factory than if they are made in several factories, since the cost of building and maintaining several factories is much greater than the cost for one factory.



*Amazon.com has used economies of scale to grow its business with a large network of fulfillment centers.*

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When a business owner has to decide whether to build another factory or expand production at the current facility, he is dealing with issues of economy of scale.

A related but separate issue is *economy of scope*. This is when a company's average total cost of production decreases as it produces more related products. For example, it is cheaper for one factory to produce shampoo and conditioner than it would be for two companies to build and maintain facilities to produce them separately. If a company becomes known for paper goods or computer peripherals, it can probably obtain material resources and utilize advertising more cheaply to develop full lines of products than

the total cost incurred by several companies making and advertising individual though related products.

Another way that a company might utilize economy of scope is by expanding the scope of activities related to what it produces. For instance, some companies have found that it is more efficient to own sources for raw materials and trucks for distribution instead of just producing the product and paying other companies to provide the other steps in the supply chain.

These are just some of the choices that producers make. We will consider other decisions they make in Unit 9.

Jesus placed a choice before the rich young ruler. Unfortunately, the young man decided that

the tradeoff was too great for him to choose the way Jesus wanted him to choose.

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*Looking at him, Jesus felt a love for him and said to him,  
“One thing you lack: go and sell all you possess and give to the poor,  
and you will have treasure in heaven; and come, follow Me.”  
But at these words he was saddened, and he went away grieving,  
for he was one who owned much property.  
Mark 10:21-22*

## Assignments for Lesson 23

**Making Choices** Read the letter to Eli Whitney Sr. (pages 48-50).  
Read the letter to Eli Whitney Jr. (page 51).

**Literature** Continue reading *The Rise of Silas Lapham*.

**Project** Continue working on your project for this unit.

**Student Review** Answer the questions for Lesson 23.



*Shoppers wait for a sale in Zurich, Switzerland (2015)*

# 24

## We Choose

### *Paper or plastic?*

— *another question of economics*

**Y**ou might think that the choices consumers make play only a small role in the economy. The tendency might be to believe that corporate and investment activity make up the lion's share of what goes on in the economy. However, economists estimate that personal consumption makes up seventy percent of economic activity in the United States. So much of what companies produce is geared toward the consumer, and so many consumers live in the country, that understanding the choices that consumers make is a major part of understanding economics.

The fundamental choice that consumers make is what to buy. That simple decision, however, has many factors. One factor is the choice between spending or saving. The consumer might not want to buy. He or she might want to save instead, either while waiting for a better deal on a particular product or while waiting to buy something else entirely.

### Incentives

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Incentives influence the choices that consumers make. Economists believe that people act out of self-

interest, though sometimes a person's self-interest involves serving or sacrificing for others. An *incentive* is a benefit that motivates action. People behave differently because of incentives that producers provide which appeal to a person's self-interest.

The most common example of an incentive is a reduction in price. People generally buy more when prices are lower because people are interested in saving money. Another incentive is a subsidy in one form or another, which means that someone else is paying part of the cost. A common subsidy for consumers is the rebate. With a rebate, the seller does not lower the purchase price, but the company offers to refund part of the purchase price if the customer completes and submits a rebate form. The practice of offering rebates generally increases sales. In addition, companies have found that some of those who buy at full price do not send in the rebate form, and this increases the company's profit.

Some consumers respond to the incentive of conspicuous consumption, which means buying goods in order to display one's wealth or prestige. Producers encourage this by adding a distinctive logo or charging a higher price so that consumers will view their products differently.



*Workers making blue jeans in Istanbul, Turkey (2014)*

People also respond to disincentives, which discourage purchases. One common disincentive is an additional tax on an item. The federal government, state governments, and some local governments place excise taxes on cigarettes, partly to discourage people from smoking. The health warnings in cigarette advertisements are another disincentive. Since producers want people to buy their goods and services, disincentives usually come from the government to accomplish some goal other than the sale of goods, such as a decrease in smoking.

Incentives can have unintended consequences. For instance, if a computer company cuts its prices to encourage more sales, the demand might exceed the company's ability to supply the goods. This can frustrate consumers, who might not want to wait for weeks until they can get a computer at the lower price, so they buy another brand. Disincentives can also have unintended consequences. For example, if government raises taxes on gasoline to encourage lower consumption, the resulting drop in sales can

cause lower gasoline tax collections, which means that the government loses revenue.

## Substitute Goods

Another factor in consumer choices is the presence of substitute goods. A *substitute good* is an alternative to the item that the consumer would otherwise buy. A consumer might buy apples instead of bananas (or vice versa), or one brand of soft drink instead of another. A common example of substitute goods are store brands or generic items that compete with name brand goods. Instead of buying a pair of jeans made by a company that has spent big money on an advertising campaign that gives the impression that fashionable people only buy this brand, a consumer might decide to buy a cheaper pair of jeans made by a company that does not have a big marketing budget and that only sells to a particular retailer.

Choosing substitute goods is not just a shopping or a personal budget issue. Producers know that a sizable market exists for non-name brand items. Some producers decide to try to make a profit not by offering the best known or most expensive goods, but by offering items that appeal to consumers who are more interested in saving money.

Substitute goods raise the issue of tradeoffs. Sometimes the cheaper store brand of an item is of lesser quality than the more expensive name brand. The consumer has to decide whether to pay more for higher quality or pay less for what she believes will be good enough quality. Then, of course, there is the tradeoff that other people may not think of you as cool if you do not have a pair of designer jeans!

Substitute goods also have to do with the issue of marginal decisions. The *marginal rate of substitution* involves how much of one product a consumer is willing to give up in exchange for another product to maintain the same level of satisfaction. For me personally, buying four books would bring me a certain level of satisfaction. Buying three books and two CDs would bring me an equivalent level of satisfaction. Thus, my marginal rate of substitution would be two CDs for one book.

## Consumer Choice Theory

One specialized area of economic study is *consumer choice theory*, which examines how consumers decide what to buy. In economics, *utility* does not mean usefulness but satisfaction. Economists assume that customers want satisfaction and that they seek the greatest utility or satisfaction in their purchasing. Economists study what brings about the maximum utility for consumers.

One factor in consumer choice is what the consumer wants. The second factor is what the consumer can afford, given his or her budget restraints. The third factor is what the consumer actually chooses. Since economists focus on margin, consumer choice economists study a fourth factor, which is how changes in price and changes in

consumer income affect the choices that consumers make. The people who operate businesses have an interest in knowing all of these factors.

A principle that economists have developed is the law of *diminishing marginal utility*. One application of this law says that, as someone consumes more of an item, each unit has less value to the consumer, to the point at which one more unit provides no utility. An example is potato chips. The first few potato chips that a person eats at one sitting are tasty and satisfying. Additional chips are less and less satisfying, until the person reaches the point that another chip would not provide any additional satisfaction beyond what he already feels.

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*Calbee is a snack food manufacturer based in Japan that operates in many other countries. Popular items include Pizza Potato chips in the Philippines, ketchup-flavored Jaxx potato sticks in Thailand, and Snapea rice sticks in the United Kingdom and Spain. A worldwide favorite is Kappa Ebisen, made with shrimp. This display in Hong Kong features bags of Kappa Ebisen snacks.*



This might seem like a trivial issue unless your business is producing and distributing potato chips. Then you will want to know how many chips to put into an individual serving bag to achieve maximum average consumer utility, since putting in more than that amount would increase your cost without increasing positive customer response. The point of diminishing marginal utility for a particular product or service changes from time to time, which we can see in the fact that portion sizes of chips, soft drinks, and other food items have increased in recent years.

Economists refer to *utility-maximizing conditions* as those conditions (usually influenced by government policies) that bring about the most utility (satisfaction) for the greatest number of people. This might include the creation of more public parks or taxing the wealthy at higher rates to

provide income or service benefits to the poor. The theory behind this idea is that a dollar of benefits to the poor will increase their utility (satisfaction) more than a dollar more in taxes will decrease the utility of the wealthy.

## Looking at the College Choice from an Economic Standpoint

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High school students face the choice of whether or not they will attend college. Colleges offer a service—education—that many people want. About fifty to sixty percent of high school graduates go on to attend college for some length of time. The choice that a young person makes will have a major impact on his or her life, so it is wise to consider the decision carefully.

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*Lewis Hines photographed these students at the West Virginia Collegiate Institute in 1921. Now known as West Virginia State University, the school was established in 1891 as a segregated school for African Americans.*





**Cost-benefit analysis.** The financial costs for attending college include tuition, books, room and board, transportation, and discretionary spending. College students pay an opportunity cost, since they sacrifice the income they could have made at a full-time job in order to attend college. The primary financial benefit of attending college is that, on average, college graduates earn more over their lifetime than high school graduates who do not attend college. During the recession of 2007-2009, the unemployment rate for college graduates was reportedly about half that of the general public. College graduates generally had more stable jobs and had more options open to them when looking for jobs.

Attending college also has intangible costs and benefits. The potential costs include a student compromising his or her spiritual principles under pressure from friends, media, and the campus culture to adopt an ungodly lifestyle. Potential intangible benefits from attending college, besides the college education itself, include gaining a broader view of the world. In addition, many people meet their spouse while at school. And some come to Christ during their college careers.

A primary cost-benefit factor that potential college students will want to consider is whether attending college will help them achieve their life goals. If someone wants to obtain a professional degree or to be trained in a particular area of study and work, a college degree will help him or her with that goal. If a person wants to operate the family business or to be a full-time wife and mother, a college education might or might not be worth the cost.

**Payment options.** If a person decides to attend college, he has many choices for paying for it. Colleges offer incentives such as scholarships, grants, and work-study arrangements. Many college students take out loans to pay for college expenses, under the expectation that they will earn enough after graduating to repay the loans.



