

Microeconomics

Canadian Edition

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For Aglaia, Adia, and Alia.

—Apostolos Serletis

For Marla, Nora, Ed, and Leslie.

—Jason Childs



ABOUT THE AUTHORS



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PREFACE

There have been dramatic advances in microeconomics over the past 40 years and the field is changing rapidly. The roles of uncertainty and information, the analysis of pricing by firms with market power, and game theory and competitive strategy play a central role in microeconomic theory today. Yet, in the aftermath of the global financial crisis, a number of economists, the media, and policymakers have argued that modern microeconomics cannot capture the complexity of the real world.

We believe that with increasing uncertainty and interdependence of real economies, there is a need for increasingly relevant and applicable microeconomics. However, most first-year books do not help students understand many of the issues and economic events and the managerial and public policy responses to them. We realized that the Fourth U.S. Edition of Hubbard and O'Brien's *Principles of Microeconomics* is the kind of textbook that makes modern microeconomics valuable and applicable. It is the textbook that we always wanted to use in our classes and for this reason we decided to work on the Canadian edition of the book.

The Canadian edition of *Principles of Microeconomics* is completely widget free. It delivers complete economics coverage using many fresh, lively, real world examples from newspapers, magazines, websites, and professional journals from around the world. By building from the specific example to the general case, this text fosters student engagement. In testing early drafts of the text in the classroom, we found the degree of student engagement was substantially improved by placing real-world examples and applications at the forefront rather than treating them as add-ons or afterthoughts. The approach is attractive to both instructors and students because it captures the richness and interactions of the real-world while demonstrating the value and applicability of modern microeconomics.

Highlights of this Edition

The severe global financial crisis that began in 2007 with the bursting of the housing bubble in the United States and the Great Recession and European debt crisis that followed are still affecting the world economy today. In many countries, unemployment has risen to levels not seen in decades. The crisis in the financial system has been the worst since the Great Depression of the 1930s. Managerial and public policy debates have intensified as governments around the world introduced the largest packages of spending increases and tax cuts in history. Central banks, including the Bank of Canada, have sailed into uncharted waters as they develop new policy tools to deal with the unprecedented financial turmoil. Other long-running managerial and public policy debates continue as well, as huge long-run budget deficits, environmental problems, income inequality, and changes to the tax system all receive attention from economists, policymakers, and the public.

Principles of Microeconomics, The Canadian edition, helps students understand recent economic events and the managerial and public policy responses to them. It places applications at the forefront of the discussion. We believe that students find the study of microeconomics more interesting and easier to master when they see microeconomic analysis applied to real-world issues that concern them.

The Foundation: Contextual Learning and Modern Organization

We believe a course is a success if students can apply what they have learned in both personal and business settings and if they have developed the analytical skills to understand what they read in the media. That's why we explain economic concepts by using many real-world

business examples and applications in the chapter openers, graphs, *Making the Connection* features, *An Inside Look* features, and end-of-chapter problems. This approach helps both business majors and liberal arts majors become educated consumers, voters, and citizens. In addition to our widget-free approach, we also have a modern organization and discuss interesting policy topics early in the book to pique student interest.

We are convinced that students learn to apply economic principles best if they are taught in a familiar context. Whether they open an art studio, do social work, trade on Bay Street, work for the government, or tend bar, students benefit from understanding the economic forces behind their work. And though business students will have many opportunities to see economic principles in action in various courses, liberal arts students may not. We therefore use many diverse real-world business and policy examples to illustrate economic concepts and to develop educated consumers, voters, and citizens.

Notable features of this book are:

