FREE ENTERPRISE
The Economics of Cooperation

FEDERAL RESERVE BANK OF DALLAS

Economic education is a high priority at the Dallas Fed. In a democracy, effecting sound economic policy requires an economically literate public. We're convinced that greater economic literacy will lead to sounder policies, which will in turn raise our standard of living significantly.

That's why I'm delighted to offer this publication, which looks at how communication, coordination and cooperation interact to make free markets work. Our hope is that it gives readers a deeper appreciation for an economic system that encourages both individual freedom and social cooperation.

I've read enough economics tomes to know that the subject can be made deadly dull. Luckily, Dwight Lee, author of this booklet, writes with style and humor. He has a knack for conveying complex information in a straightforward fashion and being entertaining in the process. We're grateful that he agreed to take on this project.

Bob McTeer

Bob McTeer
President
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CHAPTER 1 A Wealth of Opportunities in a World of Limits

Few people approach the study of economics with excitement. Economics has a reputation for being difficult and dull. In fact, it's commonly known as the dismal science. But economics doesn't have to be difficult, and it certainly shouldn't be dull because it provides insight into something we are all interested in—producing wealth and having the freedom to enjoy it.

Economics can make you appreciate how fortunate you are to live in America. It explains why we have achieved a level of wealth inconceivable not long ago and how the personal freedom Americans enjoy is critical to producing that wealth.

But getting wealthy is not easy. The power of economics comes from understanding the obstacles to creating wealth. Wealth doesn't simply fall from the sky; it has to be coaxed out of natural resources with effort and ingenuity, neither of which is plentiful enough to accomplish all we would like. Creating wealth requires that we cooperate with each other to make the most valuable use of our limited time, effort and resources. But no matter how successful we are, limits will remain on the desirable things that can be accomplished.

Recognizing limits to what is possible, however, is not the same as yielding to pessimism. By understanding what the limits are, we can push them back when it's possible and accept them when it's not. We would never have sent men to the moon without understanding gravity. And no one thinks physicists are pessimists because they point out that trying to invent a perpetual motion machine is a waste of time.

Concentrating on limits may seem dismal, but it is the key to creating a wealth of opportunities. As this book makes clear, economics delivers the hopeful message that human progress can continue to be made through communication, coordination and cooperation. There is a lot of optimism to be found in the dismal science.

This first chapter introduces the fundamental economic problem of scarcity, along with some basic concepts that will help us understand the implications of scarcity and how we can best deal with it. As we are about to see, the most obvious implication of scarcity is that there are costs to everything we do. But the bright side is that costs always mean attractive opportunities.

Cooperation is desirable, but competition is inevitable.

Chapter 2 deals with the social cooperation needed to push back the limits of scarcity by taking full advantage of the opportunities that exist. Interestingly—and at first glance paradoxically—the competition that exists in market economies is a powerful force for social cooperation.

Sometimes the best way to understand the benefits realized from the cooperation of the marketplace is by considering the problems that arise when we mess with the market—the subject of Chapter 3. Chapter 4 continues our look at social cooperation by examining the importance of profits in keeping producers responsive to consumers' interests.

Finally, Chapter 5 looks at the connection between freedom and the entrepreneurship that fuels economic progress. Without freedom, the spirit of entrepreneurship could not be unleashed, and without the cooperation of the marketplace, we would quickly find limits placed on many of our freedoms.

THE ABUNDANCE OF SCARCITY

No matter how much we have, we continue to face scarcity—the inability to have as much as we want. Average life expectancy at birth has increased by over 30 years in the past century, yet we want to live longer. We can travel from Dallas to Tokyo in far less time than it took Thomas Jefferson to travel from Charlottesville, Va., to Washington, D.C., yet we want more on-time flights. E-mail has made it routine to send a written message halfway around the world and receive a reply in seconds, instead of the weeks it took by regular mail; yet we want more broadband hookups and faster modems.

Most of our activities can be explained as attempts to deal with scarcity. As Adam Smith, the founder of economics, wrote in *The Wealth of Nations* (published in 1776), "There is scarce perhaps a single instant in which any man is so perfectly and completely satisfied with his situation as to be without any wish of alteration or improvement of any kind."

Scarcity doesn't result from people wanting more just for themselves. Mother Teresa couldn't help nearly as many as she wanted to because of scarcity. Indeed, in a world without scarcity—a world hard to even imagine—there would be no need for the generosity and self-sacrifice she exemplified.

