# Book I The market economy, overview and application

hapters 1-4 of *Microeconomics for MBAs*, which constitute Book I, develop the broad outlines of *The Economic Way of Thinking for Managers*. We explore in Chapters 1 and 2 what economists mean by markets and "rational behavior" and show how rationality-based thinking can illuminate many (hardly all) public and management policies. In Chapter 3 we will focus on how markets can be analyzed through the forces of supply and demand, developed with graphical analysis, in spite of serious limitations regarding the complete realism of having just two lines on a graph (supply and demand) to represent market forces. However, we show how supply and demand curves can be used to illuminate how and why competitive markets can work efficiently (to one degree or another) and under what conditions competitive markets can fail to work efficiently. In Book II, Chapters 5-6, supply and demand curve analysis is used to explore the market consequences of an array of governmental and organizational policies. Throughout Chapters 1-6, we will consider how management policies can affect the forces of supply and demand and how market forces can affect management policies. Our goal in Book I and II is to provide a broad overview of the market economy. In Book III, Chapters 7-9, and Book IV, Chapters 9-13, we will examine many of the theoretical details underpinning supply and demand. In these later chapters, we will develop a theory of firms and explain how firms can be pressed to minimize their production costs in markets with different levels of competitiveness and in markets dominated by firms with differing levels of monopoly power.



1

# Microeconomics: a way of thinking about business

In economics in particular, education seems to be largely a matter of unlearning and "disteaching" rather than constructive action. A once famous American humorist observed that "it's not ignorance that does so much damage; it's knowin' so darn much that ain't so" … It seems that the hardest things to learn and to teach are things that everyone already knows.

Frank H. Knight

The late Frank Knight was a wise professor at the University of Chicago who realized that students beginning a study of economics, no matter the level – even those who are in advanced business programs – face a difficult task. They must learn many things in a rigorous manner that, on reflection and with experience, amount to common sense. To do that, however, they must set aside – or "unlearn" – many preconceived notions of the economy and of the course itself. The problem of "unlearning" can be especially acute for MBA and other advanced business students who are returning to a university after years of experience in industry. People in business rightfully focus their attention on the immediate demands of their jobs and evaluate their firms' successes and failures with reference to production schedules and accounting statements, a perspective that stands in stark contrast to the perspective developed in an economics class.



#### 4 The market economy, overview and application

You are now one of the many students to whom Knight directed his comments. As all good teachers must do, we intend to challenge you in this course to rethink your views on the economy and the way firms operate, as well as using abstract, deductive thinking. We shall ask you to develop new methods of analysis, maintaining all the while that there is, indeed, a distinctive "economic way of thinking" that deserves to be mastered.

We will not tell you how you *must* think when you move into managerial roles. However, we will ask you to think differently while reading the materials for this course in the expectation that practicing the economic way of thinking will, to one degree or another, become more or less "natural." We understand that you might never be as precisely *rational* as we assume people are in the economic models developed and refined throughout the chapters. However, we take the time to go through a refined form of the *rational* way of thinking in order that you will at least *consider* how you can *improve* the rationality of your thinking and decision making, as well as improve the cost-effectiveness and profitability of your business decisions. A theme of this book is that there is money to be made by developing better "mousetraps," but there is also money (and careers) to be made through clear and focused thinking employing the methods we cover.

We shall also ask you to reconsider, in light of the new methods of thinking, old policy issues – both inside and outside the firm – about which you may have fixed views. These tasks will not always be easy for you, but we are convinced that the rewards from the study ahead are substantial. The greatest reward may be that this course of study will help you to better understand the way the business world works and, again, how businesses may be made more efficient and profitable.