- **A strong set of introductory chapters.** The introductory chapters provide students with a solid foundation in the basics. We emphasize the key ideas of marginal analysis and economic efficiency. In Chapter 4, “Economic Efficiency, Government Price Setting, and Taxes,” we use the concepts of consumer surplus and producer surplus to measure the economic effects of price ceilings and price floors as they relate to the familiar examples of rental properties and the minimum wage. (We revisit consumer surplus and producer surplus in Chapter 7, “Comparative Advantage and the Gains from International Trade,” where we discuss outsourcing and analyze government policies that affect trade, and in Chapter 13, “Monopoly and Antitrust Policy,” where we examine the effect of market power on economic efficiency. In the online Chapter 16, “Pricing Strategy,” we examine the effect of firm pricing policy on economic efficiency.) In the online Chapter 17, “Firms, the Stock Market, and Corporate Governance,” we provide students with a basic understanding of how firms are organized, how they raise funds, and how they provide information to investors. We also illustrate how in a market system entrepreneurs meet consumer wants and efficiently organize production.
- **Early coverage of policy issues.** To expose students to policy issues early in the course, we discuss immigration in Chapter 1, “Economics: Foundations and Models”; rent control and the minimum wage in Chapter 4, “Economic Efficiency, Government Price Setting, and Taxes”; air pollution, global warming, and whether the government should run the health care system in Chapter 5, “Externalities, Environmental Policy, and Public Goods”; and government policy toward illegal drugs in Chapter 6, “Elasticity: The Responsiveness of Demand and Supply.”
- **Complete coverage of monopolistic competition.** We devote a full chapter—Chapter 11, “Monopolistic Competition: The Competitive Model in a More Realistic Setting”—to monopolistic competition prior to covering oligopoly and monopoly in Chapter 12, “Oligopoly: Firms in Less Competitive Markets,” and Chapter 13, “Monopoly and Antitrust Policy.” Although many instructors cover monopolistic competition very briefly or dispense with it entirely, we think it is an overlooked tool for reinforcing the basic message of how markets work in a context that is much more familiar to students than are the agricultural examples that dominate other discussions of perfect competition. We use the monopolistic competition model to introduce the downward-sloping demand curve material usually introduced in a monopoly chapter. This helps students grasp the important point that nearly all firms—not just monopolies—face downward-sloping demand curves. Covering monopolistic competition directly after perfect competition also allows for the early discussion of topics such as brand management and sources of competitive success. Nevertheless, we wrote the chapter so that instructors who prefer to cover monopoly (Chapter 13, “Monopoly and Antitrust Policy”) directly after perfect competition (Chapter 10, “Firms in Perfectly Competitive Markets”) can do so without loss of continuity.

- **Extensive, realistic game theory coverage.** In Chapter 12, “Oligopoly: Firms in Less Competitive Markets,” we use game theory to analyze competition among oligopolists. Game theory helps students understand how companies with market power make strategic decisions in many competitive situations. We use familiar companies such as Apple, Hewlett-Packard, Coca-Cola, PepsiCo, and Dell in our game theory applications.
- **Unique coverage of pricing strategy.** In the online Chapter 16, “Pricing Strategy,” we explore how firms use pricing strategies to increase profits. Students encounter pricing strategies everywhere—when they buy a movie ticket, book a flight for spring break, or research book prices online. We use these relevant, familiar examples to illustrate how companies use strategies such as price discrimination, cost-plus pricing, and two-part tariffs.

Special Features: A Real-World, Hands-on Approach to Learning Economics

Business Cases and *An Inside Look* News Articles

Each chapter-opening case provides a real-world context for learning, sparks students’ interest in economics, and helps to unify the chapter. The case describes an actual company facing a real situation. The company is integrated in the narrative, graphs, and pedagogical features of the chapter. Many of the chapter openers focus on the role of entrepreneurs in developing new products and bringing them to the market. For example, Chapter 3 covers Bill Gates of Microsoft and Steve Jobs of Apple, the online Chapter 17 covers the founding of the Hudson’s Bay Company and the Facebook initial public offering, and Chapter 11 covers Howard Schultz of Starbucks. Here are a few examples of companies we explore in the chapter openers in this new edition:

- Apple (Chapter 3, “Where Prices Come From: The Interaction of Demand and Supply”)
- Hudson’s Bay Company and Facebook (online Chapter 17, “Firms, the Stock Market, and Corporate Governance”)
- Starbucks (Chapter 11, “Monopolistic Competition”)

3

Where Prices Come From: The Interaction of Supply and Demand

Chapter Outline and Learning Objectives

- 3.1 **The Demand Side of the Market**, page 62
Discuss the variables that influence demand.
- 3.2 **The Supply Side of the Market**, page 69
Discuss the variables that influence supply.
- 3.3 **Market Equilibrium: Putting Buyers and Sellers Together**, page 73
Use a graph to illustrate market equilibrium.
- 3.4 **The Effect of Demand and Supply Shifts on Equilibrium**, page 77
Use demand and supply graphs to predict changes in price and quantity.

Appendix B: Quantitative Demand and Supply Analysis, page 90
Use quantitative demand and supply analysis.