*R. L. "Rube" Goldberg published this cartoon in Puck magazine in 1914. The title asks the question "Can a college man be successful in spite of his 'education'?" It points out that achievement and popularity in college do not always lead to greater success in later life.*

A student might decide to support himself by working and paying cash for college expenses. Several options for substitute services are available, such as trade schools, online degree programs, and attending a less expensive community college for the first two years.

**Unintended consequences.** A student who borrows money to go to college may face the unintended consequence of not having enough income to make the necessary payments on a large debt (often tens of thousands of dollars). On the other hand, the person who does not go to college might find himself at a disadvantage if he applies for jobs for which a college degree is preferred.

**Tradeoffs.** By going to college, a person accepts less income now for the prospect of greater income later. The person who does not attend college soon after high school faces the reality that going back to school later is often more difficult than continuing his or her education directly after high school. However, other people have found that, after being out of school for a period of time,

they are more highly motivated and have a clearer life purpose when they do attend college later. The person who goes to work instead of college can use the money he would have spent on college to start his own business, buy a home, or invest for the future.

Jesus described the ultimate choice that every person must make, including its costs and benefits.

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*And He summoned the crowd with His disciples, and said to them,  
“If anyone wishes to come after Me, he must deny himself,  
and take up his cross and follow Me.*

*For whoever wishes to save his life will lose it,  
but whoever loses his life for My sake and the gospel’s will save it.  
For what does it profit a man to gain the whole world, and forfeit his soul?  
For what will a man give in exchange for his soul?”  
Mark 8:34-37*

## Assignments for Lesson 24

**Making Choices** Read the Letters to Theodore and Martha Roosevelt (pages 52-54).

**Literature** Continue reading *The Rise of Silas Lapham*.

**Project** Continue working on your project for this unit.

**Student Review** Answer the questions for Lesson 24.



Utah State Senate (2011)

# 25

## Uncle Sam Chooses

*Ginger: “We’ll either die free chickens or die trying!”  
Babs: “Are those the only choices?”*

— *dialog from the movie Chicken Run*

Many people talk about “the government deciding” to do this or that, or they say that “society disapproves” of this or that, but these expressions can cause us to forget an important truth. “Government” and “society” as institutions do not do anything; people make choices. People in government, people in business, and people in society make decisions. In this curriculum, when you read something about what government, business, or another group does, remember that this is a shorthand way to express the fact that people make decisions.

### Who Decides?

In an earlier lesson, we said that the two models of economies are capitalist and command. Another way to express this is to say that the two poles or ideals of economic systems are market economies and command economies. The difference between them primarily involves the question of who makes economic decisions. In a market economy, the people who participate in the market of buying and selling goods and services make the decisions about who gets what and for what price. In a command

economy, government officials make the decisions about who gets what and for what price.

Economists have identified and defined six broad economic goals that people in government pursue. Both command economies and market economies pursue these goals, but they do so in different ways.

### Choices of Efficiency and Equity

**Efficiency.** Economic efficiency is the goal of encouraging the people in an economy to be as productive as possible in making goods and services available for consumers. Leaders of command economies believe that they can best decide how to make an economy efficient.

In a market economy, producers and consumers work in the freedom of the marketplace to make the most goods and services available. In this atmosphere of competition, some will be successful and some will not. Those who are not can regroup and try again. Some people are not productive, so they will not have as much as those who are. Historically, market economies are far superior to command economies in achieving efficiency.

**Equity.** Economic equity is the goal of having people in a society share goods and services as equally as possible. Those who lead a command economy believe it is better for all to have somewhat less but be more equal in what they have than to have some who are very rich and some who are very poor. (In practice, this applies to everyone except the elite leaders of the command economy and those whom the leaders favor!)

In a market economy, people have a wide range of income and wealth depending on how they participate in the market. People in a market economy are free to work for great wealth. It is also possible that some will be poor, for a number

of reasons. Experience has shown that market economies give people the greatest opportunity for acquiring wealth, and even middle and lower class people in market economies have more than the vast majority of people in command economies. The average standard of living in a market economy is much higher than the average standard of living in a command economy.

These first two principles can be in conflict to some degree because an efficient economy (getting the most produced) is not necessarily an equitable economy (making sure that most people have about the same amount of wealth and income).

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*The government of North Korea is one of the strictest in the world. It censors the news media, regulates movement within the country, and enforces a dress code. It spends large amounts of money to build its military while many North Koreans struggle to get enough food.*



## Choices of Freedom and Security

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**Freedom.** The goal or principle of economic freedom involves allowing people to do what they want to do in an economy. A market economy highly values this principle, which influences such questions as whether individuals can decide where they live, what work they do, and whether they may start their own businesses.

A command economy, by contrast, does not highly value this principle. In a command economy, what people produce and who works where are decisions that the central planning office makes. In a market economy, supply and demand and personal choice provide the answers to these questions.

**Security.** A command economy places higher value on economic security than freedom. The government has a stated goal of meeting the basic needs of all citizens. However, because of limited economic resources, the average income for most people will be relatively low.

In a market economy, it is possible that some people might slip through the economic cracks. However, even in market economies people in government have provided significant human and social services to the population.

Market economies give people the chance to achieve higher economic success, but people also have the risk of failing. In command economies, people generally cannot fly as high, so they do not have as far to fall. Again, though, the vast majority of people in market economies have more than the vast majority of people in command economies. The goals of freedom and security can be in conflict. Being free economically means that you give up a degree of economic security, while the promise of economic security means that you give up a degree of economic freedom.

## Choices of Growth and Stability

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**Growth.** Economic growth, the expansion of production and consumption, takes place in command economies in the segments of the economy that central planners target for growth, often in such areas as heavy industry and military armaments. Often this growth takes place at the expense of growth in consumer goods and other parts of the economy.

By contrast, growth in a market economy takes place primarily as a function of market demand and productivity. In countries with market economies, people in government can encourage or discourage productivity; but generally real growth takes place in the market, not through government action. These governments can spur growth more directly by providing subsidies to certain industries, such as “green” technology, or by spending government money in a certain industry, such as the manufacture of military equipment.

**Stability.** Market economies experience “boom and bust” business cycles, which involve periods of significant growth that alternate with periods of recession and shrinkage. Command economies have fewer such dramatic swings, again because the economy has less productivity to begin with. Market economies enable growth by risking stability. Command economies try to ensure stability while sacrificing the possibility of significant growth.

## Decisions That People in Government Make

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People in government create policies that affect the economy. Here are some of the kinds of decisions that people in government make.

**Priorities.** As with a family budget, the areas of expenditure in a government’s budget and the amounts allotted for each reflect the priorities of the people in government.



*President Lyndon Johnson signed the bill creating the Medicare program in 1965. Seated at the table with him is former president Harry Truman, who had pushed for a federal health care plan in the 1940s.*

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For many years after World War II, during the Cold War between the United States and the Soviet Union, military spending accounted for about half of the federal budget. Spending on social programs became a greater budget priority in the 1960s. When politicians talked about choosing whether to spend money on defense or social programs, they called it a choice between “guns and butter.” A top priority of the federal government had always been guns (that is, national defense). The idea of the federal government being responsible for providing butter (that is, social welfare) reflected a new budget priority.

**Incentives.** People in government can provide incentives that can influence the actions of producers and consumers. For instance, a state or local government can try to attract new industry by offering to forgo collecting property or business taxes from the industry for a period of years or by offering to build new roads to the factory. The federal government offers a significant incentive for

owning a home by allowing homeowners to deduct from their taxable income the interest they pay on a home mortgage loan.

**Limitations.** People in government can put limitations on business activity in order to achieve some social or economic goal. Environmental regulations limit what a business can do, but it also limits pollution in order to help the environment. Governments put tariffs and embargoes on imported goods to help domestic producers. These policies serve to limit the choices that producers and consumers have in order to meet other goals that the people in government value.

**Allocation.** People in government can determine who gets what goods and services. Will they be available only to those who can afford them, or will they be available to all, regardless of their ability to pay, by means of government funding for them? This policy involves the government redistributing money from one part of the population to another to pay for some goods and services.

In the 1930s, for instance, people in the federal government decided to allocate more of the nation's wealth to the elderly through the Social Security program by taxing workers to pay for retirement pensions. In the 1960s, the federal government expanded this policy of redistribution to include medical services for the elderly through Medicare, paid for through Medicare premiums and payments that participants paid, taxation to pay what premiums and payments did not cover, and borrowing money to pay what payments and taxes did not pay. This borrowed money added to the federal debt.

## Public Choice Theory

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*Public choice theory* is a field of study that applies principles of economics to political science. Just as people act on the basis of their self-interest in economic matters, public choice theory holds that voters act politically on the basis of their self-interest

and that—lo and behold!—elected and appointed government officials act on the basis of their self-interest as well. Government officials do not always act benevolently on the basis of some so-called “higher public good.” This helps to explain why many elected officials promote spending and other policies that further their own interests (namely, re-election) and why government bureaucracies become entrenched and seem almost impossible to reduce in size.

When the party out of power convinces enough voters to “throw the rascals out,” the “new rascals” that come into power tend to do the same things for which they criticized the previous majority when they exhibit the same basic motivation of self-interest. This premise of basic self-interest also helps explain why special interest groups pressure elected officials to support their programs: their basic self-interest motivates them as they seek to influence government policy.

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### *2016 presidential campaign memorabilia*



The economic impact on the public of policies determined by self-interest is significant because the government collects tax revenue from the public at large but funds many programs that are of particular interest to relatively few, namely those who are in positions of power and those who support these elected representatives. Public choice scholars also study other factors, such as possible ways of changing the constitutional rules by which government representatives make decisions. One proposal involves placing constitutional limits on

annual spending increases. The spending increases would be tied to growth in the economy.

In this unit we have discussed the process of making choices, particularly the economic choices that consumers, producers, and people in government make. We hope you can see why making choices is a central aspect of economics.

The Bible says that even God makes choices and that one of His choices reflected the different economic conditions that people have.

