

4th Edition

# Economics

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# Economics

4th Edition

by Sean Masaki Flynn, PhD



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Published by: John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030-5774, www.wiley.com

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Published simultaneously in Canada

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Library of Congress Control Number: 2023943421

ISBN 978-1-394-16133-1 (pbk); ISBN 978-1-394-16135-5 (ebk); ISBN 978-1-394-16134-8 (epdf)

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#### Introduction

conomics is 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 quite badly. As a result, people tend to 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 in the (very serious) real world. You'll understand much more about people, the government, international relations, business, and environmental issues after reading these pages. Economics touches on nearly everything, so the returns to reading this book are enormous.

#### **About This Book**

The Scottish historian Thomas Carlyle called economics the "dismal science." 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 get as much economics into you as quickly and effort-lessly 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 benefits both individuals and nations
- >> Why faulty or nonexistent property rights are responsible for most environmental problems, including global warming, air pollution, and species extinctions
- How profit guides businesses to produce both existing goods and services as well as new products
- >> How prices serve as signals in market economies
- >> Why competitive firms are almost always better for society than monopolies
- How the Federal Reserve controls the money supply, interest rates, and inflation 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 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 when it comes to economic institutions and economic policy. 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 valid 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: I think I is too big.

I try to keep equations to a minimum, but sometimes they help to clarify things. In such instances, I sometimes 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,

$$E = mc^2$$
 (1)

$$MTV = ESPN + CNN^2$$
 (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 either a 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 discrimination.
- >> You want to know some economics, but you're also busy leading a 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.
- >> You like learning why as well as what. 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 to help you find and fathom critical 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 use.

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 happening. Feel free to skip this stuff if you want.



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



This icon indicates troublesome areas. I've used it to identify potential pitfalls.

#### **Beyond the Book**

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

To gain access to the online practice, all you have to do is register. Just follow these simple steps:

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If you don't 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 return to the practice material as often as you want. Just 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 happening 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 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 from microeconomics
- » Getting a grip on economic graphs and models

# Chapter **1**

# What Economics Is and Why You Should Care

conomics studies how people and societies make decisions that allow them to get the most from their limited resources. And because every country, every business, and every person has to deal with constraints, economics is everywhere. At this very moment, for example, you could be doing something other than reading this book. You could be grueling through your hundredth pushup, bingeing the hottest series on Netflix, or texting with that friend you reconnected with at your last reunion. You should only be reading this book if doing so is the best possible use of your limited time. In the same way, you should hope that the resources used to create this book have been put to their best use and that every dollar your government spends is being managed in the best possible way.

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

#### **Considering a Little Economic History**

To better understand today's economic situation and what sorts of changes might promote the most significant improvements in economic efficiency, you have to look back on economic history to see how humanity got to where it is now. Please stick with me. I'll make this discussion as efficient and 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. Living standards were quite low, and people lived poor, short, and painful lives. (Forget about being able to microwave the Lean Cuisine you had delivered to your doorstep or have a video chat with your doctor about the peculiarity of your Tuesday-only food allergy.) 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.
- >> Most people experienced horrible diseases and 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 past 250 years or so, everything changed. For the first time in history, people figured out how to use electricity, computers, television and radio, antibiotics, aviation, and a host of other technologies, including artificial intelligence and genetic engineering. Each has allowed people to accomplish much more with the limited amounts of air, water, soil, and sea they were given on Earth. The result has been an explosion in living standards, with life expectancy at birth now greater than 70 years worldwide and many people able to afford much better housing, clothing, and food than imaginable a few hundred years ago.

Of course, not everything is perfect. Grinding poverty is still a fact of life in a significant fraction of the world. And even the wealthiest nations have to cope with pressing economic problems like unemployment and how to transition workers from dying industries to growing ones. But the fact remains that the modern world is much richer than it was in centuries past. Even better, most nations now enjoy sustained economic growth so that their living standards rise almost every year.

# Identifying the institutions that raise living standards

The obvious reason for higher living standards is that humans have recently discovered lots of valuable technologies. But if you dig a little deeper, you have to wonder why a technologically innovative society didn't happen earlier.

The ancient Greeks, for example, invented a simple steam engine as well as a sophisticated mechanical computer that could calculate dates centuries into the future. They even developed a mechanical way of storing what today would be called a *computer algorithm*. But they never got around to having an industrial revolution or figuring out how they could raise the average person's standard of living.