Red Bull and the Market for Energy Drinks

Markets for some products suddenly explode. This was the case in the market for energy drinks. Red Bull was developed in Austria by Dietrich Mateschitz, who based it on a drink he discovered being sold in pharmacies in Thailand. Before Red Bull entered the market, few soft drinks included caffeine. Red Bull didn't enter the Canadian market until 2004, likely due to soft drink regulations. In Canada, caffeine may not be added to a traditional soft drink other than a cola. For example, Mountain Dew sold in the United States has a relatively high amount of caffeine, but the version sold in Canada contains none. Red Bull and other energy drinks are sold in Canada as natural health products, and are therefore subject to different regulations. Despite not being available in Canada before 2004, the Canadian sports and energy drink sector saw \$876 million in retail sales in 2012. The market for energy drinks has found a particularly valuable niche with students wanting an extra boost of energy for sports, gaming, or studying. Some people have speculated that energy drinks might replace coffee as the morning drink for the current generation.

The success of Red Bull, Monster Energy, and Rockstar Energy Drink has attracted the attention of huge multinational beverage corporations as well as entrepreneurs looking to introduce new products into a hot market. Coca-Cola signed an agreement to distribute Monster Energy in Canada, 20 US states, and 6 Western European countries, and Pepsi struck a similar deal with Rockstar Energy Drink. A Canadian company that has recently entered the market, DD Beverage Company, produces Beaver Buzz Energy and other energy and sports beverages. Well over 200 energy drinks are now available in the North American marketplace.

The intense competition among firms selling energy drinks is a striking example of how the market responds to changes in consumer tastes. Although intense competition is not always good news for firms trying to sell products, it is great news to consumers. Competition among firms increases the variety of products available and reduces the price consumers pay for those products.

AN INSIDE LOOK on page 84 discusses Kickstart, PepsiCo's latest high-energy breakfast drink, which the company hopes will attract young consumers who enjoy energy drinks but are looking for an alternative with the promise of health benefits.

Sources: <http://www1.agr.gc.ca/AFC-AAC/Display/afcc/ac/16-2008-017/0000eng.htm>; The Calgary Herald, February 3, 2008, “The Best: Benchmarking Energy Drinks”; National Geographic, “Why We Love Coffee,” January 2008.

Economics in Your Life

Red Bull or Beaver Buzz Energy: What's Your Beverage?

Suppose you are about to buy an energy drink and you are choosing between a Red Bull and a Beaver Buzz Energy. As the more established, well-known brand, Red Bull has many advantages over a recent entrant like Beaver Buzz Energy. One strategy DD Beverage Company can use to overcome Red Bull's advantages is to have Beaver Buzz Energy compete based on price and value. Would you choose to buy a can of Beaver Buzz Energy if it had a lower price than a can of Red Bull? Would you be less likely to drink Beaver Buzz Energy if your income dropped? As you read this chapter, see if you can answer these questions. You can check your answers against those we provide on page 82 at the end of this chapter.

An *Inside Look* is a two-page feature that shows students how to apply the concepts from the chapter to the analysis of a news article. Select articles deal with policy issues and are titled *An Inside Look*. Articles are from sources such as the *Hamilton Spectator*, *The Economist*, *National Post*, *Toronto Star*, and the *Montreal Gazette*. An *Inside Look* feature presents an excerpt from an article, analysis of the article, a graph(s), and critical thinking questions.

**AN
INSIDE
LOOK**

PepsiCo Tries to Create a New Category of Drinks That Promises Energy and Health Benefits

MAIL ONLINE

Mountain Dew for Breakfast? Soda Giant's New Morning Beverage Is Packed with Caffeine and Vitamins (Just Don't Call It an Energy Drink)

If you don't like coffee or tea, Mountain Dew has a new breakfast drink that might perk you up.

1 PepsiCo Inc. is rolling out a new drink called Kickstart this month that has Mountain Dew flavor but is made with 7% juice and Vitamin B and C along with an extra jolt of caffeine.

The company, based in Purchase, N.Y., is hoping to boost sales by reaching Mountain Dew fans at a new time of day morning.

PepsiCo said it doesn't consider Kickstart to be an energy drink, noting that it will be far less caffeine than drinks such as Monster and Red Bull and none of the mysterious ingredients that have raised concerns among lawmakers and consumer advocates.

But Kickstart, which comes in flavors such as "energizing orange citrus" and "energizing trail punch," could nevertheless give the company a side shot into the fast-growing energy drink market without getting tangled in any of its controversies.

It also comes in the same 16-ounce cans as popular energy drinks made by

Monster Beverage Corp., which also offers options with jitter content.

Simon Lowman, chief marketing officer for PepsiCo's American beverages, says the idea for Kickstart came about after the company learned through consumer research that Mountain Dew fans were looking for an alternative to traditional morning drinks such as coffee, tea and juice.