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*Listen, my beloved brethren: did not God choose the poor of this world to be rich in faith and heirs of the kingdom which He promised to those who love Him?  
James 2:5*

## Assignments for Lesson 25

**Literature** Continue reading *The Rise of Silas Lapham*.

**Project** Finish your project for this unit.

**Student Review** Answer the questions for Lesson 25, take the quiz for Unit 5, and take the first exam.





*Union Pacific train in Corinth, Mississippi (2013)*

# 12

## Measuring the Economy

Economists have developed many ways to measure economic activity, growth, and decline. Some of the most widely used are gross domestic product (GDP), the rate of inflation, the rate of unemployment, the Index of Leading Economic Indicators, and increases or decreases of values on stock and commodity markets. The determination of recessions and depressions may be the most dramatic economic indicator. Wealth and poverty are the subjects of considerable discussion and debate.

Lesson 56 - What's Gross About the Domestic Product?

Lesson 57 - A Few Important Numbers

Lesson 58 - What Goes Up Must Come Down

Lesson 59 - What's a Recession?

Lesson 60 - Rich and Poor

## Books Used

The Bible  
*Making Choices*  
*Mover of Men and Mountains*

## Project (choose one)

- 1) Write 300 to 500 words on one of the following topics:
  - Should a Christian pursue wealth? Do you think that a wealthy, luxurious lifestyle is acceptable for a Christian? What is the Biblical perspective on material goods?
  - Why do you think people tend to look upon the wealthy with suspicion and distrust? What are ways that wealthy people in the history of our country have helped others increase wealth and quality of life?
- 2) Work with one of your parents to determine what your household spent during the last full month in the categories shown in the Consumer Price Index pie chart on page 357. With this information, create a pie chart that reflects your household's spending.
- 3) Research to find out the top three products produced by each of the top ten nations ranked by Gross Domestic Product as shown on pages 352-353. Make a photo essay creatively conveying this information.

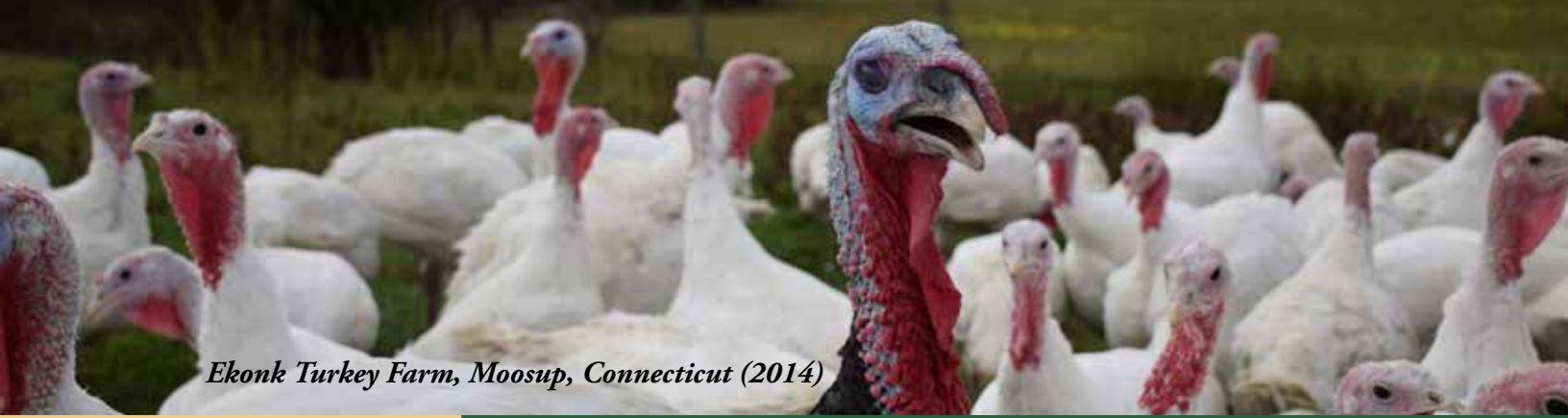
## Literature

R. G. LeTourneau was born in 1888 into a Christian family then living in Vermont. He moved around a great deal in his boyhood and adult life, spending significant time in California. Though strong-willed and rebellious in his youth, he came to Christ in his teens and spent his life serving Him.

*Mover of Men and Mountains* is LeTourneau's autobiography, published in 1959, and since translated into multiple languages. LeTourneau's purpose for the book is to glorify God through the testimony of His faithfulness.

LeTourneau was a businessman and inventor. His passion was large earth-moving and material-handling machines. He helped to transform the industry in his lifetime, and his impact continues to this day. He channeled his wealth into many causes for the Gospel, supporting mission work and many charities, distribution of a Christian newsletter, and the founding of LeTourneau Technical Institute, now LeTourneau University, still in operation in Longview, Texas.

R.G. LeTourneau died in 1969.



*Ekonk Turkey Farm, Moosup, Connecticut (2014)*

# 56

## What's Gross About the Domestic Product?

*Productivity is never an accident. It is always the result of a commitment to excellence, intelligent planning, and focused effort.*

— Paul J. Meyer

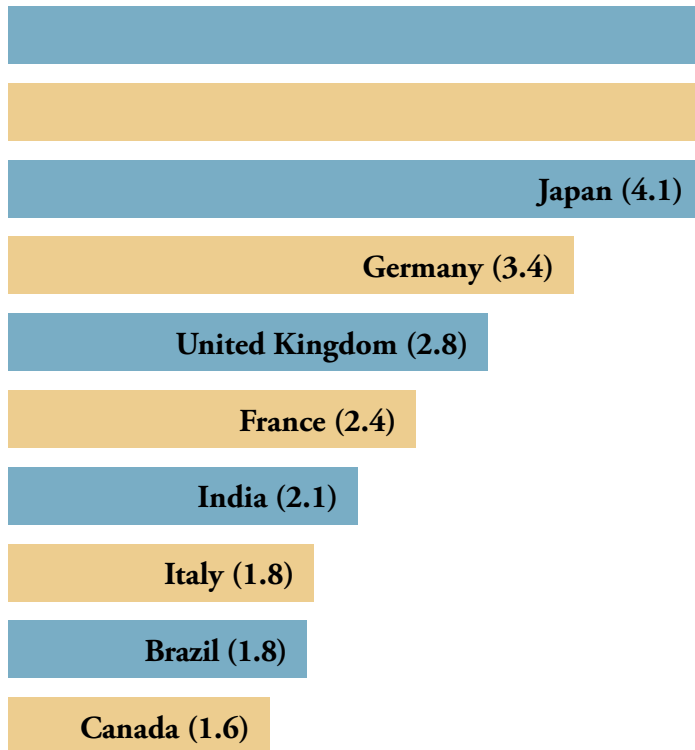
The field of macroeconomics looks at the big picture of the overall economy: production, sales, employment, income, spending, investment—everything of an economic nature that individuals, households, businesses, and the government do. The single most important and most comprehensive measure of the overall economy is the gross domestic product (GDP), which is the market value of a nation's total domestic output of all final goods and services over a period of time. The GDP consists of these components: purchases by consumers, purchases of capital goods by businesses, purchases of goods and services by government, and net exports (total exports minus total imports).

The definition is fairly simple, but we need to emphasize several aspects of it:

- The GDP measures economic activity within a country. Even if someone from another country owns a business, its sales are included in the total.
- The GDP does not include purchases of production materials that are used to make other products. Those sales are assumed to be part of the purchase price of the final products. Items that businesses put into inventory to sell later are included in the total.
- The GDP does not include sales of used products. While the total of these sales is significant, such sales say nothing about the production of new goods in the economy.
- The GDP does not include Social Security payments. These payments do not reflect any kind of production, and it is assumed that this money will be counted in consumer purchases.

The GDP is different from the gross national product (GNP). The GNP is the production of a nation's permanent residents, whether that production occurs within the country or elsewhere.

## Top Ten Nations by GDP (2015)



*Market in Goa, India (2014)*

The sales of a company owned by an American but located in another country, or the services that an American citizen provides in another country, are included in the GNP but not in the GDP.

You can think of the difference between GDP and GNP in this way. The GNP measures production by the “*nationals*” or citizens of a country, wherever they might live; whereas the GDP measures production that occurs *domestically* or within a country, regardless of who owns the business. Usually the two figures are not significantly different; but the GDP more accurately reflects economic activity taking place within a country, and this information is of greater interest to economists and the government.

## How the Government Measures GDP

In the United States, the Bureau of Economic Analysis (BEA) in the Department of Commerce measures the GDP. The bureau gathers information

from businesses and from the government and gives an estimate of the production total for every three months of the year. As the BEA obtains more complete data, it issues a revised GDP estimate for a previous quarter.

We can determine the GDP either by totaling all expenditures or by totaling all income. This is true because one person’s expenditure is another person’s income. Any exchange has two parties, the seller and the buyer. If Doug makes an object and sells it to Olivia for \$100, Ted’s expenditure is \$100, Olivia’s income is \$100, and the sale has increased the GDP by \$100.

Most economists believe that a healthy average rate of growth for a nation’s GDP is about 3% per year. This allows the economy to absorb and provide for population growth by new births and by immigration. Economies that are growing rapidly by an emphasis on modernization can grow as much as twice that fast. The U.S. GDP grew about 2.4% in 2015.

## United States (17.9 trillion US\$)

## China (10.9)

The Rule of 72 gives a rough estimate of the number of years it will take for a country to double its GDP at a given annual rate. The Rule of 72 is performed mathematically by using this formula: 72 divided by the percentage of growth in the GDP = number of years a country can expect to take to double its GDP. At a 3% average annual growth rate, a country can expect to double its GDP in about 24 years.

We can express the gross domestic product in nominal or real terms. The nominal GDP is the actual total figure of the value of the nation's output in terms of current prices. The real GDP expresses output in terms of a comparison with the prices of goods and services in the previous year. A comparison of nominal GDP to real GDP produces a statistic called the GDP deflator. The formula for the GDP deflator is:  $(\text{nominal GDP}/\text{real GDP}) \times 100$ .

