

**3rd Edition** 

# Economics





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Sean Masaki Flynn, PhD

Assistant professor of economics Scripps College



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# Economics

3rd Edition

by Sean Masaki Flynn, PhD



#### Economics For Dummies®, 3rd Edition

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# Introduction

conomics is all about humanity's struggle to achieve happiness in a world full of constraints. There's never enough time or money to do everything people want, and things like curing cancer are still impossible because the necessary technologies haven't been developed yet. But people are clever. They tinker and invent, ponder and innovate. They look at what they have and what they can do with it and take steps to make sure that if they can't have everything, they'll at least have as much as possible.

Having to choose is a fundamental part of everyday life. The science that studies how people choose — economics — is indispensable if you really want to understand human beings both as individuals and as members of larger organizations. Sadly, though, economics has typically been explained so badly that people either dismiss it as impenetrable gobbledygook or stand falsely in awe of it — after all, if it's hard to understand, it must be important, right?

I wrote this book so you can quickly and easily understand economics for what it is — a serious science that studies a serious subject and has developed some seriously good ways of explaining human behavior out in the (very serious) real world. Economics touches on nearly everything, so the returns on reading this book are huge. You'll understand much more about people, the government, international relations, business, and even environmental issues.

### **About This Book**

The Scottish historian Thomas Carlyle called economics the "dismal science," but I'm going to do my best to make sure that you don't come to agree with him. I've organized this book to try to get as much economics into you as quickly and effortlessly as possible. I've also done my best to keep it lively and fun.

In this book, you find the most important economic theories, hypotheses, and discoveries without a zillion obscure details, outdated examples, or complicated mathematical "proofs." Among the topics covered are

- How the government fights recessions and unemployment
- >> How and why international trade is good for both individuals and nations

- >> Why poorly designed property rights are responsible for environmental problems such as global warming, pollution, and species extinctions
- How profits guide businesses to produce the goods and services you take for granted
- >> How economic incentives affect healthcare costs, prices, and efficiency
- >> Why competitive firms are almost always better for society than monopolies
- >> How the Federal Reserve controls the money supply, interest rates, and inflation all at the same time
- >> Why government policies such as price controls and subsidies often cause much more harm than good
- >> How the simple supply and demand model can explain the prices of everything from comic books to open-heart surgeries

You can read the chapters in any order, and you can immediately jump to what you need to know without having to read a bunch of stuff that you couldn't care less about.

Economists like competition, so you shouldn't be surprised that there are a lot of competing views. Indeed, it's only through vigorous debate and careful review of the evidence that the profession improves its understanding of how the world works. This book contains core ideas and concepts that economists agree are true and important — I try to steer clear of fads or ideas that foster a lot of disagreement. (If you want to be subjected to my opinions and pet theories, you'll have to buy me a drink.)

*Note:* Economics is full of two things you may not find very appealing: jargon and algebra. To minimize confusion, whenever I introduce a new term, I put it in *italics* and follow it closely with an easy-to-understand definition. Also, whenever I bring algebra into the discussion, I use those handy *italics* again to let you know that I'm referring to a mathematical variable. For instance, I is the abbreviation for investment, so you may see a sentence like this one: I think that I is too big.

I try to keep equations to a minimum, but sometimes they help make things clearer. In such instances, I sometimes have to use several equations one after another. To avoid confusion about which equation I'm referring to at any given time, I give each equation a number, which I put in parentheses. For example,

- (1)  $E = mc^2$
- (2)  $MTV = ESPN + CNN^2$

# **Foolish Assumptions**

I wrote this book assuming some things about you:

- >> You're sharp, thoughtful, and interested in how the world works.
- >> You're a high school or college student trying to flesh out what you're learning in class, or you're a citizen of the world who realizes that a good grounding in economics will help you understand everything from business and politics to social issues like poverty and environmental degradation.
- >> You want to know some economics, but you're also busy leading a very full life. Consequently, although you want the crucial facts, you don't want to have to read through a bunch of minutiae to find them.
- >> You're not totally intimidated by numbers, facts, and figures. Indeed, you welcome them because you like to have things proven to you instead of taking them on faith because some pinhead with a PhD says so.
- >> You like learning why as well as what. That is, you want to know why things happen and how they work instead of just memorizing factoids.