Kickstart was developed independently from a Taco Bell breakfast drink last year.

"They didn't really see anything that fit their needs," he said.

Lowman said Kickstart was developed independently from a Taco Bell breakfast drink introduced last year that combines Mountain Dew and orange juice.

2 With the growth of energy drinks such as Monster and Red Bull expected to slow, Kickstart could also signal the emergence of a new category that plays off the promise of energy and other health benefits, said John Sichel, publisher of the trade journal Beverage Digest.

It's a nod to the growing concern about sugary drinks, for example, Kickstart also uses artificial sweeteners to reduce its calorie content to about half that of regular soda: a can has 80 calories.

"It's a very interesting experiment capturing a number of attributes," Sichel said, alluding to Starbucks' Refreshers drinks, which promise "natural energy" from green coffee extract.

PepsiCo and the Coca-Cola Co. have largely watched the growth of energy drinks from the sidelines.

The promise of "energy" has been a big seller in the beverage industry in recent years, with the energy drink market increasing 17% in 2011 even as broader soft drink consumption has continued to decline, according to Beverage Digest. PepsiCo and the Coca-Cola Co. have largely watched that growth from the sidelines, however, with players such as Monster Beverage and Red Bull dominating the market.

But the surging popularity of energy drinks has also led to sharper scrutiny. This summer, New York's attorney general launched an investigation into the marketing prices of energy drink makers including Monster and PepsiCo, which also makes Amp. Lawmakers and consumer advocacy groups have also called on the Food and Drug Administration to investigate the safety of the high levels of caffeine in energy drinks for younger people.

Although Kickstart may look like an energy drink, it has far less caffeine, at 82 milligrams for a 16-ounce can. A comparable amount of regular Mountain Dew would have 72 milligrams of caffeine while a can of PepsiCo's Amp energy drink has 162 milligrams, according to the Center for Science in the Public Interest.

By comparison, a 16-ounce cup of Starbucks coffee has 150 milligrams of caffeine.

Source: Associated Press, "Mountain Dew for Breakfast? Soda Giant's New Morning Beverage Is Packed with Caffeine and Vitamins (Just Don't Call It an Energy Drink)," *Montreal Gazette*, February 12, 2012, <http://www.montrealgazette.com/article/2277003/Mountain-Dew-breakfast-looks-good-but-not-energizing-enough>.

Key Points in the Article

PepsiCo has introduced a new product intended to fill the space between traditional softbevs and the more caffeinated energy drinks. Soft drink giant Coca Cola and PepsiCo haven't entered the caffeinated drink market with the same intensity they have other drink markets, but PepsiCo is now looking at increasing its sales in this market. Kickstart is based on a mix of orange juice and Mountain Dew, which was developed by Taco Bell (that's owned by Yum! Brands Inc., which was part of PepsiCo).

Analyzing the News

1 In addition to the growth in the demand for energy drinks, demand for healthier drinks has expanded as well. PepsiCo is hoping to capture parts of both markets by offering a product that fits into both categories. The new product also addresses some of the concerns about the large amount of caffeine in energy drinks by offering much less in Kickstart.

2 The energy drink market has been dominated by Red Bull and Monster Energy but there that are not part of either major soft drink maker (Coca Cola and PepsiCo). Kickstart also offers less sugar than many other soft drinks by using artificial sweeteners, thereby reducing the calories in the new product. By trying to meet the concerns of different consumers, PepsiCo is entering not only the energy drink market, but also the market for vitamin-fortified drinks at the same time.

3 The energy drinks have become more popular, many people have become concerned about the impact of large doses of caffeine on health, particularly in younger consumers. Kickstart has much less caffeine than an energy drink or even a medium-sized coffee or some of the most popular coffee shops in Canada.

Thinking Critically

- How would you show the impact of the launch of Kickstart on the market for energy drinks in a graph?
- If health researchers find strong evidence that high-caffeine beverages damage the health of younger consumers, what would be the impact on the market for energy drinks?

Here are some examples of the articles featured in *An Inside Look*:

- Peaking Gas Prices Set New Records—“Breaking Down the Price of Gasoline” (Chapter 6, “Elasticity: The Responsiveness of Demand and Supply”)
- Adding Value Through Association with Star Power?—“Celebrity Endorsements: Do They Make Products More Appealing to You?” (Chapter 8, “Consumer Choice and Behavioural Economics”)
- Competing in the Wireless Spectrum—“Telus CEO Entwistle Warns of ‘Bloodbath’ if Verizon Has Advantage in Wireless Spectrum Auction (Chapter 9, “Technology, Production, and Costs”)
- Competing: Intel’s “Ultrabook” Against Apple’s MacBook Air—“Intel Taps into New Computing at Taiwan Show” (Chapter 12, “Oligopoly: Firms in Less Competitive Markets”)

Economics in Your Life

After the chapter-opening real-world business case, we have added a personal dimension to the chapter opener with a feature titled *Economics in Your Life*, which asks students to consider how economics affects their own lives. The feature piques the interest of students and emphasizes the connection between the material they are learning and their own experiences.