Each chapter is divided into two major parts. The first part (Part A) will always develop microeconomic concepts and theories and apply the concepts and theories to social and economic policies. Part B will always apply the theory developed in Part A directly to issues that mid-level and executive-level managers confront all the time. For example, in this chapter we explore in very general terms how competitive markets work to overcome what we call potential "tragedies of the commons" (which is concerned with the conditions under which key resources will be overused and abused) and to develop cooperation among many firms and their workers (many of whom will never meet) across the country and the world. In a later section of this chapter we present the opposite tragedy, "the tragedy of the anticommons" (or the tendency for resources to be underutilized when there are too many decision makers from the assignment of property rights, or just decision rights).

Sandwiched between Parts A and B, we provide a "Perspective" that extends the discussion in the chapter, covers some policy or management topic new to economics, or provides a novel take on a topic that economists and lay people in economics have mistakenly accepted as settled. We also will include classic and incisive treatment of key economic arguments. In the Perspective for this chapter, we provide a classic and incisive article by the late economic journalist Leonard E. Read. In "I, Pencil," Read



#### Microeconomics: a way of thinking about business

5

relates an amazing story of how no one in the world – literally, no one – knows how to make a pencil totally from scratch. Yet, pencils by the billions are produced each year, benefiting hordes of people around the world, especially school children.

We understand that time is a scarce commodity for most serious students of business, especially those who have to balance their studies with the demands of a full-time job and a family. Accordingly, we conclude each chapter with a section in which we identify key "Practical lessons for serious business students" that emerge from the analytics of each chapter. With these "lessons" we seek to show how some aspect of the economic way of thinking can be used to understand workplace problems and to devise profit-enhancing solutions to the problems managers face on a daily basis. Before the review questions, we close with a section we call "the bottom line," which itemizes and crystal-lizes even further the most important large and small points developed in the chapter. We have deliberately kept these lists of "key takeaways" short, but at the same time we expect this section will ease student reviews of the chapters.

Throughout the volume, we have one goal: to change the way you think about the world in large and small ways. When you complete this book, your view of how markets work (and fail to work) should be greatly clarified, with an improved ability to understand and predict market outcomes. You will see more clearly the manager's role as one of coping with and responding to the competitive market forces that are ever-present outside the doors of every business, pressing both owners and executives to improve their thinking processes and to pay as much attention to the way business organizations and executive and line workers' incentives are structured as to how products are created and developed. We will pay a lot of attention to "competitive market forces," but we hope you come to understand that those forces are really directed toward pressing people in markets to find ways to cooperate in mutually beneficial ways.

We submit that by your thinking through problems with clarity, you will be able to avoid the waste of resources in your personal and work lives that comes from making errors in judgment that are bound to arise when people make decisions from "gut feelings" or simply wrongheaded presumptions about how the world works. After all, Knight was on target when he mused, quoting Mark Twain, "It's not ignorance that does so much damage; it's knowin' so darn much that ain't so."

We began revising this book for the second edition as the United States and the world slid into the worst economic recession since the Great Depression of the 1930s, with the downturn set off by a "housing and financial crisis" that left many major banks and investment houses and insurance companies struggling to stay alive because of the bursting of the "housing bubble" and subsequent meltdown of the market for "mortgage-backed securities" and other exotic financial instruments. Back then, the daily economic news was dismal. Foreclosures on homes and businesses were mounting monthly as the unemployment rate breached 10 percent. With housing and stock prices in freefall, Americans lost in 2008 over \$11 trillion, or 18 percent, of their net household wealth (an amount



#### 6 The market economy, overview and application

equal to the annual output of Germany, Japan, and the United Kingdom combined) (Kalita 2009). When you complete this book, you will better understand the microeconomic foundations of the crisis (which you now probably have come to recognize as the "Great Recession") by understanding how investments based on borrowed money can inspire risk taking, with one rule elevated to prominence: the greater the leverage involved in business ventures, the greater the incentive of firms and consumers alike to undertake risk – and excessive risks. You will understand what is meant by "moral hazard" and how that concept was at the foundation of the housing bubble and the mortgage meltdown. You might also worry about how subsequent government bailouts of failing banks and a range of other companies could inspire incentives on risk taking that could have given rise to another (perhaps larger) moral-hazard problem, involving excessive risk taking, which could harbor the potential for an even more severe economic crisis in the future.