The Bureau of Economic Analysis calculates the GDP in this way because nominal GDP does not take inflation into account. A country might sell \$100 worth of widgets in one year and \$103 worth of widgets the next year. This might look like a 3% growth rate. However, if inflation was 6%, the value of widgets sold actually declined the second year if we use the previous year's value as the basis. Inflation might cause the second year's value to be higher even if the country sold fewer widgets. The deflator helps economists know whether the economy is truly growing or just inflating. Most economists and media talk about real GDP growth.

Another refinement of GDP measurement is called seasonal adjustment. This takes into account changes in economic activity that occur routinely throughout the year. For instance, retail sales

totals are almost always lower in January than in December because people spend a great deal for Christmas and then do not spend as much in January. To say that the GDP for January fell from December would not be news. The question is whether sales fell more or less than they usually do for January. The BEA makes seasonal adjustments in its GDP estimates.

## World Comparisons

The total world gross domestic product for 2015 was estimated to be just over \$73.4 trillion, expressed in U.S. dollars. The estimated 2015 GDP for the United States, the largest national economy in the world, was \$17.9 trillion, almost one-fourth of the world total. Government spending on all levels accounted for about one-third of U.S. GDP. The countries of the European Union had a combined GDP of \$18.1 trillion.

The chart on this page shows the ten countries with the largest GDPs for 2015. The data used for this chart is provided by the World Bank with GDP values given in trillions of US dollars for comparison. GDP comparisons are at best a rough estimate because of data collection methods and currency exchange rate fluctuations. Other sources such as the International Monetary Fund and the United Nations give slightly different figures.

Another way to compare the economies of the world is with the per capita GDP, which is determined by dividing a country's GDP by its population. A corrective factor applied to GDP figures is called purchasing power parity (PPP).

The PPP takes into account the differences in the cost of living in various countries by using the long-term exchange rate between currencies to arrive at a common currency of expression.

Here are the 2015 world rankings of several countries based on national per capita GDP, PPP adjusted, in U.S. dollars. The World Bank estimated the world average per capita GDP in 2015 as \$9,996.

National Per Capita GDP, PPP Adjusted (2014 estimates)		
Rank	Country	Per Capita GDP
1	Qatar	\$132,100
2	Luxembourg	\$99,000
6	Singapore	\$85,300
19	United States	\$55,800
28	Germany	\$46,900
32	Canada	\$45,600
39	United Kingdom	\$41,200
55	Israel	\$33,700
73	Russia	\$25,400
94	Mexico	\$17,500
103	Brazil	\$15,600
113	China	\$14,100
158	India	\$6,200
206	Afghanistan	\$1,900
229	Somalia	\$400

## What the GDP Shows and What It Doesn't Show

The gross domestic product is the broadest single measurement of a nation's economy. It indicates the overall health of an economy, including productivity. Yearly comparisons of a nation's GDP show whether an economy is experiencing growth or contraction and how large the changes are.

On the other hand, the GDP does not show everything of significance about a nation. It does not indicate the status of individual industries within an economy, nor does it show how wealth is distributed among the population. In addition, the GDP does not reflect the value of many things that are important to people, such as families where the wife and mother works at home, people caring for a sick or elderly relative, or citizens doing volunteer work. Nor does the GDP directly give us an indication of such quality of life factors as leisure time, environmental quality, literacy, or personal health.

However, the GDP does tell us something about such factors. The citizens of countries with a higher per capita GDP do tend on average to have better health and education, longer life expectancy, and other factors that contribute to a higher standard of living that cannot be measured in economic terms. A stronger economy makes more options available to more people, options which enable a better quality of life.

*Modern skyline of Doha, Qatar, with traditional wooden boats in the foreground*



For a country to be truly prosperous, the people need more than money. The Old Testament book of

1 Kings described the economic well-being of Israel and Judah during the reign of Solomon.

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*Judah and Israel were as numerous  
as the sand that is on the seashore in abundance;  
they were eating and drinking and rejoicing.  
1 Kings 4:20*

## Assignments for Lesson 56

**Literature** Begin reading *Mover of Men and Mountains*. Plan to finish it by the end of Unit 15.

**Project** Choose your project for this unit and start working on it.

**Student Review** Answer the questions for Lesson 56.



*Sunrise in Denver, Colorado (2013)*

# 57

## A Few Important Numbers

*An “acceptable” level of unemployment means that the government economist to whom it is acceptable still has a job.*

*— Anonymous*

The three most important macroeconomic variables are the gross domestic product, the rate of inflation, and the rate of unemployment. The GDP gives the best comprehensive picture of the overall economy. The rate of inflation affects the purchasing power of just about everyone. Unemployment puts the economy on a personal level. The strength of an economy rests in great measure on productivity, and people are not productive in a strict economic sense if they are not working. Unemployment affects both supply and demand. People have to be working to create goods and services for others to buy, and most people have to be working to be able to buy goods and services themselves.

These three variables are relatively easy to quantify and to understand. They are easy for the media to report. These are the economic statistics that the political party in power hopes will vindicate their policies or that the opposition party will use to condemn the economic policies of the administration in office at the time.

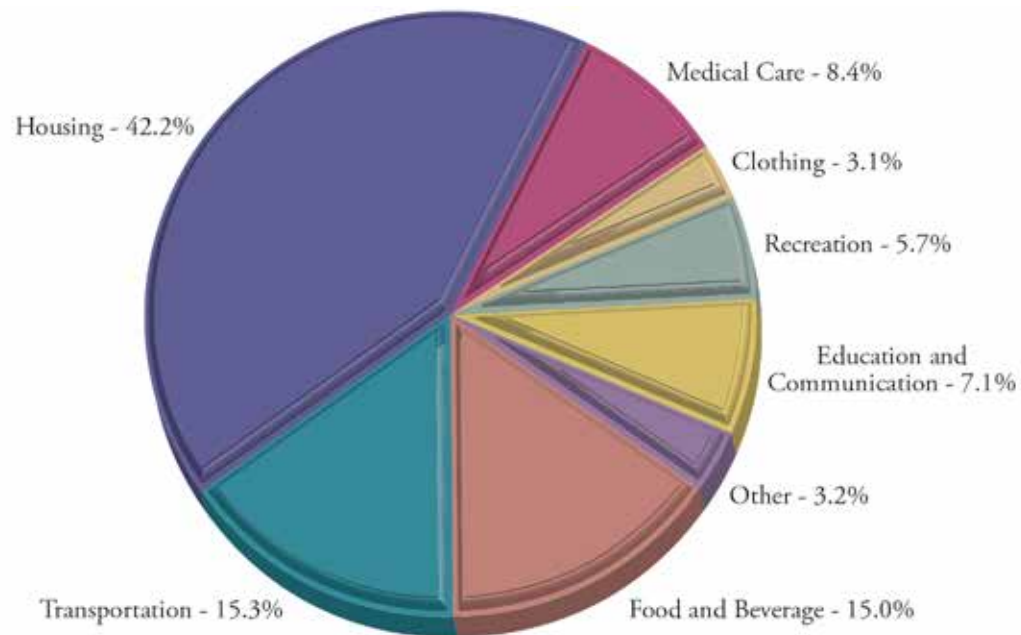
We considered the gross domestic product in the previous lesson. We have looked at inflation and unemployment in previous lessons, so here we will focus on how the government collects this information.

### Inflation: The Consumer Price Index

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The Consumer Price Index (CPI) is an estimate of what a typical urban consumer has to pay for a sampling of typical goods and services. The Bureau of Labor Statistics in the Department of Labor reports this estimate around the middle of each month for the preceding month. The BLS reports the CPI as a percent change from the previous month or from the same month of the previous year. When prices are said to have increased “at an annual rate of x%,” that percentage figure is what most people consider to be the current rate of inflation. The focus is on urban consumers because they make up about 89% of the population. The CPI for urban consumers (CPI-U) is slightly different from the CPI for urban workers (CPI-W).





The basis for the CPI is what is called a market basket of goods and services. The items in the market basket are constant. (The BLS website has a five-page, single-spaced list of items included in the survey.) The BLS takes samplings of prices in several different cities, and they weight different categories to reflect their importance in a typical consumer's budget. The main categories and the percentage that each had in the market basket for December 2015 are shown in the chart above.

As comprehensive as the CPI is, it does have some limitations. The index does not include taxes. It does not reflect consumer prices in rural areas. Nor does it reflect changes in buying habits, such as when people decide to buy hamburger instead of steak when times are hard. The BLS constantly reviews the CPI to reflect consumer buying more accurately, but it does not immediately reflect new products that come onto the market or how consumers respond to changes in existing goods and services.

The CPI is a key indicator of changes in the cost of living as a result of inflation. Changes in the cost of living lead to cost of living adjustments (or COLA) in such things as the payments that Social Security recipients receive. Some labor contracts have annual COLA provisions.

## How the Government Measures Unemployment

The rate of unemployment is another economic factor that the BLS measures. The basis for this figure is a monthly survey of 60,000 homes. Another BLS survey looks at the payrolls of about 146,000 businesses and government agencies. The Bureau of Labor Statistics reports its unemployment figure early in a month for the preceding month.

At best, the unemployment figure is an approximation of the percentage of the labor force that is out of work and looking for a job. As we indicated in Lesson 50, the survey does not reflect the percentage of discouraged persons who have given up looking for work or the percentage of persons who are underemployed and working less than they want. The payroll survey does not consider self-employed persons and does not reflect the number of people who have more than one job.

Economist Arthur Okun determined a direct correlation between changes in the real GDP and changes in the unemployment rate. Using the 3% annual rate of growth in the GDP as a benchmark, Okun found that for every two percentage point change in the real GDP above or below the

benchmark figure, the unemployment rate will increase or decrease by about 1%. In other words, if the GDP grows by 6% (3% above the average), the unemployment rate will likely drop by about 1.5%. On the other hand, if the real GDP grows by only 1% (2% below the average), the unemployment rate will likely increase by about 1%.