It's not even clear that we would enjoy the complete absence of scarcity very long, though it would be fun temporarily. Overcoming obstacles to achieve worthwhile goals gives our lives meaning and provides satisfaction. What would there be to achieve if scarcity didn't exist—if everything you, and everyone else, could possibly want was instantly available?

THE IMPLICATIONS OF SCARCITY

The implications of scarcity are profoundly important. Ignoring them can—and often does—result in serious mistakes.

Opportunity Cost

The most fundamental implication of scarcity is that everything we do carries a cost. When you are doing one thing, you are using time and resources that cannot be used for the next most valuable thing you could have been doing. The cost of doing more of one thing, then, is the value that is sacrificed by doing less of something else. This is why economists are so fond of pointing out that there is no such thing as a free lunch.

Economists refer to the value forgone every time we do something as *opportunity cost*. In fact, all costs are opportunity costs. We commonly think of cost as the money we spend to obtain something. But spending money on one thing is sacrificing the opportunity to spend it on something else. The money spent on something simply provides a convenient measure of its real cost, which is the value of an opportunity forgone.

The biggest cost of doing something often has nothing to do with spending money. For example, the biggest cost of going to college is the income forgone, not the money spent on tuition and books. This explains why college enrollment typically increases when high unemployment makes it difficult for college-age people to get good jobs. The biggest cost of making a telephone call is often that it prevents you from doing something else, like watching TV, reading a book or cooking dinner. This explains why so many people talk on cell phones while driving: The cost is low because there's little else they can be doing. (Of course, not paying attention to your driving can be forgoing the value of safety.)

Concentrating on opportunity cost may seem to be emphasizing the negative. But there are two sides to the coin of opportunity cost. One is forgone value resulting from scarcity, and the other is opportunity. There would be no opportunity costs without opportunity. If there were only one thing you could do with your time and talents, there would be no cost to doing it. The larger the number and the more valuable the opportunities you have, the better—although this increases the cost of the choices you make.

The Bright Side of Opportunity Costs

Imagine that you are the most athletic, beautiful and intelligent person in the world. This sounds great, and it is. But it means everything you do will be extraordinarily costly. With some training you can break the world record of over 20 feet in the pole vault, and you won't even need a pole. But training for the event means forgoing the opportunity to be the most glamorous movie star Hollywood has ever seen—a high cost to pay for the world record in the pole vault. You may decide, however, it is also too costly to pursue a career in the movies, since you could otherwise earn your Ph.D. in microbiology and make medical discoveries that save millions of lives.

You will face high opportunity costs at every turn in your life, but this is hardly dismal. It is cause for celebration because there are no opportunity costs without opportunity.

Competition and Cooperation

Another implication of scarcity is that cooperation is desirable but competition is inevitable. The best way to push back the limits of scarcity is by working in cooperation with others. More can be accomplished when people coordinate their efforts with each other and take the concerns and talents of others into consideration. But because scarcity always leaves people wanting more, competition is unavoidable.

Fortunately, competition does not have to be at the expense of cooperation. In fact, as we will see, competition can be the most effective way of ensuring cooperation. But first we need to consider some other implications of scarcity.

Rationing

Since there is never enough to satisfy everyone, there have to be ways to ration the things we want.

Rationing requires rules, and those rules determine the type of competition that occurs. For example, using the rule "first come, first served" is one way to ration things. This rule causes people to compete by waiting in line, with the competition favoring those willing to wait the longest—those with the lowest opportunity costs. Unfortunately, this does nothing to promote the type of cooperation that makes everyone better off. Waiting in line does nothing to produce more of what people are waiting for.

Another way to ration scarce goods is by having the government distribute them. Government distribution is typically justified as a way of ensuring things go to those who most deserve them, instead of to those best able to compete. But the rules of government distribution don't eliminate competition, they just change the type of competition that occurs. The more wealth government allocates, the more money interest groups spend contributing to political campaigns and hiring lobbyists to influence officeholders' decisions. Such competition may provide politicians with some information, but it does little to produce more of the wealth people are competing for. When one group gets more through political competition, some other group gets less.

The most productive competition takes place in response to the rules of the marketplace. As we will see, market competition excels at promoting the type of cooperation that allows each of us to get more of what we want by helping others get more of what they want. Market competition doesn't eliminate scarcity, since people never get as much as they would like. But the cooperation of the marketplace enables us to do a better job pushing back the limits of scarcity.

Doing More with Less

Another implication of scarcity is so obvious it shouldn't need to be stated. But it does.