As we began work on this third revised edition in late spring 2015, a slow (some would insist, a painfully slow) economic recovery in the United States and, for the most part, had been underway for five or more years. Economists and policy makers have learned much about what national economic policies work and don't work, and what policies can slow an economic recovery down. In this edition, we cover what we have learned through tough experience.

When you complete this book, you will also naturally be able to make observations that might, without going through this course of study, escape your attention. For example, most people now understand the entire world, not just the developed nations, faces a growing obesity problem, which is giving rise to a growth in obesity-related health problems that, in turn, are driving up firms' health insurance costs and depriving workers of increases in money wages (Brody 2005).

You might now be aware of how obesity problems have been caused by a long-term reduction in the price of calories (especially those obtained from fast-food restaurants) and a long-term growth in real incomes. Having completed this book, you will be able to easily extend the cause-and-effect change. You will naturally think about how people's weight problems are founded, at least partially, on the growing openness and competitiveness of the world's food markets, which are driving down the cost of food and driving up people's real incomes, with both effects leading to more food consumption - and people's expanded girths and backsides. You will also naturally wonder how managers will change their pay offers for prospective overweight workers, since the health care costs of such workers can be expected to feed into company health insurance costs. Indeed, might not competitive market forces be expected to put downward pressures on the money wages of overweight workers and upward pressures on prospective workers who maintain a healthy weight (and lifestyle)? You will be naturally inclined to think of how people's excess weight may increase the demand for and market price of gasoline and jet fuel. You will wonder why airlines that charge thin passengers extra for their checked bags weighing over 50 pounds do not add extra charges on obese passengers. You will also



#### Microeconomics: a way of thinking about business

7

understand how low water prices in California have exacerbated the economic impact of the drought that (at this writing) has been hanging over the state for five years.

On reading about the atrocity-filled march of Islamic State militants across Iraq and into other countries, you will naturally want to understand how economics (as well as geopolitics) can be driving military conflicts. After all, much of the Middle East is oil rich. Conquests over territories can have booty prizes, control not only of people (for, say, religious purposes) but oil reserves and derricks and the revenue streams they represent, which can make the conquests pay financially. You will also begin to wonder how the growth in retrievable natural gas reserves in the United States and elsewhere can affect the financial payoffs from conquests in the Middle East. On completing this book, you will no longer be able to assess the terrorists' attack on the World Trade Center towers on September 11, 2001 as having only political or military consequences. After all, the 9/11 attack immediately hiked many people's perceived risk of flying, as well as causing a substantial lengthening of security lines at airports, with both factors - risk and wait time increasing the total cost of plane trips. You will naturally understand why economic researchers have looked for, and found, that the greater cost of flying from the terrorists' actions should be expected to lead to - and apparently has led to - more people driving to many destinations, the consequence of which has been, as researchers have found, more automobile accidents, injuries, and deaths (Blalock, Kadiyali, and Simon 2005a, 2005b).

You will understand with greater facility after completing this book how airport security is truly a management problem with life-and-death consequences: Tighter airport security can have two opposing effects. First, it can increase the cost of flying (by increasing the length of the security lines), which can lead to less flying and more driving – and more highway accidents, injuries, and deaths. Second, the greater security can reduce the risk of flying and, thus, can increase the demand for flying (and reduce the demand for driving). Which effect is stronger? To date, the evidence suggests that, on balance, raising the alert status at airports from, say, yellow to orange can lead to more driving and more road deaths (Blalock, Kadiyali, and Simon 2005a, 2005b). Managers of the nation's homeland security system must weigh their actions very carefully and, before they raise the alert status, feel reasonably confident that the higher alert status will avert more deaths in the air than will arise on the nation's roads. Hence, we should expect that airport homeland security managers often will not elevate the alert status when the increase in the perceived risk of terrorist attacks is small.