#### Icons Used in This Book

To make this book easier to read and simpler to use, I include a few icons that can help you find and fathom key ideas and information.



This icon alerts you that I'm explaining a fundamental economic concept or fact that you would do well to stash away in your memory for later. It saves you the time and effort of marking the book with a highlighter.



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This icon tells you that the ideas and information that it accompanies are a bit more technical or mathematical than other sections of the book. This information can be interesting and informative, but I've designed the book so that you don't need to understand it to get the big picture about what's going on. Feel free to skip this stuff.



This icon points out time and energy savers. I place this icon next to suggestions for ways to do or think about things that can save you some effort.

TIP



This icon discusses any troublesome areas in economics you need to know. Keep an eye open for them to alert you of potential pitfalls.

## **Beyond the Book**

To view this book's Cheat Sheet, simply go to www.dummies.com and search for "Economics For Dummies Cheat Sheet" for a handy reference guide that answers common questions about economics.

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If you do not receive this email within two hours, please check your spam folder before contacting us through our Technical Support website at http://support.wiley.com or by phone at 877-762-2974.

Now you're ready to go! You can come back to the practice material as often as you want — simply log on with the username and password you created during your initial login. No need to enter the access code a second time.

Your registration is good for one year from the day you activate your PIN.

### Where to Go from Here

This book is set up so that you can understand what's going on even if you skip around. The book is also divided into independent parts so that you can, for instance, read all about microeconomics without having to read anything about macroeconomics. The table of contents and index can help you find specific topics easily. But, hey, if you don't know where to begin, just do the old-fashioned thing and start at the beginning.

# Economics: The Science of How People Deal with Scarcity

#### IN THIS PART . . .

Find out what economics is, what economists do, and why these things are important.

Decipher how people decide what brings them the most happiness.

Understand how goods and services are produced, how resources are allocated, and the roles of government and the market.

- Taking a quick peek at economic history
- » Observing how people cope with scarcity
- » Separating macroeconomics and microeconomics
- Getting a grip on the graphs and models that economists love to use

# Chapter **1**

# What Economics Is and Why You Should Care

conomics is the science that studies how people and societies make decisions that allow them to get the most out of their limited resources. And because every country, every business, and every person has to deal with constraints, economics is literally everywhere. For instance, you could be doing something else right now besides reading this book. You could be exercising, watching a movie, or talking with a friend. You should only be reading this book if doing so is the best possible use of your very limited time. In the same way, you should hope that the paper and ink used to make this book have been put to their best use and that every last tax dollar that your government spends is being used in the best way.

Economics gets to the heart of these issues, analyzing the behavior of individuals and firms, as well as social and political institutions, to see how well they convert humanity's limited resources into the goods and services that best satisfy human wants and desires.

# **Considering a Little Economic History**

To better understand today's economic situation and what sort of policy and institutional changes may promote the greatest improvements, you have to look back on economic history to see how humanity got to where it is now. Stick with me: I make this discussion as painless as possible.

# Pondering just how nasty, brutish, and short life used to be

For most of human history, people didn't manage to squeeze much out of their limited resources. Standards of living were quite low, and people lived poor, short, and rather painful lives. Consider the following facts, which didn't change until just a few centuries ago:

- >> Life expectancy at birth was about 25 years.
- >> More than 30 percent of newborns never made it to their fifth birthdays.
- >> A woman had a one in ten chance of dying every time she gave birth.
- >> Most people had experienced horrible diseases and/or starvation.
- >> The standard of living was low and stayed low, generation after generation. Except for the nobles, everybody lived at or near subsistence, century after century.