Doing more with less destroys some jobs, but that doesn't mean fewer employment opportunities.

Because of scarcity, we should take advantage of opportunities to produce more value with fewer resources (less opportunity cost). The reason for making such an obvious point is that it is so often ignored. People commonly object to automation that allows us to produce more with less effort because they fear it will destroy jobs. A common complaint about international trade is that it destroys American jobs by allowing us to get products from other countries for less than we can produce them domestically. People become upset when a company lays off lots of workers, even if it no longer needs as many of them to maintain, or even expand, production.

It is true that doing more with less destroys some jobs, but that doesn't mean fewer employment opportunities. Because of scarcity, there are always more jobs we would like done than can be done. There is no limit to the goods and services we would like to consume, and everything we consume has to first be produced. (Consumption comes before production only in the dictionary.) So there are really too many potential jobs, and the problem is not providing people with jobs but providing them with the jobs in which they produce the greatest value. When technology enables us to do a job with fewer workers and resources, those workers and resources can be used to produce other desirable things that we would otherwise have done without.

While no one wants to lose a job, we are all better off because millions of jobs have been destroyed over the years. Over half the American workforce were farmers in the first half of the 19th century. Today, only about 2 percent are farmers because technological advances allow us to produce more food with fewer workers (and less land).

Those advances haven't resulted in massive unemployment. People who would have been producing food are now able to produce medical services, cell phones, computers, airline travel and many other things that would be produced in smaller amounts, or not at all, had farming jobs not been destroyed.

It has been estimated that if we made as many telephone calls as we do today, but with the technology that existed in 1900, well over half the adult population would be working as telephone operators. Of course, we would never employ that many operators, so without the jobs lost because of improvements in telephone technology, we would have had far less of many nice things—including telephone service.

LIVING AT THE MARGIN

In our world of scarcity, we constantly have to make choices. Making them sensibly requires comparing the value of alternatives. But we seldom have to make choices between all of one thing or all of another. For example, we don't choose between food but no clothes and clothes but no food. If we did, the choice would be between eating in the nude or starving in style.

Fortunately, we make most decisions *at the margin*, choosing a little bit more of one thing at the cost of having a little bit less of something else. So the comparisons we make are between the *marginal values* of goods—the value of another unit of the good. It is sensible to spend our money on a variety of things, with an extra dollar going for the product with the greatest marginal value.

People recognize the importance of comparing marginal values in their personal choices, which explains why even very poor people usually wear clothes when they dine. But people commonly take positions that ignore the importance of comparing marginal values.

For example, we have all heard arguments like this one: Something is wrong with the economy when wrestling stars are paid a lot more than nurses, since nurses are obviously more valuable than wrestlers. As we will see, such arguments sound plausible but are flawed because they ignore the importance of marginal considerations. For a long time, even economists didn't understand marginal arguments.

Marginal Value vs. Total Value

For years, economists puzzled over why the price of diamonds is far greater than the price of water, even though water is obviously far more valuable than diamonds. This diamond–water paradox wasn't resolved until the 1870s, when Austrian economist Carl Menger and British economist William Jevons independently recognized the difference between marginal value and total value.

The price of something is a measure of its marginal value—the amount people are willing to pay for one more unit—not its total value. The total value of water is obviously much greater than the total value of diamonds; we would pay far more to avoid going without water than we would to avoid going without diamonds. But because water is so plentiful, the amount people are willing to pay for one more (the marginal) gallon is close to zero; the marginal value of water is low. On the other hand, diamonds are so rare that people are willing to pay thousands of dollars for just one more.

Which brings us back to wrestlers and nurses. Because so few have the physical attributes to satisfy the demand for wrestling, some people are willing to pay a lot to attract one more person with those attributes into the ring. Conversely, many have the attributes to satisfy our demand for nurses, so it takes much less to attract one more person into nursing.

Being as successful as possible requires being somewhat less successful than possible in everything you do.

Although the total value of nurses far exceeds the total value of wrestlers, the marginal value of nurses is far less. And it is the marginal value of workers—not the total value—that helps determine salaries.

So there is nothing remarkable about professional wrestlers earning a lot more than nurses, although some consider it objectionable. But the real objection is to how others choose to spend their money. Many who don't believe wrestlers should make more than nurses spend their money in ways that ensure talented opera singers and symphony conductors also make more than nurses.

Marginal Considerations and Personal Success

The marginal way of thinking (which is not the same as marginal thinking) helps us understand many public issues. It also helps us understand how to achieve personal success. Thousands of books have been written on personal success, and few if any ever point out the importance of marginal considerations. Many, however, extol the importance of the old saw that if a job is worth doing, it's worth doing as well as possible.