## Leading Economic Index

The Conference Board, founded in 1916, is “a global, independent business membership and research association working in the public interest . . . to provide the world's leading organizations with the practical knowledge they need to improve their performance and better serve society.” The Board conducts research and holds conferences on business and economics.

For many years, the Conference Board has published the Leading Economic Index, also known as the Index of Leading Economic Indicators. The Index gathers information concerning ten areas of the economy and produces a single figure in an

attempt to forecast future economic activity. The indicators are leading in the sense that movements in these areas can indicate the beginning of an overall economic trend. See the list below.

## Lagging and Coincident Indicators

Some economic indicators are lagging in the sense that they change more slowly and as a result react to trends. Their value is not in predicting future economic activity but in providing information for assessing economic activity in the past. The Conference Board's seven lagging indicators are shown on the next page. Unemployment is a lagging indicator because layoffs generally occur after sales have started to decline, while hiring increases after the level of sales has begun to rise.

Still other economic indicators are called coincident because they occur about the same time as the economic trends they reveal. For instance, changes in personal income generally coincide with changes in the overall economy.

### Leading Economic Indicators

1. Average length of work week for manufacturing workers
2. Number of first-time applications for unemployment benefits
3. New orders received by manufacturers for consumer goods and materials
4. New orders by manufacturers for capital goods (not related to defense contracts)
5. How quickly new merchandise is sent from suppliers to vendors
6. Number of new building permits for residential buildings
7. The Standard and Poor index of 500 stocks
8. The Leading Credit Index, which measures six financial and investment indicators
9. The difference between long-term and short-term interest rates (also called the yield curve)
10. Consumer expectations (or consumer confidence)

## Lagging Economic Indicators

1. Average length of unemployment
2. Value of commercial and industrial loans that are outstanding
3. Change in the CPI for services
4. Change in labor cost per unit of output in manufacturing
5. Ratio of manufacturing and trade inventories compared to sales
6. Ratio of outstanding consumer credit compared to personal income
7. Average prime rate charged by banks

## Other Economic Indicators

Since a nation's economy is complex, economists have devised many different ways of measuring economic activity in specific areas. Here are some other assessments and the sources for them.

**Income.** The Bureau of Economic Analysis in the Department of Commerce collects figures monthly on personal income, which is the gross income of households, and disposable personal income (DPI), which is the money that households have available for discretionary spending after taxes (because paying taxes is not a matter of choice).

**Spending.** The Census Bureau conducts surveys throughout the year and the Bureau of Labor Statistics (BLS) in the Labor Department reports the data from the surveys on consumer spending, focusing on retail sales. As we have indicated, retail consumer spending makes up about 70% of economic activity.

**Producer Prices.** The BLS gathers information to publish the monthly Producer Price Index (PPI), which reflects wholesale prices that producers charge to retail establishments. Changes in producer prices usually indicate that a change in retail prices will occur soon.

**Durable Goods.** The Census Bureau reports monthly on orders for durable goods. Durable goods are not consumable and typically remain in service for longer than one year. These are usually more expensive than goods that people consume quickly. An increase in orders for durable goods generally indicates that manufacturing activity is growing and that consumers have more disposable income and are more confident about their economic prospects.

**Home Sales.** The National Association of Realtors reports each month on the sale of new and existing homes and how the rate of sales compares with one year earlier. The Census Bureau and the Department of Housing and Urban Development announce each month the rate at which construction of new homes is beginning. We will see in a later lesson why home construction and home sales are an important indicator of economic activity.

**Productivity.** The Bureau of Labor Statistics provides a quarterly reading of worker productivity, which is a statistic that reveals average output per labor-hour. Productivity reflects how well producers are using raw materials, technology, and improvements in machinery and how well workers are trained to do the work they are performing. We will discuss the importance of productivity in economic activity and growth in a later lesson.

People want to know what is going to happen in the future. Economists study surveys and reports to try to identify trends that indicate what is likely to happen in the economy. The Pharisees and

Sadducees wanted to see indicators from Jesus that would reveal His identity to them. Jesus gave plenty of signs showing who He was, but the Jewish leaders were unwilling to accept what those signs revealed.

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*The Pharisees and Sadducees came up, and testing Jesus, they asked Him to show them a sign from heaven. But He replied to them, “When it is evening, you say, ‘It will be fair weather, for the sky is red.’ And in the morning, ‘There will be a storm today, for the sky is red and threatening.’ Do you know how to discern the appearance of the sky, but cannot discern the signs of the times?”*  
*Matthew 16:1-3*

## Assignments for Lesson 57

**Literature** Continue reading *Mover of Men and Mountains*.

**Project** Continue working on your project for this unit.

**Student Review** Answer the questions for Lesson 57.



*BM&F Bovespa Stock Exchange, São Paulo, Brazil (2016)*

# 58

## What Goes Up Must Come Down

*I never attempt to make money on the stock market. I buy on the assumption that they could close the market the next day and not reopen it for five years.*

— *Warren Buffett, billionaire investor*

**W**hen you want to buy or sell vegetables, you go to a vegetable market. The supply and demand of vegetables in the market determine the prices for the vegetables.

When you want to buy or sell shares of stock (that is, shares of ownership) in publicly traded corporations, you go to a stock market. The supply and demand of those stocks in the market determine the prices for the shares of stock.

### New York Stock Exchange

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The New York Stock Exchange (NYSE) is the largest actual stock market in the world. It traces its roots to business dealings on Wall Street in 1792, and the NYSE headquarters is still located on Wall Street. The nature of its operations has changed significantly over the years, but traders still buy and sell shares of stock on the exchange. The classic image of the exchange involves hundreds of stock brokers shouting buy and sell orders, with piles of paper mounting on the floor, and stock ticker tapes

spitting out changes in stock prices. Today's trading floor is not as frenzied, since computerized electronic trading has become the order of the day. The NYSE itself is owned by Intercontinental Exchange, a publicly traded, for-profit company based in Atlanta that also owns exchanges in Canada, Europe, and Singapore.

The prices for shares on the stock market rise and fall. These changes occur not only as a result of economic developments but also because of world political events. An old Wall Street saying holds that greed and fear are the two main emotions driving the buying and selling of stocks.

The two most famous declines in U.S. stock values occurred October 28-29, 1929, when the market lost 23.6% of its value, and October 19, 1987, when the market lost 22.6% of its value, the largest single-day loss in its history. One reason the losses were so great on that day in 1987 was program trading, which involved automatic sell orders by many brokers that took effect when the market declined by a certain amount. The exchange halted trading early that day to avoid further losses.



*Trading floor of the New York Stock Exchange in 1936 and in 2014*

The New York Stock Exchange did not open on September 11, 2001, after terrorists flew planes into the World Trade Center in New York. The stock market remained closed until the next week. The first week it was open, the market lost about 14% of its value, or about \$1.4 trillion dollars in stock value.

On the other hand, the long term trend of the market has been one of growth. Historically, the combined value of stocks has increased by an average of about 10% annually. Most non-experts who “play the stock market” by constantly buying and selling the stocks of individual companies are hoping—some would say gambling—to catch favorable trends. The more reliable way for average Americans to invest in the stock market is through a mutual fund that professional investors manage. Wise investors plan to keep their investments in the fund for several years.

## The Dow Jones Averages and the S&P 500

In 1896, Charles Dow, editor of the *Wall Street Journal*, and Edward D. Jones created the Dow Jones Industrial Average (DJIA). The DJIA takes the stock values of thirty key companies out of the thousands

that are traded and uses a formula to determine a cumulative value for those stocks. This value of the Dow, as it is sometimes called, is a composite index which gauges how well these businesses are doing.

The New York Stock Exchange publishes its own composite index of all the stocks listed on the exchange, but the Dow is probably the best known index of the value and performance of the New York Stock Market.

The Dow began in 1896 with a value of 40.94. Its value is updated continuously, and during the day it can rise or fall dramatically before settling on its closing value at the end of the trading day. Here are some landmark high closings:

Date	Closing Value
January 12, 1906	100.25
March 12, 1956	500.24
November 14, 1972	1003.16
November 21, 1995	5023.55
March 29, 1999	10,006.78

The all-time high close as of the publication of this book was on July 12, 2016, when the Dow closed at 18,347.67.

## Dow Jones Industrial Average Companies and Stock Ticker Symbols (September 2016)

AAPL	Apple	KO	Coca-Cola
AXP	American Express	MCD	McDonald's
BA	Boeing	MMM	3M
CAT	Caterpillar	MRK	Merck
CSCO	Cisco	MSFT	Microsoft
CVX	Chevron	NKE	Nike
DD	E I du Pont de Nemours and Co	PFE	Pfizer
DIS	Disney	PG	Procter & Gamble
GE	General Electric	TRV	Travelers Companies Inc
GS	Goldman Sachs	UNH	UnitedHealth
HD	Home Depot	UTX	United Technologies
IBM	IBM	V	Visa
INTC	Intel	VZ	Verizon
JNJ	Johnson & Johnson	WMT	Wal-Mart
JPM	JPMorgan Chase	XOM	Exxon Mobil

The company that owns the Dow changes the businesses listed in the DJIA periodically to reflect the changing economy and changing demand for specific stocks. The thirty companies that made up the Dow Jones Industrial Average at the time of writing are shown in the table above.

The Dow Jones Company publishes other stock averages in addition to the industrial average. The Dow Jones Transportation Average, begun in 1884, predates the DJIA. It measures the stock values of twenty companies involved in transportation, such as railroads, trucking companies, airlines, United Parcel Service, and Federal Express. The Dow Jones Utilities Average began in 1929 when the Dow Jones Company private utility companies were separated from the DJIA. The Utilities Average considers the share values of fifteen utility companies, mostly

providers of electricity, such as Consolidated Edison, Pacific Gas and Electric, and American Electric Power Company.