In casual conversations, consumers and even businesspeople talk as if they *know* many things that few listeners think to challenge:

- "Houses with views sell more quickly than houses without views."
- "Buying a house is a better deal than renting a comparable size apartment because houses carry tax advantages (interest on home mortgages is deductible from taxable incomes)."

A

#### 8 The market economy, overview and application

On completing this textbook and hearing any such comment, you will be inclined to ask reflectively and in earnest, "How can that be?"

The kind of economic thinking that will be central to this book, and evident in the foregoing discussions of the housing bubble and burst, obesity, airport security, and any assessment of the above statements, springs from an innocuous observation: people have a basic drive to improve their lot in life because they don't have everything they want and need. Much of this introductory chapter and the book (and the course), both in theory and in application, is directed at driving home this easily overlooked lesson. Oddly enough, many lessons covered in this book are crystallized in a classic story of what happened in a German prisoner-of-war (POW) camp during the Second World War, as related by a prisoner who happened to be a trained economist.

# Part A Theory and public policy applications

### The emergence of a market

Economic systems spring from people's drive to improve their welfare. R. A. Radford, an American soldier who was captured and imprisoned during the Second World War,

A **market** is the process by which buyers and sellers determine what they are willing to buy and sell and on what terms. It is the process by which buyers and sellers decide the prices and quantities of goods that are to be bought and sold.

left a vivid account of the primitive **market** for goods and services that grew up in the most unlikely of places, his POW camp (Radford 1945). Because the inmates had few

opportunities to produce the things they wanted, they turned to a system of exchange based on the cigarettes, toiletries, chocolate, and other rations distributed to them periodically by the Red Cross.

The Red Cross distributed the supplies equally among the prisoners, but "very soon after capture ... [the prisoners] realized that it was rather undesirable and unnecessary, in view of the limited size and the quality of supplies, to give away or to accept gifts of cigarettes or food. Goodwill developed into trading as a more equitable means of maximizing individual satisfaction" (Radford 1945, 190).

As the weeks went by, trade expanded, and the prices of goods stabilized. A soldier who hoped to receive a high price for his soap found he had to compete with others who also wanted to trade soap. Soon shops emerged, and middlemen began to take advantage of discrepancies in the prices offered in different prisoner bungalows.

For example, a priest, one of the few prisoners allowed to move freely among the prisoner bungalows, found that he could exchange a pack of cigarettes for a pound of cheese in one bungalow, trade the cheese for a pack and a half of cigarettes in a second bungalow, and return home with more cigarettes than he had started with. Although he



#### Microeconomics: a way of thinking about business

A

was acting in his own self-interest (not so much out of religious convictions), he had provided the people in the second bungalow with something they wanted – more cheese than they would otherwise have had. In fact, prices for cheese and cigarettes differed partly because prisoners in different bungalows had different desires and partly because they could not all interact freely. To exploit the discrepancy in prices, the priest moved the camp's store of cheese from the first bungalow, where it was worth less, to the second bungalow, where it was worth more. Everyone involved in the trade benefited from the priest's enterprise.

A few **entrepreneurs** in the camp hoarded cigarettes and used them to buy up the troops' rations

An **entrepreneur** is an enterprising person who discovers potentially profitable opportunities and organizes, directs, and manages productive ventures.

shortly after issue, and then sold the rations just before the next issue, at higher prices. Although these entrepreneurs were pursuing their own private interest, like the priest, they were providing a service to the other prisoners. They bought the rations when people wanted to get rid of them and sold them when people were running short. The difference between the low price at which they bought and the high price at which they sold gave them the incentive they needed to make the trades, hold on to the rations, and assume the risk that the price might not rise.