The problem with following this advice is that it would guarantee failure. Fortunately, people seldom do tasks as well as possible, and they are more successful because they don't. The marginal way of thinking explains why.

No matter how much time you spend doing a task, you can always do it a little better by spending yet more time on it. But before you spend enough time to do a task as well as possible, the marginal value of time spent on it is less than the marginal value of time spent on another task. Another minute on the first task adds less value than the first minute on a new one.

Recalling *opportunity cost*, before one task is done as well as possible, the *marginal value* of spending more time on it becomes less than the *marginal cost* (the marginal value sacrificed by spending less time on another task). So even if perfection were possible, it wouldn't be sensible.

We often hear that if we want to get things done, it's important to get started. This is good advice. Starting a task is often the hardest part, and many people fail to accomplish much because they never postpone a chance to procrastinate. But marginal considerations tell us that to do a task right, you also have to know when to stop. Like spelling *banana*, you have to know when to quit.

Consider doing well in school. Teachers often complain that students would get more out of their courses if they would study more. The teachers are right, but they shouldn't be surprised at, or critical of, their students' behavior. Doing well in class can be important in achieving the objectives students have, but so are lots of other things, such as working part-time, making friends, developing social skills, or just hanging out and having fun.

Even if perfection were possible, it wouldn't be sensible.

More time on class assignments adds value, but it means less time on other valuable activities. And long before a student has done as well as possible in his or her course work, the marginal value of time spent studying will have fallen below the marginal opportunity cost—the marginal value sacrificed in other activities.

So the student doing her absolute best in class is getting less value from the marginal minute spent studying than she would if she spent that minute doing something else. She increases the value realized from her time by *equating at the margin*—reducing the time spent studying until study time has the same marginal value as time spent doing other things. Even if the student is a complete nerd, she will still do better equating at the margin over her different courses, since she will get more out of all of her courses by learning less than possible in each of them.

Decreasing Marginal Value

The point of equating at the margin is not to provide an excuse for being sloppy in the jobs you do or for trying so many different things that you do them all poorly. But generally, the marginal value of doing something eventually begins decreasing as we do more of it. Putting the first coat of paint on a house adds more value than adding a tenth coat. Putting the first coat of wax on a car adds more luster and protection than putting on the third coat. Economists refer to this as *decreasing marginal value*.

Of course, it is also important to recognize that we get better at doing many things as we spend more time on them, which means the marginal value of time in these activities can increase for awhile—maybe quite awhile—before it starts decreasing.

So you don't want to attempt so many things that you never become very good at any of them. Developing real skill in the relatively few things you have talent in or you really enjoy (talent and enjoyment generally go together) increases your productivity and enjoyment.

But no matter how much you enjoy an activity, or how good you are at it, eventually the marginal value of doing it begins to decline relative to other things. So you still want to equate at the margin over a number of activities. And although this means you will end up doing nothing as well as you possibly can, you can still be extremely good at what you do. Not doing your absolute best at any one thing is not the same as not doing your absolute best overall. Being as successful as possible requires being somewhat less successful than possible in everything you do.

Your personal success obviously depends primarily on your own efforts and productivity. But it is also true that your efforts will be more productive if you coordinate your actions with those of others. How market economies help all of us pursue our dreams in cooperation with others is the topic of the next chapter and the overarching theme of this publication.

CHAPTER 2 Social Cooperation and the Three M's of the Marketplace

We can never overcome scarcity. But by understanding its implications—opportunity costs, the inevitability of competition and the desirability of cooperation, the need to ration and the importance of choosing at the margin—we can better understand how market economies constantly push back the limits of scarcity.

In a nutshell, market economies succeed because they let us make the best use of the information necessary for social cooperation. They do so by allowing that information to be communicated from those who have it to those best able to act on it, with the *messages* containing this information *motivating* people to respond appropriately and providing them with the *means* to do so. Any successful economy has to be a system of messages, motivation and means. And no economic system incorporates these three M's as effectively as the market economy.

MESSAGES

Only by directing scarce resources into their highest-value uses can an economy prosper. But there are countless uses for resources, differences of opinion about their value in different uses, and shifting conditions that constantly change a resource's relative scarcity and its value in different uses.