The Standard and Poor 500 (S&P 500) is the second most widely followed stock index after the Dow. In 1860, H. V. Poor published his first reference book with information on railroad companies. In 1906, the Standard Statistics Bureau company was organized to publish information about businesses other than railroads. Standard and Poor, now a part of McGraw Hill publishing company, produces materials that provide financial research and analysis. The S&P (Standard and Poor) 500 tracks the value of the stocks of 500 large companies that are listed either on the New York Stock Exchange or on NASDAQ.

## NASDAQ and NYSE MKT LLC

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Other stock exchanges trade the stocks of other companies. NASDAQ (National Association of Securities Dealers Automated Quotations), founded in 1971, is headquartered in New York City. It is an electronic stock market and is the second largest stock exchange in the United States. The NASDAQ maintains its own index of the stock prices of companies traded on it.

The NYSE MKT LLC, formerly known as the American Stock Exchange, is also based in New York. It began in 1842 with brokers gathering on the sidewalk to shout buy and sell bids. The noise was so loud that brokers developed hand signals to indicate their wishes. As a result of its outdoor origin, it was sometimes called the Curb Exchange. Trading did not move indoors until 1921. The NYSE MKT LLC maintains an index of the stocks traded through it.

Other countries have stock markets and related indices. For instance, the best-known index for the London Stock Exchange is the FTSE (pronounced footsie) 100. The Nikkei 225 is an index for the Tokyo Stock Exchange.

## Commodity Exchanges

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Another specialized market is that for commodities. Several commodity markets exist, including ones for agricultural products, such as grains, hogs, and cattle; oil and natural gas; precious metals; and metals industries use, such as zinc and copper.

Probably the most famous commodity market is the Chicago Mercantile Exchange. The Chicago Board of Trade (CBOT) was founded in 1848. The Chicago Butter and Egg Board began as a spin-off of the CBOT in 1898 and was eventually renamed the Chicago Mercantile Exchange (CME or the Merc). The CBOT and the CME merged in 2007 to become the CME Group.

Trade on the commodity exchanges once involved traders standing in pits and shouting their bids or using hand signals. Now nearly all trading is done electronically. Traders call electronic trading “on screen” trading.

## Futures

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The buying and selling of commodities takes place by means of futures contracts. In a futures contract, a speculator agrees to buy a commodity from a producer at a specified time in the future for a price agreed upon today. Such an agreement protects the producer against a price decline in the market for that commodity between now and the time the commodity sells, and it protects the buyer against a price increase over the same period. If the price in the market does go up by the sell date, the speculator will make a profit when he sells the commodity to a third party. The risk with a futures contract is that the buyer of the contract could lose money if the market price of the commodity falls below what he has agreed to pay the producer and then tries to sell the commodity to a third party.

Here is a simple example. A corn farmer plants his crop not knowing what the price for corn might be at harvest time. The market might experience a shortage and the price could be high, or there might be a bumper crop and the price could be low. A speculator who studies the overall corn market offers the farmer a contract to buy his crop at a certain price at a specified future date. It will be something less than what the speculator hopes to sell it for at harvest time, but at least the farmer knows for sure what he will make from the crop. The difference between the buying price and the selling price might only be a few cents per bushel; but if the speculator can buy a large amount of corn, he stands to make a great deal of money. Speculators do lose money sometimes, so it is to their benefit to know the market well and to bid accurately.





*Chicago Mercantile Exchange*

The actual buying and selling of commodity futures and stock futures is more complicated than this simple example. Futures are usually bought on margin, which means that the buyer only pays a fraction of the purchase price up front. Traders can buy and sell stock futures also. Stock futures can involve agreements to buy stock or agreements to sell stock, depending on what the speculator thinks the market will do. Futures investors try to make money by taking risks on what stock and commodity prices will be in the future.

## How the Stock Market Is the Economy—And How It Isn't

Each business day brings a report on how the Dow Jones Industrial Average has changed in that

day's trading. Usually the report also includes the NASDAQ index and perhaps the S&P 500. These numbers are fairly good indicators of the perceived success of large companies that employ millions of people and that have a major impact on the economy.

On the other hand, the stock markets are not the whole story of the economy. The closing numbers from Wall Street are easy to report; but the longer term trends that we described in the previous lesson that the government and other agencies report monthly, quarterly, or yearly provide a broader and more accurate reading of the overall economy. The Wall Street numbers are especially important to investors, and many average Americans who participate in mutual fund accounts are small investors.

But the NYSE and NASDAQ do not directly reflect what is happening with small businesses and with the self-employed. A large disconnect can exist between big businesses and people who invest in them on the one hand and the lives of

middle income and poor Americans on the other. The economic situation of the latter groups, less wealthy but more numerous, is important also.

The Lord taught this lesson about what is of far greater importance than economics.

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*Sell your possessions and give to charity; make yourselves money belts which do not wear out, an unfailing treasure in heaven, where no thief comes near nor moth destroys.*

*Luke 12:33*

## Assignments for Lesson 58

**Making Choices** Read about the US Foods IPO (pages 139-140).

**Literature** Continue reading *Mover of Men and Mountains*.

**Project** Continue working on your project for this unit.

**Student Review** Answer the questions for Lesson 58.



*Abandoned hotel sign, Las Vegas, Nevada*

# 59

## What's a Recession?

*The media has correctly predicted 36 of the last 2 recessions.*

*— Zig Ziglar*

Of all the measurements of economic activity, the one that economists, politicians, and journalists watch and discuss with the most interest is the determination of a recession.

One reason for the discussion is that economists differ over the precise definition of a recession, including when it starts and when it is over. What the various definitions have in common is that they use some combination of the measurements we have discussed in this unit. Adding to the interest is the often-hyped media coverage of economic activity.

News outlets have a hard time coming up with an exciting news story when the economy is growing at a decent pace and no calamities are taking place. As a result, the media sometimes seize upon one indicator or one economist's dire predictions to make things appear to be bleak throughout the economy. This creates a story that the media can use to attract viewers, readers, and listeners, regardless of what is actually happening in the economy. Hence the quotation by Zig Ziglar above.

### Defining a Recession

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A business cycle consists of a period of expansion, a peak of activity, a period of significant decline that most economists consider to be a recession, and a trough or turning point when expansion begins again.

The traditional definition of a recession is when the gross domestic product has declined for at least two consecutive quarters or six months. However, many economists do not like this definition because it does not consider any other variables such as unemployment or consumer confidence and because they prefer to identify a more precise starting point for a recession.

During a period of economic downturn, most or all of the major measures of economic activity—stock prices, employment, personal income, business profits, and so forth—decline or show only small growth. Most business and economic experts can tell when a general decline is taking place. However, the closest thing to an official definition of a recession comes after the fact by the National Bureau of Economic Research.

The National Bureau of Economic Research (NBER) is a private, non-partisan, and non-profit organization founded in 1920 that conducts research on the economy. It published its first business cycle dates in 1929. The official definition of a recession by the NBER is “a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales.” The NBER Business Cycle Dating Committee, formed in 1978, considers what it believes to be the relevant economic data and determines when a recession began. Most economists accept the committee’s determination of the beginning and ending points of a business cycle.

Since World War II, recessions have lasted an average of just over eleven months from peak

to trough. The periods between low points have generally gotten longer. The recession that lasted from December 2007 until June of 2009 was the deepest and longest-lasting slowdown of economic activity in the U.S. since the year that World War II ended.

In the latest recession, the Business Cycle Dating Committee of the NBER determined that domestic production and employment were the main factors; but they also considered personal income, manufacturing output, and wholesale and retail sales. The peaks for all of these factors did not converge in December of 2007, but that is when the committee felt that the overall decline in the economy began. We will discuss this recession more in Lesson 70.

U.S. Business Cycles (1945-2009)				
Peak (when decline started)	Trough (low point before recovery began)	Number of months of contraction or recession (from peak to trough)	Number of months from previous trough to this trough	Decline in GDP during contraction
February 1945	October 1945	8	88	12.7%
November 1948	October 1949	11	48	1.7%
July 1953	May 1954	10	55	2.6%
August 1957	April 1958	8	47	3.1%
April 1960	February 1961	10	34	1.6%
December 1969	November 1970	11	117	0.6%
November 1973	March 1975	16	52	3.2%
January 1980	July 1980	6	64	1.1%
July 1981	November 1982	16	28	3.6%
July 1990	March 1991	8	100	1.4%
March 2001	November 2001	8	128	0.3%
December 2007	June 2009	18	91	5.1%



*Unemployed workers in a “Hooverville” in New York City, January 1938*

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## Defining a Depression

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A joke, sometimes attributed to Harry Truman, says that a recession is when your neighbor loses his job and a depression is when you lose your job.

Before the 1930s, people referred to every economic downturn as a depression (a common term in the 1800s was panic). The United States had experienced many downturns earlier in its history, so what happened in the 1930s was called the Great Depression. The term recession came to be used after the Great Depression to describe less severe downturns.

The NBER does not have a set definition for an economic depression. A depression is generally understood to be a period of economic downturn

that is more severe than a recession. One common rule of thumb is that a depression involves a decline in the GDP of more than 10%.

The NBER has determined that two periods of significant decline occurred during the 1930s. The first extended from the peak in August of 1929 until the trough of March of 1933. During that time, real GDP declined 27% and was the worst downturn in American history. After a time of relative (though by no means complete) recovery, the second decline of the decade occurred from the peak in May of 1937 until the trough in June of 1938. As the chart at left indicates, the recessions that have occurred since then do not come close to the severity of the downturns during the 1930s.

The impact of economic downturns spreads throughout the country, although not all parts of the country feel the effects to the same degree or in the same way. While it is true that the large majority of people do not lose their jobs, almost everyone knows of a family that endures significant hardship because of a recession or depression. This is yet another

reminder that the study of economics is not about impersonal numbers but about real people enjoying success and enduring setbacks.