Economics in Your Life

Red Bull or Beaver Buzz Energy: What’s Your Beverage?

Suppose you are about to buy an energy drink and you are choosing between a Red Bull and a Beaver Buzz Energy. As the more established, well-known brand, Red Bull has many advantages over a recent entrant like Beaver Buzz Energy. One strategy DD Beverage Company can use to overcome Red Bull’s advantages is to have Beaver Buzz Energy compete based on price and value. Would you choose to buy a can of Beaver Buzz Energy if it had a lower price than a can of Red Bull? Would you be less likely to drink Beaver Buzz Energy if your income dropped? As you read this chapter, see if you can answer these questions. You can check your answers against those we provide on page 82 at the end of this chapter.

At the end of the chapter, we use the chapter concepts to answer the questions asked at the beginning of the chapter.

Economics in Your Life

Red Bull or Beaver Buzz Energy: What's Your Beverage?

At the beginning of the chapter, we asked you to consider two questions: Would you choose to buy a can of Beaver Buzz Energy if it had a lower price than a can of Red Bull? Would you be less likely to drink Beaver Buzz Energy if your income dropped? To determine the answer to the first question, you have to recognize that Beaver Buzz Energy and Red Bull are substitutes. If you consider the two drinks to be very close substitutes, then you are likely to buy the one with the lower price. In the market, if consumers generally believe that Beaver Buzz Energy and Red Bull are close substitutes, a fall in the price of Beaver Buzz Energy will increase the quantity of Beaver Buzz Energy demanded and decrease the demand for Red Bull. Suppose that you are currently leaning toward buying Red Bull because you believe that it is better tasting than Beaver Buzz Energy. If a decrease in your income made you more likely to buy Beaver Buzz Energy, then you consider Beaver Buzz Energy as an inferior good.

The following are examples of the topics we cover in the *Economics in Your Life* feature:

- How Much Do Gas Prices Matter to You? (Chapter 6, “Elasticity: The Responsiveness of Demand and Supply”)
- Have You Ever Been Urged to “Buy Canadian”? (Chapter 7, “Comparative Advantage and the Gains From International Trade”)
- Why Does Toronto Have Only One NHL Team? (Chapter 13, “Monopoly and Antitrust Policy”)

Solved Problems

Many students have great difficulty handling applied economics problems. We help students overcome this hurdle by including two or three worked-out problems tied to select chapter-opening learning objectives. Our goals are to keep students focused on the main ideas of each chapter and to give students a model of how to solve an economic problem by breaking it down step by step. Additional exercises in the end-of-chapter Problems and Applications section are tied to every *Solved Problem*. Additional *Solved Problems* appear in the Instructor’s Manual and the print Study Guide. In addition, the Test Item Files include problems tied to the *Solved Problems* in the main book.

Table 3.3
How Shifts in Demand and Supply Affect Equilibrium Price (P) and Quantity (Q)

	Supply Curve Unchanged	Supply Curve Shifts Right	Supply Curve Shifts to the Left
Demand curve unchanged	Q unchanged	Q increases	Q decreases
	P unchanged	P decreases	P increases
Demand curve shifts right	Q increases	Q increases	Q increases or decreases
	P increases	P increases or decreases	P increases
Demand curve shifts left	Q decreases	Q increases or decreases	Q decreases
	P decreases	P decreases	P increases or decreases

Solved Problem 3.2

High Demand and Low Prices in the Lobster Market

For many communities in the Maritimes, the lobster fishery is an essential part of the local economy. Lobster is fished only in season, and different communities are allowed to fish at different times of the year. For example, the fishing season for the area of Yarmouth, Nova Scotia, is from late November to the end of May. It isn't uncommon for the price of lobster to fluctuate during the season. In some cases, it can change from below \$5 per pound to \$8 or \$9

per pound. A patch of really bad weather can drive up the price quickly, but so does Christmas (lobster tends to be a popular part of winter festivities in Canada, Europe, and other parts of the world).

