# Principles of Economics: Economics and the Economy

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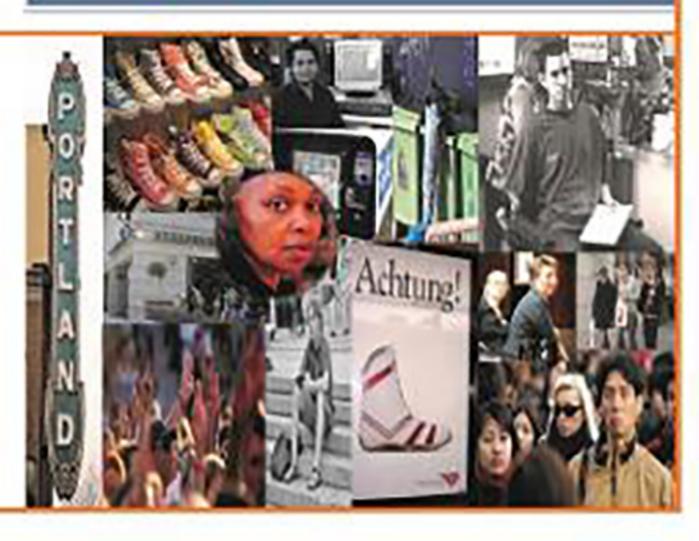


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#### **Third Edition**

# Timothy Taylor's Principles of Economics Economics and the Economy

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#### **Preface**

When authors describe their reasons for writing an economics textbook, it seems customary to proclaim lofty goals, like teaching students "to think like economists" so that they can become more informed voters and citizens. Paul Samuelson, the author of the most famous introductory economics textbook for the second half of the twentieth century, famously said: "I don't care who writes a nation's laws—or crafts its advanced treaties—if I can write its economics textbooks." On my best days, I have sufficient time and energy to lift my eyes to the horizon, strike a statuesque pose, and proclaim exalted goals. But most of the time, I'm just a workaday teacher and my goals are more limited and concrete.

The pedagogical approach of this textbook is rooted in helping students master the tools that they need to solve problems for a course in introductory economics. Indeed, one of the great pleasures of writing the book is having the opportunity to share my teaching toolkit of step-by-step explanations, practical examples, and metaphors that stick in the mind. On quizzes and exams, I do not ask broad or open-ended questions about informed citizenship and thinking like an economist. At the most basic level, my goal for an economics class is that students should feel well-prepared for quizzes and exams.

The preparation that students need to perform well in an introductory economics class can be divided into three parts. First, an introductory economics class involves mastering a specialized vocabulary. I sometimes tell students that learning economics is akin to learning a foreign language—with the added difficulty that terms in economics like "demand" or "supply" or "money" sound like standard English, and thus learning economics often requires that students drop their preconceptions about what certain words mean.

Second, students need to acquire some basic analytical tools. There are four central analytical models in an introductory economics course: budget constraints, supply and demand, cost curves, and aggregate demand–aggregate supply. These four models are used for a very wide variety of applications; still, there are only four of them. There are also a few key formulas and equations to learn with regard to topics like growth rates over time and elasticity.

Third, students must learn to recognize when these terms and tools apply and to practice using them. I often tell students not to bother memorizing particular questions and answers from the textbook or homework, because my quiz and exam questions will ask them to apply what they have learned in contexts they have not seen before. To provide a variety of contexts, this book describes many economic issues and events, drawn from recent times and past history, and also drawn both from U.S. and international experiences. When students see a concept or analytical skill applied in a number of ways, they learn to focus on the underlying and unifying idea. I've also found that students do take away knowledge of many economic events and episodes—although different students seem to focus on an unpredictable (to me) array of examples, which is perhaps as it should be in an introductory course.

As a workaday teacher, the goal of helping students master the material so that they can perform well on my quizzes and exams is lofty enough—and tough enough for me. There's an old joke that economics is the science of taking what is obvious about human behavior and making it incomprehensible. Actually, in my experience, the process works in the other direction. Many students spend the opening weeks of an introductory economics course feeling as if the material is difficult, even impossible, but by the middle and the end of the class, what seemed so difficult early in the term has become obvious and straightforward. As a course in introductory economics focuses on one lesson after another and one chapter after another, it's easy to get tunnel vision. But when you raise your eyes at the end of class, it can be quite astonishing to look back and see how far you have come. As students apply the terms and models they have learned to a series of real and hypothetical examples, they often find to their surprise that they have also imbibed a considerable amount about economic thinking and the real-world economy. Learning always has an aspect of the miraculous.

As always, my family makes a significant contribution to the existence of this book. In the six years since the first edition, the U.S. and world economy has been convulsed by a Great Recession and then by an ungainly process of sluggish and partial recovery. The task of updating figures

and examples for this third edition is inevitably large, but thinking about how to build connections from the concepts in the text to the economic events of the last few years made it larger. During the process of preparing this revised edition, my wife has dealt lovingly with a distracted husband; my children, with a father who was sleepdeprived or "at the office." In a very real sense, then, this book is from my dear ones to the students and instructors who use it. I hope that it serves you well.