Ancient Greece wasn't alone. Even though there have always been brilliant people in every society in history, it wasn't until the late 18th century, in England, that the Industrial Revolution started. Only then did living standards begin to rise substantially, year after year.



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 commoners outnumbered the nobles, the advent of democracy meant that, for the first time, governments reflected the interests of society at large. A significant result was the creation of government policy that favored city-dwelling merchants and manufacturers over landed nobles living out in the countryside.
- >> The limited liability corporation: Under this business structure, investors could lose only the amount of their investments rather than being personally liable for all of a business's debts and liabilities. That reduction in risk led to way more investing enough, in fact, to pay for factories and railroads and steamships.
- >> 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 provided a financial incentive to produce lots of inventions. Indeed, after patents came into being, the world saw its first full-time inventors people who made a living by inventing things. (Hello, Thomas Edison, Alexander Graham Bell, and Grace Hopper!)
- >> Widespread literacy and education: After the Industrial Revolution began, many nations began to make primary education mandatory. They understood that without widespread literacy, there would be few inventors and little

progress. In addition, an educated workforce made spreading and implementing new technologies much easier. Soon, middle school and high school were mandated, too, paving the way for rapid and sustained economic growth.

Institutions and policies like these have given people a world of growth and opportunity. We enjoy a material abundance so unprecedented in world history that the most significant public health problem in many countries today is obesity. (Maybe if we had to forage for our own Lean Cuisine. . .)

#### Looking toward the future

Moving forward, the challenge is getting even more of what people want out of the world's limited pool of resources. We must face this challenge because problems like infant mortality, child labor, malnutrition, endemic disease, illiteracy, and unemployment are alleviated by higher living standards.

Economists believe that many of the poverty-related problems found in less economically developed areas might be alleviated if those areas adopt some of the institutions that have helped already-developed areas reach high levels of material prosperity.

On the other hand, economists point out that developing areas should learn from the mistakes of the past. There's no need to blindly copy the "smokestack industrialization" and heavy pollution that characterized the economic rise of England, Japan, and the United States in the 19th and 20th centuries. Modern development can be clean and green.



TIP

To summarize, three interrelated and excellent reasons should motivate you to read this book and get a firm grasp of economics:

- >> You can discover how modern economies function. Doing so can help you understand how they've raised living standards and where they could improve.
- >> By getting a thorough handle on fundamental economic principles, you can judge the economic policy proposals that politicians and activists promote. After reading this book, you'll be much better able to sort the good from the bad.
- >> You'll be able to spout off some interesting factoids at parties. Hey, whatever it takes to get a date, right?

# Framing Economics as the Science of Scarcity

Chapter 2 delves into scarcity and the tradeoffs that it forces people to make.

The fundamental and unavoidable constraint that generates a need for the science of economics is *scarcity*: There isn't nearly enough time or stuff to satisfy human desires.

To compensate, people have to make hard choices about what to produce and what to consume. If they do so wisely, they can at least have the best of what's possible, even though what they end up with will likely fall far short of everything they dreamed of.

The processes that people follow when attempting to deal with scarcity turn 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. In Chapter 3, I explain how people deal with diminishing returns to get the most out of humanity's limited pool of resources.

# Sending Microeconomics and Macroeconomics to Separate Corners

The central 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 firms. It explains how individuals behave when deciding where to spend their money or how to invest their savings. And it describes how profit-maximizing firms behave when competing against each other.
- >> Macroeconomics looks at the economy as an organic whole by focusing on statistics that reflect economy-wide trends, 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.

Some basic principles, such as scarcity and diminishing returns, underly both microeconomics and macroeconomics. Consequently, I spend the rest of Part 1 explaining these fundamentals before diving into microeconomics in Part 2 and macroeconomics in Part 4.

It's a good idea, though, for us to pause a little and use the next few pages to give you a slightly more detailed overview of microeconomics and macroeconomics. That way, you'll be able to jump around and read the book out of order without losing context. Don't worry. It's not like turning to the last page of a murder mystery to find out who done it.

## Getting up close and personal: Microeconomics

Microeconomics gets down to the nitty-gritty, studying the most fundamental economic agents: individuals and firms. Topics include supply and demand, competition, property rights, market failures, and how the government might want to regulate giant internet companies like Google and Microsoft.

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

In a modern economy, individuals and firms produce and consume everything that's made. Producers determine supply, consumers determine demand, and their interaction in markets determines what's 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 first by 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 affect prices and output levels in markets, as I discuss in Chapter 6.