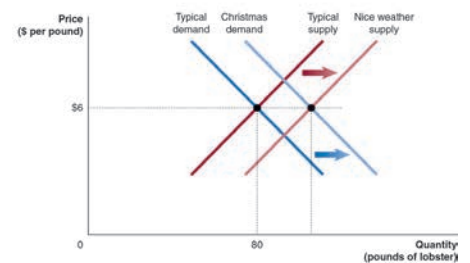
What would happen if the weather just before Christmas was particularly good, allowing fishers to spend more time on the water and catch more lobster?

Solving the Problem

Step 1: Review the chapter material. This problem is about how shifts in demand and supply curves affect the equilibrium price, so you may want to review the section “The Effect of Shifts in Demand and Supply over Time.”

Step 2: Draw the demand and supply graph. Draw a demand and supply graph,

Step 3: Add a demand and supply curve. Add a demand curve to account for the increase in the demand for lobster from Europe. Add a supply curve to account for the nicer-than-usual weather.



Step 4: Explain the graph. After studying the graph, you should see how the two events of increased demand from Europe and the nicer-than-usual weather combine to move the equilibrium price. The increase in supply due to the nicer-than-usual weather is offset by some of the increase in demand from Europeans. We can't say for sure which way the price will go. The price of lobster will rise if the shift in demand is greater than the shift in supply. If the shift in supply is greater than the shift in demand, prices will actually fall. All that we can say for certain is that the quantity of lobster sold (and eaten) will go up.

Source: Province of Nova Scotia, “Lobster Fishing Seasons in Atlantic Canada,” *Nova Scotia Fisheries and Aquaculture*, May 17, 2012. <http://www.gov.ns.ca/fish/marine/map/lobarea.shtml>.

Your Turn: For more practice, do related problems 4.3 and 4.4 on page 88 at the end of this chapter.

Don't Let This Happen to You

We know from many years of teaching which concepts students find most difficult. Each chapter contains a feature called *Don't Let This Happen to You* that alerts students to the most common pitfalls in that chapter's material. We follow up with a related question in the end-of-chapter Problems and Applications section.

Don't Let This Happen to You

Remember: A Change in a Good's Price Does Not Cause the Demand or Supply Curve to Shift

Suppose a student is asked to draw a demand and supply graph to illustrate how an increase in the price of oranges would affect the market for apples, other variables being constant. He draws the graph on the left below and explains it as follows: "Because apples and oranges are substitutes, an increase in the price of oranges will cause an initial shift to the right in the demand curve for apples, from D_1 to D_2 . However, because this initial shift in the demand curve for

apples results in a higher price for apples, P_2 , consumers will find apples less desirable, and the demand curve will shift to the left, from D_2 to D_3 , resulting in a final equilibrium price of P_3 ." Do you agree or disagree with the student's analysis?

You should disagree. The student has correctly understood that an increase in the price of oranges will cause the demand curve for apples to shift to the right. But the second demand curve shift the student describes, from D_2 to D_3 , will not take place. Changes in the price of a product do not result in shifts in the product's demand curve. Changes in the price of a product result only in movements along a demand curve.

Making the Connection

Each chapter includes two to four *Making the Connection* features that provide real-world reinforcement of key concepts and help students learn how to interpret what they read

on the web and in newspapers. Most *Making the Connection* features use relevant, stimulating, and provocative news stories focused on businesses and policy issues. Each *Making the Connection* has at least one supporting end-of-chapter problem to allow students to test their understanding of the topic discussed. Here are some of the *Making the Connection* features:

- Chapter 1: Should the Government of Ontario Increase the Minimum Wage?
- Chapter 6: Price Elasticity, Cross-Price Elasticity, and Income Elasticity in the Market for Alcoholic Beverages
- Chapter 8: Why Do Firms Pay Sidney Crosby to Endorse Their Products?
- Chapter 10: The Rise and Fall of Canada's Technology Darling
- Chapter 11: The Tim Hortons Coffee War in Canadian Cities

Making the Connection

Is Beer an Inferior Good?

For most Canadians, a beverage on a hot summer afternoon is part of the culture. In 2012, Canadians drank 8.1 litres of alcohol in various forms per person, including 80.3 litres of

beer. This is a profitable industry with the LCBO (Liquor Control Board of Ontario) paying a dividend to the Government of Ontario of \$1.63 billion.