The opening verse of the Old Testament book of Lamentations expresses Jeremiah's sad appraisal of what had happened in Jerusalem, a city that once bustled with economic activity.

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*How lonely sits the city that was full of people!*

*She has become like a widow who was once great among the nations!*

*She who was a princess among the provinces has become a forced laborer!*

*Lamentations 1:1*

## Assignments for Lesson 59

**Literature** Continue reading *Mover of Men and Mountains*.

**Project** Continue working on your project for this unit.

**Student Review** Answer the questions for Lesson 59.



*Ten members of the De Marco family lived in this shack near Pemberton, New Jersey (1910)*

60

## Rich and Poor

*The fellow that has no money is poor.  
The fellow that has nothing but money is poorer still.  
— Billy Sunday, American evangelist (1862-1935)*

The United States is a wealthy nation. As of the end of 2015, total net household worth was about \$86.8 trillion (most of the figures in this lesson come from the U.S. Census Bureau). Total annual household income as of mid-2016 was just over \$16 trillion. As of 2014 (the last year for which data was available at the time of publication), the median household income was \$53,657.

However, income in America is not equally distributed. About 20% of American households have an income of \$100,000 or more, while another 20% have household income under \$20,000. Transfer payments from government programs add to that latter figure in practical terms.

In this lesson, we examine the reality of income inequality. We will consider what has brought about this situation, what is the nature of poverty in America, and what can and should be done about income inequality.

In 1963 Mollie Orshansky, the daughter of immigrants, was an economist and statistician working in the Social Security Administration. She developed the first official guidelines for defining poverty in the United States. Her basic standard was

three times the amount of income needed for an economical food budget, adjusted for the number of persons in a household.

Over the years, the basis for the calculation has changed in some ways; but the basic approach is the same. Each year, the U.S. Department of Health and Human Services issues poverty guidelines, which the government uses to determine whether citizens are eligible for certain federal programs designed to help the poor.

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*Mollie Orshansky (1915-2006)*



## 2016 Poverty Guidelines Based on Number of Persons in Household

1	\$11,880	5	\$28,440
2	\$16,020	6	\$32,580
3	\$20,160	7	\$36,730
4	\$24,300	8	\$40,890

For families with more than 8 persons, add \$4,160 for each additional person.

The table above shows the 2016 income guidelines for the 48 contiguous states and the District of Columbia. The economies of Alaska and Hawaii are different enough to justify separate guidelines. The meaning of the chart is that a family with this many members with income at that level or below is considered to be in poverty.

In 1964, 19% of the U.S. population lived in poverty. Fifty years later, after \$22 trillion spent in the War on Poverty, the poverty rate was still

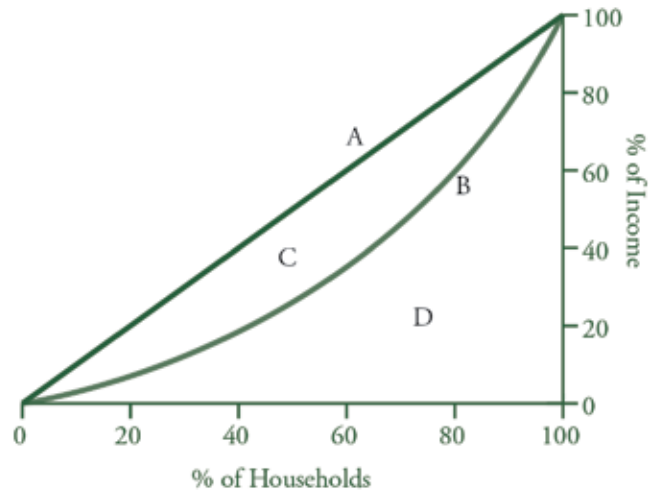
15%. Social welfare programs have provided real benefits for real people in need. Poverty rates for African Americans and for seniors have dropped more sharply than for the population as a whole. However, while these programs have alleviated some of the symptoms of poverty, they have not been able to eliminate the root causes.

Identifying the wealthy is more difficult. The federal government has not established official guidelines to determine who is wealthy. Different people have different ideas about how much annual income makes a person wealthy: \$100,000, \$250,000, one million dollars, or some other amount. The typical person would probably define a wealthy person as being someone who makes or who has more than he or she does.

The trend of the first decade and a half of the twenty-first century was that the percentage of total income earned by the wealthiest 1% of Americans increased, while the percentage of total income earned by the rest of Americans declined.

## The Lorenz Curve

The Lorenz curve, developed by Max Lorenz in 1905, is a graph showing actual income distribution compared to perfect distribution. The diagonal line A from (0,0) to (100,100) illustrates perfect distribution: twenty percent of the population has twenty percent of income, sixty percent has sixty percent of income, and so forth. Any point along the line shows the percentage of income which that percentage of the population receives. The curved line B below the diagonal line shows the actual distribution of income by households in a certain population.



For instance, the lowest 20% of households might have 10% of income, the highest 20% might have 40% of income, and so forth. The Gini coefficient, developed by Corrado Gini in 1912, is the ratio of the area (C) between the line of perfect distribution and the Lorenz curve compared to the total area below the line of perfect distribution (C+D). The smaller the ratio, the closer actual distribution is to perfect distribution. Recent calculations of the Gini coefficient for countries of the world show that the United States has the highest ratio, which means that we have a greater degree of income inequality than any other country.



## Important Factors in Defining Rich and Poor

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As we consider wealth and poverty, we need to keep certain facts in mind. First, we must recognize the difference between wealth and income. Income is what a person earns during a certain period, say one year. Wealth, on the other hand, is the total value of a person's assets, which often includes a house and property, investments, bank accounts, and other useful goods, acquired over several years. A person might have little or no income in a year but still be wealthy because of what he owns. A person just starting a career might have a good income but little wealth because he has not had time to save or acquire much. Income can lead to wealth, but the two are not the same in economic terms. In calculating wealth and poverty, we usually measure income, since accurate information about a person's wealth beyond an estimate is usually not available until someone dies and his estate is settled.

Second, terms such as “the rich” or “the poor” do not always communicate the real situation. The same people are not always rich or always poor. A large number of people have good years with high income but also lean years with much less income. Thomas Sowell has said that 54% of Americans will be in the top 10% in income at some point in their lives; many of them just don't stay there. In the same way, most people qualify as poor at some point. Someone who is just starting out, or who is without a job for a year or more, would qualify as poor; but they probably won't stay in that category. A small percentage of Americans are chronically poor.

Third, to a degree poverty is a relative measurement. Most people classified as poor today have it much better than people whose income classified them as poor in previous decades. A 2005 survey revealed that 46% of families in poverty owned their own home. The typical home of a family in poverty had three bedrooms, one and a half bathrooms, a garage, a porch or patio, and was in good repair. Seventy-six percent had

air conditioning, three-fourths owned cars, 97% owned at least one television set (over half had two or more), and 73% owned a microwave oven. Only 2% said they often did not have enough to eat. The image of a family with gaunt children living in a shack and wearing ragged clothes does not apply to the vast majority of cases. The face of poverty in the United States has changed.

Most of those who live in the lowest income quintile in the U.S. live in conditions that are vastly superior to the conditions in which most impoverished people in the world live. Still, it does not change the fact that people living in poverty in the United States today do not have as much income or wealth as many other people in America today.

Fourth, it is important to note that in world history, poverty is the norm and wealth is the exception. Most people worked hard to live very simply, while the very few had abundant income and wealth. We will note later in this lesson what has created the different situation in our world today.

## Why Are Some Poor and Some Rich?

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Some say the poor are just lazy, while others say they are victims of an unjust system. The reason that this debate continues is that both sides have valid claims and can point to examples that support their arguments.

Many factors can influence a person's earning power. Where a person grows up can make a difference. A child who grows up in a remote Appalachian town has more obstacles to wealth than a child who grows up in a wealthy suburb on Long Island. The Appalachian child can overcome the obstacles and the Long Island child can throw his opportunity away; but the likelihood is strong that their backgrounds will play a part in their lifetime income. Education can make a difference, especially one that prepares a child for a productive adult life. Family culture can make a difference: a child who grows up with his or her mom and dad and who has books in the home and abundant

cultural opportunities has a better chance of a good income than a child who lives with one parent, watches lots of television from a young age, and has little verbal interaction with adults.

The key issue for determining wealth and poverty is productivity. Some people are more productive than others. Income is a by-product of productivity; more productive people have higher incomes. Sometimes people have low productivity because of their own choices: they choose to leave school, they choose not to work, or they make other choices that limit their productivity. In some cases, a person might want to be more productive but cannot. For instance, if someone cannot get a job because of discrimination, he or she cannot be productive. If a husband leaves his wife and children, the mom will find it hard to be economically productive while caring for her children. Some disabled persons find work difficult or impossible.

We will look at productivity in more detail in a later lesson.

The question of why some are poor does not have one simple answer for every situation. However, two factors are clear. In many poor households, people in the household do not work many hours and the father is absent. The members of an average poor family only work about 16 hours per week. The reasons for this can vary; but if the poor who could work did work, their situation would be greatly improved. Two-thirds of children in poor families live in one-parent homes. If their fathers would take the responsibility to provide for their children, this would greatly reduce poverty. Some are poor because of systemic injustice. Some are poor because they live in a culture of poverty that makes it hard for them to see another way of life. Personal attitudes also play a major role.

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*Volunteers at the Food Bank of Central and Northeast Missouri, Columbia, Missouri (2013)*



The reasons why some are rich are to a great degree the mirror images of the reasons why some are poor. Most of those who are wealthy have sought out educational opportunities, have decided that they are not going to be victims, have worked hard, and have kept their families intact. Many do what many poor do not do, and as a result they achieve different outcomes. According to economist Thomas Sowell, 80% of millionaires earned their money during their lifetime. Only 20% of millionaires, which is a tiny percentage of the total U.S. population, inherited their wealth. Even this does not make them the “idle rich” as others sometimes call them. A large number of those with inherited wealth work hard and are active in philanthropic causes.