Soon the troops began to use cigarettes as money, quoting prices in packs or fractions of packs. (Only the less desirable brands of cigarettes were used this way; the better brands were smoked.) Because cigarettes were generally acceptable, the soldier who wanted soap no longer had to search out those who might want his jam; he could buy the soap with cigarettes. Even nonsmokers began to accept cigarettes in trade.

This makeshift monetary system adjusted itself to allow for changes in the money supply. On the day the Red Cross distributed new supplies of cigarettes, prices in cigarettes rose, reflecting the influx of new money. After nights spent listening to nearby bombing, when the nervous prisoners had smoked up their holdings of cigarettes, prices fell. Radford saw a form of social order emerging in these spontaneous, voluntary, and completely undirected efforts. Even in this unlikely environment, the human tendency toward mutually advantageous interaction had asserted itself.

Today, markets for numerous new and used products spring up spontaneously in much the same way. At the end of each semester, college students can be found trading books among themselves, or standing in line at the bookstore to resell the books they bought at the beginning of the semester. Used book buyers can save students the time wasted in line by roaming dormitory and classroom hallways offering to buy student books (as well as the textbooks professors have collected), sometimes at better prices than campus bookstores pay. Of course, used book buyers put their purchases up for sale on Amazon where they sell along with new copies to future students, the result being an increase in the competitiveness and efficiency of textbook markets and fewer new copies of textbooks sold.

A

#### 10 The market economy, overview and application

Garage sales are now common in practically all communities (with eBay effectively being the largest global "garage sale"). Indeed, like the priest in the POW camp, many people go to garage sales to buy what they believe they can resell – at a higher price, of course. "Dollar Stores" have sprung up all over the country for one purpose, to buy the surplus merchandise from manufacturers and to unload it at greatly reduced prices to willing customers. There are even firms that make a market in getting refunds for other firms on late overnight deliveries. Many firms don't think it is worth their time to seek refunds for late deliveries, mainly because they individually don't have many late deliveries (because the overnight delivery firms have an economic incentive to hold the late deliveries in check). However, there are obviously economies to be had from other firms collecting the delivery notices from several firms and sorting the late ones out, with the refunds shared by all concerned.

Gift cards have become a big and profitable business for retailers, partially because many of the cards go unused. Recipients lose them or don't care to shop where the card is redeemable. Plastic Jungle has created an exchange for gift cards, offering recipients \$80 (typically) for a \$100 gift card from Macy's. It will then put the card up for sale on Plastic Jungle's website for more than \$80. Recipients can also donate the unused balances on their cards to charity through DonorsChoose.org (Wortham 2009).

Today, we stand witness to an explosion of a largely new economy on the Internet, which many students reading this book will, like the priest in the POW camp, help to develop. The development of the Internet economy has obviously brought gains to many firms – most notably Microsoft, Apple, Google, and Amazon – and their customers who have gained from higher-quality products that have fallen in price through competition. But then the Internet economy has wreaked havoc for other firms – most notably bricks-and-mortar bookstores and a host of major city newspapers – that have lost market share or have closed. The expansion of some industries – regardless of whether they are seen as a part of the "old" or "new" economy – and the contraction of others are interrelated for a reason that lies at the heart of economics: we simply can't do everything.

# The economic problem

Our world is not nearly as restrictive as Radford's POW camp, but it is no Garden of Eden either. Most of us are constantly occupied in securing the food, clothing, and shelter we need to exist, to say nothing of those things we would only like to have – an ultra high-definition television, a trip to Tahiti, and a shopping spree. Indeed, if we think seri-

**Resources** are things used in the production of goods and services. There are only so many acres of land, gallons of water, trees, rivers, wind currents, oil and mineral deposits, trained workers, and machines that can be used in any one period to produce the things we need and want.

ously about the world around us, we can make two general observations.

First, the world is more or less fixed in size and limited in its known and usable **resources** (given available technology). We can plant more