In the last 250 years or so, however, everything changed. For the first time in history, people figured out how to use electricity, engines, complicated machines, computers, radio, television, biotechnology, scientific agriculture, antibiotics, aviation, and a host of other technologies. Each has allowed people to do much more with the limited amounts of air, water, soil, and sea they were given on planet Earth. The result has been an explosion in living standards, with life expectancy at birth now over 70 years worldwide and with many people able to afford much better housing, clothing, and food than was imaginable a few hundred years ago.

Of course, not everything is perfect. Grinding poverty is still a fact in a large fraction of the world, and even the richest nations have to cope with pressing economic problems like unemployment and how to transition workers from dying industries to growing industries. But the fact remains that overall, the modern world is a much richer place than its predecessor, and most nations now have sustained economic growth, which means that living standards rise year after year.

# Identifying the institutions that raise living standards

The obvious reason for higher living standards, which continue to rise, is that human beings have recently figured out lots of new technologies, and people keep inventing more. But if you dig a little deeper, you have to wonder why a technologically innovative society didn't happen earlier.

The Ancient Greeks invented a simple steam engine and the coin-operated vending machine. They even developed the basic idea behind the programmable computer. But they never quite got around to having an industrial revolution and entering on a path of sustained economic growth.

And despite the fact that there have always been really smart people in every society on earth, it wasn't until the late 18th century, in England, that the Industrial Revolution actually got started and living standards in many nations rose substantially and kept on rising, year after year.



So what factors combined in the late 18th century to so radically accelerate economic growth? The short answer is that the following institutions were in place:

- >> Democracy: Because the common people outnumbered the nobles, the advent of democracy meant that for the first time, governments reflected the interests of a society at large. A major result was the creation of government policy that favored merchants and manufacturers rather than the nobility.
- >> The limited liability corporation: Under this business structure, investors could lose only the amount of their investment and not be liable for any debts that the corporation couldn't pay. Limited liability greatly reduced the risks of investing in businesses and, consequently, led to much more investing.
- >> Patent rights to protect inventors: Before patents, inventors usually saw their ideas stolen before they could make any money. By giving inventors the exclusive right to market and sell their inventions, patents gave a financial incentive to produce lots of inventions. Indeed, after patents came into existence, the world saw its first full-time inventors people who made a living inventing things.
- >> Widespread literacy and education: Without highly educated inventors, new technologies don't get invented. And without an educated workforce, they can't be mass-produced. Consequently, the decision that many nations made to make primary and then secondary education mandatory paved the way for rapid and sustained economic growth.

Institutions and policies like these have given people a world of growth and opportunity and an abundance so unprecedented in world history that the greatest public health problem in many countries today is obesity.

#### Looking toward the future

The challenge moving forward is to get even more of what people want out of the world's limited pool of resources. This challenge needs to be faced because problems like infant mortality, child labor, malnutrition, endemic disease, illiteracy, and unemployment are all alleviated by higher living standards and an increased ability to pay for solutions to such problems.

Along those lines, it's important to point out that many poverty-related problems can be cured by extending to poorer nations the institutions that have already been proven by already-rich countries to lead to rising living standards. In addition, developing nations can also learn from the mistakes that were made by already-rich countries back when they were in the process of figuring out how to raise living standards — mistakes related to promoting economic growth without causing massive amounts of pollution, numerous species extinctions, or widespread resource depletion.



Consequently, there are two related and very good reasons for you to read this book and get a firm grasp about economics:

- >> You can discover how modern economies function. Doing so can give you an understanding not only of how they've so greatly raised living standards but also of where they need some improvement.
- By getting a thorough handle on fundamental economic principles, you can judge for yourself the economic policy proposals that politicians and others run around promoting. After reading this book, you'll be much better able to sort the good from the bad.