Timothy Taylor St. Paul, Minnesota October 1, 2013

#### About the Author

#### **Timothy T. Taylor**

Timothy T. Taylor has been the Managing Editor of the *Journal of Economic Perspectives*, published by the American Economic Association, since the first issue of the journal in 1987. All issues of the journal are freely available online at http://e-jep.org. Taylor holds a B.A degree in economics and political science from Haverford College. He holds an M.S. degree in economics from Stanford University, where he focused on public finance, industrial organization, and economic history.

Taylor has taught economics in a variety of contexts. In 2012, his book The Instant Economist: Everything You Need to Know About How the Economy Works, was published by Penguin Plume. It was named an "Outstanding Academic Title" by Choice magazine of the American Library Assocation and was also listed as one of the Best Books for 2012 in the "Business" category by Library Journal. He has recorded a variety of lecture courses for The Teaching Company, based in Chantilly, Virginia, including Economics (3rd edition), Unexpected Economics, America and the New Global Economy, Legacies of Great Economists, and History of the U.S. Economy in the 20th Century. In 1992, he won the Outstanding Teacher Award from the Associated Students of Stanford University. In 1996, he was named a Distinguished Instructor for his courses in introductory economics at the University of Minnesota. In 1997, he was voted Teacher of the Year by students at the Humphrey Institute of Public Affairs at the University of Minnesota.

He has published articles on various topics in economics in publications such as the *Milken Institute Review*, the *Cato Journal*, *Public Interest*, and the *Journal of Economic Perspectives*. He blogs regularly at http://conversableeconomist.blogspot.com.



## Glossary

#### A

**absolute advantage:** When one nation can produce a product at lower cost relative to another nation.

**accounting profit:** Total revenues minus the firm's costs, without taking opportunity cost into account.

**acquisition:** When one firm purchases another; for practical purposes, often combined with mergers.

**adaptive expectations:** The theory that people look at past experience and gradually adapt their beliefs and behavior as circumstances change.

**adjustable rate mortgage (ARM):** A loan used to purchase a home in which the interest rate varies with the rate of inflation. **adverse selection:** The problem that arises when one party knows more about the quality of the good than the other, and as a result, the party with less knowledge must worry about ending up at a disadvantage.

**affirmative action:** Active efforts to improve the job opportunities or outcomes of minority groups or women.

**aggregate demand (AD):** The relationship between the total quantity of goods and services demanded and the price level for output.

**aggregate production function:** The process of an economy as a whole turning economic inputs like labor, machinery, and raw materials into outputs like goods and services used by consumers.

**aggregate supply (AS):** The relationship between the total quantity that firms choose to produce and sell and the price level for output, holding the price of inputs fixed.

**allocative efficiency:** When the mix of goods being produced represents the allocation that society most desires.

**anti-dumping laws:** Laws that block imports sold below the cost of production and impose tariffs that would increase the price of these imports to reflect their cost of production.

**antitrust laws:** Laws that give government the power to block certain mergers, and even in some cases, to break up large firms into smaller ones.

**applied research:** Research focused on a particular product that promises an economic payoff in the short or medium term. **appreciating:** When a currency is worth more in terms of other currencies; also called "strengthening."

**asset-liability time mismatch:** A bank's liabilities can be withdrawn in the short term while its assets are repaid in the long term.

**assets:** Items of value owned by a firm or an individual. **automatic stabilizers:** Tax and spending rules that have the effect of increasing aggregate demand when the economy slows down and restraining aggregate demand when the economy speeds up, without any additional change in legislation.

**average cost:** Total cost divided by the quantity of output. **average variable cost:** Variable cost divided by the quantity of output.

#### B

**backward-bending supply curve for labor:** The situation when high-wage people can earn so much that they respond to a still-higher wage by working fewer hours.

**balance of trade:** The gap, if any, between a nation's exports and imports.

balance sheet: An accounting tool that lists assets and liabilities

**balanced budget:** When government spending and taxes are equal.

**bank run:** When depositors race to the bank to withdraw their deposits for fear that otherwise they would be lost.

**barriers to entry:** The legal, technological, or market forces that may discourage or prevent potential competitors from entering a market.

**barter:** Trading one good or service for another directly, without using money.

**basic quantity equation of money:** Money supply × Velocity = Nominal GDP.

basic research: Research on fundamental scientific breakthroughs that may offer commercial applications only in the distant future.

**basket of goods and services:** A hypothetical group of different items, with specified quantities of each one, used as a basis for calculating how the price level changes over time.

biodiversity: The full spectrum of animal and plant genetic material.

**black market:** An illegal market that breaks government rules on prices or sales.

**bond:** A financial contract through which a borrower like a corporation, a city or state, or the federal government agrees to repay the amount that was borrowed and also a rate of interest over a period of time in the future.

**bond yield:** The rate of return that a bond is expected to pay at the time of purchase.

**bondholders:** Those who own bonds and receive the interest payments.

**budget constraint:** A diagram that shows the possible choices. **budget deficit:** When the federal government spends more than it collects in taxes in a given year.

**budget surplus:** When the government receives more in taxes than it spends in a year.

**bundling:** A situation where a customer is allowed to buy one product only if the customer also buys another product; also called "tie-in sales."