How does income affect the choices Canadians make at the liquor store? As Canadians have gotten wealthier, they have changed their drinking habits. There is an underlying trend: Instead of buying beer at the lowest possible price, more and more Canadians are opting for local micro-brewery beer or local wine. In 2009, New Brunswick's alcohol retailer (Alcool NB Liquor) launched its own brand of beer, which provided New Brunswickers with a low-cost alternative, but in July 2011, that brand was discontinued due to lack of sales. During the 2011 fiscal year, the LCBO noticed that the sales of its premium products recovered from the slump that started around the same time as the financial crisis; in Ontario, the volume of sales of alcoholic beverages changed little.

What we're seeing from beer sales in particular is that Canadians have begun to treat mainstream beer as an inferior good. As the average income of Canadians rises, they switch from low-cost beverages to more expensive ones. Recall that when economists describe a product as inferior, they aren't necessarily saying it is of poor quality, they're just saying that consumers buy less of it when their incomes rise.

Sources: Statistics Canada - CANSIM Table 183-0019 Series v28463248; David Pett and Jared Lindzon, Financial Post, Jun. 3, 2011; Cigdem Ilhan on Thursday, July 7, 2011, MacLean's Magazine.



Brent Lewin/Bloomberg via Getty Images

Alcool NB Liquor discontinued its low cost brand of beer as the economy recovered from recession.

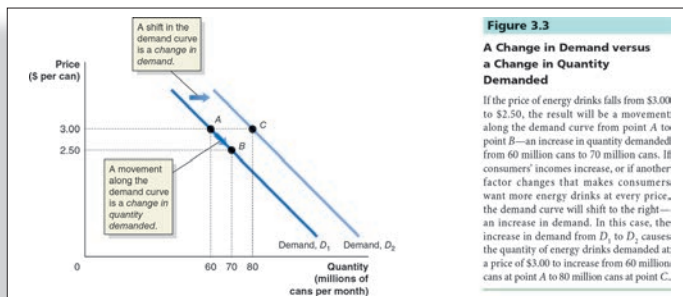


Figure 3.3

A Change in Demand versus a Change in Quantity Demanded

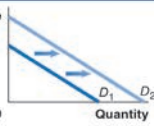
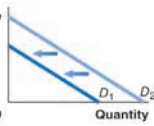
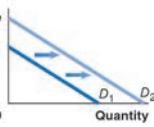
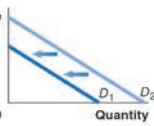
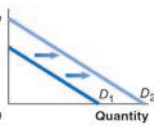
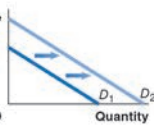
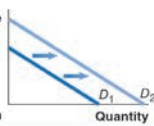
If the price of energy drinks falls from \$3.00 to \$2.50, the result will be a movement along the demand curve from point A to point B—an increase in quantity demanded from 60 million cans to 70 million cans. If consumers' incomes increase, or if another factor changes that makes consumers want more energy drinks at every price, the demand curve will shift to the right—an increase in demand. In this case, the increase in demand from D_1 to D_2 causes the quantity of energy drinks demanded at a price of \$3.00 to increase from 60 million cans at point A to 80 million cans at point C.

Graphs and Summary Tables

Graphs are an indispensable part of a principles of economics course but are a major stumbling block for many students. Each chapter except Chapter 1 includes end-of-chapter problems that require students to draw, read, and interpret graphs. Interactive

graphing exercises appear on the book's supporting website. We use four devices to help students read and interpret graphs:

1. Detailed captions
2. Boxed notes

Table 3.1	An Increase in	Shifts the Demand Curve	Why?
Variables That Shift Market Demand Curves	income (and the good is normal)	RIGHT 	Consumers spend more of their higher incomes on the good.
	income (and the good is inferior)	LEFT 	Consumers spend less of their higher incomes on the good.
	the price of a substitute good	RIGHT 	Consumers buy less of the substitute good and more of this good.
	the price of a complementary good	LEFT 	Consumers buy less of the complementary good and less of this good too.
	taste for the good	RIGHT 	Consumers are willing to buy a large quantity of the good at every price.
	population	RIGHT 	Additional consumers result in a greater demand at every price.
	the expected future price of the good	RIGHT 	Consumers buy more of the good today to avoid the higher future price.

3. Colour-coded curves
4. Summary tables with graphs (see pages 68, 72, and 163 for examples)

Review Questions and Problems and Applications

Every exercise in a chapter's Problems and Applications section is available in MyEconLab. Using MyEconLab, students can complete these and many other exercises online, get tutorial help, and receive instant feedback and assistance on exercises they answer incorrectly. Also, student learning will be enhanced by having the summary material and problems grouped together by learning objective, which will allow students to focus on the parts of the chapter they found most challenging. Each major section of the chapter, paired with a learning objective, has at least two review questions and three problems.