# Framing Economics as the Science of Scarcity

Scarcity is the fundamental and unavoidable phenomenon that creates a need for the science of economics: There isn't nearly enough time or stuff to satisfy all desires, so people have to make hard choices about what to produce and consume so that if they can't have everything, they at least have the best that was possible under the circumstances. Without scarcity of time, scarcity of resources, scarcity of information, scarcity of consumable goods, and scarcity of peace and goodwill on Earth, human beings would lack for nothing. Chapter 2 gets deep into scarcity and the tradeoffs that it forces people to make.

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Economists analyze the decisions people make about how to best maximize human happiness in a world of scarcity. That process turns out to be intimately connected with a phenomenon known as *diminishing returns*, which describes the sad fact that each additional amount of a resource that's thrown at a production process brings forth successively smaller amounts of output.

Like scarcity, diminishing returns is unavoidable, and in Chapter 3, I explain how people very cleverly deal with this phenomenon in order to get the most out of humanity's limited pool of resources.

# Sending Microeconomics and Macroeconomics to Separate Corners

The main organizing principle I use in this book is to divide economics into its two broad pieces, macroeconomics and microeconomics:

- >> Microeconomics focuses on individual people and individual businesses. For individuals, it explains how they behave when faced with decisions about where to spend their money or how to invest their savings. For businesses, it explains how profit-maximizing firms behave individually, as well as when competing against each other in markets.
- >> Macroeconomics looks at the economy as an organic whole, concentrating on factors such as interest rates, inflation, and unemployment. It also encompasses the study of economic growth and the methods governments use to try to moderate the harm caused by recessions.

Underlying both microeconomics and macroeconomics are some basic principles such as scarcity and diminishing returns. Consequently, I spend the rest of Part I explaining these fundamentals before diving in to microeconomics in Part II and macroeconomics in Part III. But first, this section gives you an overview of microeconomics and macroeconomics.

# Getting up close and personal: Microeconomics

Microeconomics gets down to the nitty gritty, studying the most fundamental economic agents: individuals and firms. This section delves deeper into the micro side of economics, including info on supply and demand, competition, property rights, problems with markets, and the economics of healthcare.

#### **Balancing supply and demand**

In a modern economy, individuals and firms produce and consume everything that gets made. Supply and demand determine prices and output levels in competitive markets. Producers determine supply, consumers determine demand, and their interaction in markets determines what gets made and how much it costs. (See Chapter 4 for details.)

Individuals make economic decisions about how to get the most happiness out of their limited incomes. They do this by first assessing how much *utility*, or satisfaction, each possible course of action would give them. They then weigh costs and benefits to select the course of action that will yield the greatest amount of utility possible given their limited incomes. These decisions generate the demand curves that affect prices and output levels in markets. I cover these decisions and demand curves in Chapter 5.

In a similar way, the profit-maximizing decisions of firms generate the supply curves that affect markets. Every firm will decide what to produce and how much to produce by comparing costs and revenues. A unit of output will only be produced if doing so will increase its maker's profit. In particular, a firm will only produce a unit if the increase in revenue from selling it exceeds the unit's cost of production. This behavior underpins the upward slope of supply curves and how they affect prices and output levels in markets, as I discuss in Chapter 6.

#### Considering why competition is so great

You may not feel warm and fuzzy about profit-maximizing firms, but economists love them — just as long as they're stuck in competitive industries. The reason is that firms that are forced to compete end up satisfying two wonderful conditions:

- >> They're *allocatively efficient*, which simply means that they produce the goods and services that consumers most greatly desire to consume.
- >> They're *productively efficient*, which means that they produce these goods and services at the lowest possible cost.



The allocative and productive efficiency of competitive firms are the basis of Adam Smith's famous *invisible hand* — the idea that when constrained by competition, each firm's greed ends up causing it to act in a socially optimal way, as if guided to do the right thing by an invisible hand. I discuss this idea, and much more about the benefits of competition, in Chapter 7.

#### **Examining problems caused by lack of competition**

Unfortunately, not every firm is constrained by competition. And when that happens, firms don't end up acting in socially optimal ways. The most extreme case