Many factors lead to income inequality, but most poor Americans are not poor because other people prevent them from earning much money. By and large, the poor do not have much money because of their own decisions. They need something besides money to help them alleviate their poverty.

## Are the Poor Poor Because the Rich Are Rich?

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When I toured the Biltmore Mansion in Asheville, North Carolina some years ago, I was impressed with its beauty and immensity; but I had a nagging thought. It seemed to me that the Vanderbilts could have paid their workers more and made do with fewer rooms. The idea of one family living in such luxury while their employees had to get by with a relatively low hourly wage haunted me.

Today we hear reports of corporate CEOs getting huge bonuses and retirement packages, sometimes after their companies have lost money and after people who trusted them with their life savings have been badly hurt financially. As justifiably valuable as the executives might be to their companies, it does seem as though the table is tilted in favor of the few who become wealthy and away from the millions who struggle to get by.

The facts, however, say otherwise. Those who take the risk of building companies provide jobs for many others. The Vanderbilt wealth did not make others poor; instead, the Vanderbilt wealth enabled many others to have more by providing jobs for them. The same is true about Henry Ford, Bill Gates, and other entrepreneurs. Yes, the wealthy could pay their employees more and keep less wealth for themselves; but who is to say how much wealth that should be? What if someone in government decided how much wealth you should have?

In addition, the wealthy pay a huge portion of the personal income taxes that the federal government collects every year; and much of that revenue goes to fund government income redistribution programs. In addition to starting and growing companies, the wealthy make donations to fund hospitals, museums, and other charitable and cultural organizations.

The argument that the poor are poor because the rich are rich assumes a stagnant, limited economic pie and that the wealthy find it to their benefit to starve the poor. Wealth, however, grows a bigger pie that helps more people. Even the so-called “idle rich” spend and invest, both of which give economic opportunity to others.

Why must the wealthy be the villains? Why is the answer that many propose to tax more heavily people who have worked the hardest, sacrificed and risked the most, and been willing to do what they needed to do to be successful economically? Why not see them as heroes who help instead of selfish people who abuse others? We can find examples of the wealthy who do take advantage of others, but these are the exception and not the rule.

## Can We Eliminate Poverty?

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We live at a remarkable time in world history. Fewer than ten percent of the world population live in extreme poverty, defined as living on the equivalent of \$1.90 per day or less. In 1990, that figure was about 37%.



*May 1 is International Workers Day, and on May 1, 2012, protestors in cities around the world demonstrated in favor of workers' rights. People at a rally in San Francisco criticized the wealthiest 1% of Americans for having what they consider excessive wealth and disproportionate influence. A few people used the protest as a cover for violence, causing property damage to cars and small businesses in the area.*

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As noted earlier, the poor in America today live much better than the poor in America a generation or two ago. In real terms, we have taken huge strides toward eliminating poverty in the United States. The poor in America live better, have better health care, and have better nutrition than the poor anywhere else in the world. The poor in America today also have a better life in material terms than the vast majority of people who have ever lived.

Immigrants have come to America with nothing and by their hard work have been able to enjoy economic success. In the twentieth century, many

people left the poverty of Appalachia, found work in the industrial cities of the North, and achieved economic success. Immigrants (legal and illegal) still come to the United States because they see here their best hope for a better future for themselves and their children.

Why has this happened? Because people had ideas about doing things better, the freedom to do something with those ideas, and the belief that every individual deserved to have access to those ideas. It has been because places such as China and India discovered the power of markets and because

governments have gotten out of the way of people using their talents to help others and by doing so helping themselves. The U.S. did not become the richest country in the world by government handouts. Some industries have managed to get preferential subsidies and tax breaks, and the government has done some things right to correct injustices; but government programs did not cause the rising tide that has lifted all boats the way it has.

Nevertheless, we can probably never completely eliminate poverty. I have been in many cities, and there never fails to be a poor section of town, with run-down housing, idle people, and a generally depressed atmosphere. Try as we might, with government transfer programs, work training programs, and encouragement for businesses to hire people, Jesus' observation that we will always have the poor with us is evident. The best that the United States can do is offer equality of opportunity, and this is more true today than it has ever been. No one, however, can promise equality of results. As Friedrich Hayek said in *The Road to Serfdom*, to guarantee equality of outcome, we would have to treat people unequally because they do not start out in the same place.

Can the richest country in the world keep everyone from living in poverty? Probably not, as long as people are free to choose how they live. If the government gave every poor person \$50,000, some would invest that in building a strong financial foundation, while others would squander it. If the government protects freedom and encourages businesses to give people a chance, that will give more people a chance to succeed economically.

Some people choose to become entrepreneurs, while others choose to work as a laborer. One choice is not better than the other. There will always be inequality of results. No system of forced equality will bring true equality because even in such a system some will use the system to their own benefit. And as we said above, forced equality limits the pie instead of helping the pie to grow larger.

Many believe that the government needs to “do something” to make income more equal, specifically tax the rich and redistribute it to the poor. But we cannot trust the government to carry out such a program perfectly. There will still be inequities. It won't work, but the idea wins votes from the poor and from those who want to feel good for thinking this way.

Those who believe the government should redistribute wealth could just do it themselves. They could give 50%, 60%, or 90% of their income (or wealth) to others. They could do it for a small community if necessary and see how it works.

## What Spiritual Obligations Do Christians Have to the Poor?

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Some are poor because of systemic injustice in our society. Some are poor because they grew up in a culture of poverty and haven't left. Some are poor because of their own bad decisions. Some are poor who are unable to work because of physical limitations or mental health challenges.

So what do we do? Can we who follow the One who came to redeem us simply shake our heads, turn away, and ignore the problem? Can the children of poverty look for any help from people who worship the God of compassion, the God who gave them another chance when they did not deserve it? Can Christians build ever larger buildings in which to assemble while many of their fellow citizens see few opportunities to lead productive lives? Should Christians assume that the government will take care of the poor, while those same Christians lament boondoggle government programs and handouts?

Christians can work to promote justice and equal opportunity, and they can offer practical assistance to the poor to help them address the real reasons for poverty in their lives. Christians can support educational opportunities that can help the next generation break the cycle of poverty.

Believers can also work through their churches to provide benevolent help, to offer training in productive skills, and to provide a new vision for what is possible in people's lives. Poverty is not just a financial issue. People living in poverty frequently face other problems such as a broken family, drug dependency, illiteracy, and crime. Christians can offer the possibility of a different way of life, but they have to be in touch with the people who need a different way of life to be able to offer it.

Christians can also look carefully and honestly at their own rising expectations of material well-being and decide how much is really enough. The poor aren't poor because some Christians are better off, but Christians who are better off can commit

themselves to helping others in the name of Jesus (Acts 4:34-35). The Bible does not condemn wealth as such. For example, Abraham was wealthy, Job was wealthy, and some believers that Timothy knew were wealthy (1 Timothy 6:17-19). The Bible does teach the importance of righteousness in obtaining wealth and in using it, and the Word also warns against the dangers of greed for wealth and against the dangers of depending on wealth. Generous and compassionate Christians will not eliminate poverty, but they can make a difference in the lives of the people God places in their path.

The wealthy can be humbled, the poor can be encouraged, and they both can be brought closer together by this truth:

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*The rich and the poor have a common bond,  
The Lord is the maker of them all.  
Proverbs 22:2*

## Assignments for Lesson 60

**Making Choices** Read "Poverty and Wealth" (page 141).

**Literature** Continue reading *Mover of Men and Mountains*.

**Project** Finish your project for this unit.

**Student Review** Answer the questions for Lesson 60 and take the quiz for Unit 12.



*Market in Afghanistan (2009)*

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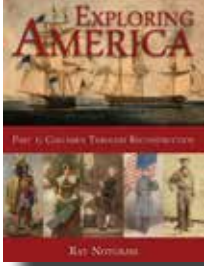
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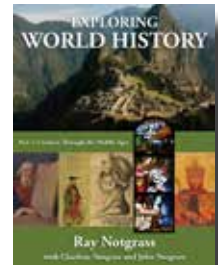


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Engaging lessons, combined with primary sources, survey history from Creation to the present. Your child can earn one year of credit in world history, English (literature and composition), and Bible. High school.

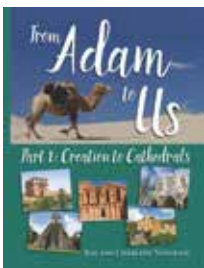
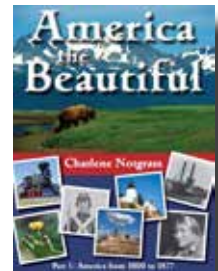


## *Exploring Government* by Ray Notgrass

This one-semester course provides a half-year credit in government and English (literature and composition). Learn about the operations of government and about issues facing our nation today. High school.

## *America the Beautiful* by Charlene Notgrass

This one-year American history, geography, and literature course combines the flexibility and richness of a unit study with the simplicity of a textbook-based approach to history. Engaging, fascinating, and fun. Ages 10-14.

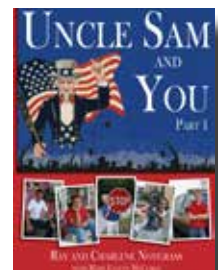


## *From Adam to Us* by Ray and Charlene Notgrass

This one-year world history and literature course combines narrative lessons, full-color photographs, primary sources, literature, and hands-on activities to help the student connect with world history in a personal way. Ages 10-14.

## *Uncle Sam and You* by Ray and Charlene Notgrass

This one-year civics and government course has daily lessons that teach your child about the foundations of American government, the elections process, and how Federal, state, and local governments work. Ages 10-14.



For more information about our resources, call 1-800-211-8793 or visit [notgrass.com](http://notgrass.com).