We include end-of-chapter problems that test students' understanding of the content presented in the *Solved Problem*, *Making the Connection*, and *Don't Let This Happen to You* special features in the chapter. Instructors can cover a feature in class and assign the corresponding problem for homework. The Test Item Files also include test questions that pertain to these special features.

Integrated Supplements

The authors and Pearson Canada have worked together to integrate the text, supplements, and media resources to make teaching and learning easier.

MyEconLab

MyLab and Mastering, our leading online learning products, deliver customizable content and highly personalized study paths, responsive learning tools, and real-time evaluation and diagnostics. MyLab and Mastering products give educators the ability to move each student toward the moment that matters most—the moment of true understanding and learning. MyEconLab for Hubbard, Canadian Edition, can be used as a powerful out-of-the-box resource for students who need extra help, or instructors can take full advantage of its advanced customization options. Students can also benefit from MyEconLab's Study Play, now powered by a sophisticated adaptive learning engine that tailors learning material to meet their unique learning needs.

Pearson eText gives students access to the text whenever and wherever they have access to the Internet. eText pages look exactly like the printed text, offering powerful new functionality for students and instructors. Users can create notes, highlight text in different colours, create bookmarks, zoom, click hyperlinked words and phrases to view definitions, and view in single-page or two-page view. Pearson eText allows for quick navigation to key parts of the eText using a table of contents and provides full-text search. The eText may also offer links to associated media files, enabling users to access videos, animations, or other activities as they read the text.

Other Resources for the Instructor

Instructor's Manual

The Instructor's Manual includes chapter-by-chapter summaries grouped by learning objectives, teaching outlines incorporating key terms and definitions, teaching tips, topics for class discussion, new *Solved Problems*, new *Making the Connection* features, new *Economics in Your Life* scenarios, and solutions to all review questions and problems in the book. The Instructor's Manual is available for download from the Instructor's Resource Center (www.pearsoned.ca/highered). The text authors—Jason Childs and Apostolos Serletis—prepared the solutions to the end-of-chapter review questions and problems.

Two Test Item Files

This edition is accompanied by two Test Item Files. Each Test Item File includes 2,000 class-tested multiple-choice, true/false, short-answer, and graphing questions. The first Test Item File will be available upon publication of the text; the second Test Item File of 2,000 questions will be added a year following publication in order to incorporate market feedback and to provide a fresh and updated store of questions. There are questions to support each key feature in the book. The Test Item Files are available in print and for download from the Instructor's Resource Center (www.pearsonhighered.com/hubbard). Test questions are annotated with the following information:

- **Difficulty:** 1 for straight recall, 2 for some analysis, 3 for complex analysis
- **Type:** multiple-choice, true/false, short-answer, essay
- **Topic:** the term or concept the question supports
- **Learning outcome**
- **AACSB** (see description that follows)
- **Page number**
- **Special feature in the main book:** chapter-opening business example, *Economics in Your Life*, *Solved Problem*, *Making the Connection*, *Don't Let This Happen to You*, and *An Inside Look*

The Association to Advance Collegiate Schools of Business (AACSB)

The Test Item File author has connected select questions to the general knowledge and skill guidelines found in the AACSB Assurance of Learning Standards.

TestGen

The computerized TestGen package allows instructors to customize, save, and generate classroom tests. The test program permits instructors to edit, add, or delete questions from the Test Item Files; analyze test results; and organize a database of tests and student results. This software allows for extensive flexibility and ease of use. It provides many options for organizing and displaying tests, along with search and sort features. The software and the Test Item Files can be downloaded from the Instructor's Resource Center (www.pearsonhighered.com/hubbard).

PowerPoint Lecture Presentation

Two sets of PowerPoint slides are available:

1. A comprehensive set of animated PowerPoint slides can be used by instructors for class presentations or by students for lecture preview or review. These animated slides include all the graphs, tables, and equations in the textbook.
2. A second set of PowerPoint slides without animations is available for those who prefer a more streamlined presentation for class use.

CourseSmart for Instructors

CourseSmart goes beyond traditional expectations—providing instant, online access to the textbooks and course materials you need at a lower cost for students. And even as students save money, you can save time and hassle with a digital eTextbook that allows you to search for the most relevant content at the very moment you need it. Whether it's evaluating textbooks or creating lecture notes to help students with difficult concepts, CourseSmart can make life a little easier. See how when you visit www.coursesmart.com/instructors.

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