Given the complexities, it would be easy to dismiss the goal of making the most valuable use of our resources as a utopian dream. Somehow, people from all over the world would have to be in constant communication. Consumers would have to constantly send messages, to each other and to producers, on the value they place on the various goods and services that can be produced. Producers would have to send messages, to each other and to consumers, on how productively they can use resources to turn out various goods and services. Communications technology is improving dramatically, but surely we'll never reach the point where everyone can be in constant communication with everyone else.

Market economies are successful because they allow us to make the best use of the information required for people to cooperate with each other.

Even if such an amazing communications network were possible, it couldn't ensure that resources flowed to their most valuable uses. People would not only have to be able to communicate with others constantly, they would also have to communicate accurately. If the messages contain distortions on the value of resources and the goods they produce, there is no possibility that the resources will be used to produce the most value.

What hope is there that individuals will resist the temptation to exaggerate the importance of resources in the uses they favor? Improving communication technology is difficult enough. Ensuring accurate communication is even trickier. But as we will see, market prices do a remarkable job of communicating information accurately.

MOTIVATION

Ensuring that the economy makes the best use of its resources requires more than accurate communication. It also requires motivating those best able to respond to that information to do so appropriately.

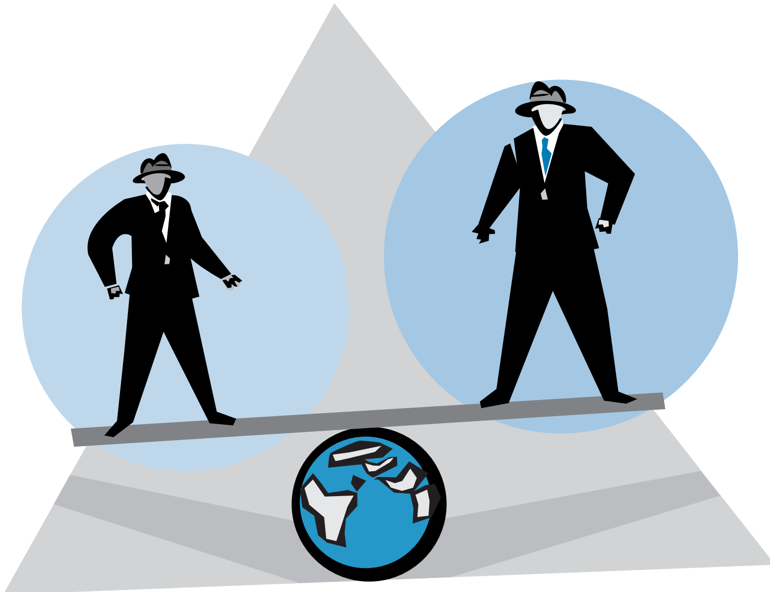
For example, if others inform you that they value a good more than you do, responding appropriately means reducing your consumption so they can increase theirs. Or if consumers inform a producer that the resources he is using would be more valuable in another activity, responding appropriately means using less of those resources (perhaps by going out of business) so producers doing a better job of satisfying consumers can use more.

It's unrealistic, of course, to expect people to be as concerned for others as for themselves, their family members and close friends. Concern for others hardly seems strong, widespread and constant enough to get resources directed into their most valuable uses. Yet in our market economy, we come very close to realizing the type of social cooperation needed to do just that. This cooperation is achieved through market prices.

MEANS

When people want more of a good, they communicate that through their willingness to pay a higher price for it. The higher price does more than inform producers that more of the good is wanted and motivate them to produce more of it. The higher price results in more revenue, which provides those producing the good with the means to produce more of it.

Market prices give us the information needed to respond to the concerns of people all over the world and the motivation to do so.



HOW IT WORKS

Consider a trip to the grocery store. Everywhere you look are products from around the world—even domestic products require foreign inputs—that are consumed all over the world. Each of them bears a price that communicates information from everyone who contributed to supplying the product and from everyone who consumes it. That price is a message that tells you all you need to know about all those people—almost none of whom you'll ever encounter—to respond appropriately to their various preferences and circumstances, and it motivates you to do so.

For example, the price of bananas—which we'll assume is 49 cents a pound—tells you how much another pound of bananas is worth to other consumers.

If people valued another pound by more than 49 cents, they would buy more, which would drive up the price in the short run (the time over which it is impossible to grow more bananas). If they valued another pound by less than 49 cents, they would buy fewer bananas, which would lower the price (again, in the short run).

Their decision on how many bananas to buy is responsive to this price information and feeds back into that information by affecting the price of bananas. It pays consumers to evaluate the marginal value of bananas to them and then buy bananas only to the point where an additional pound is worth 49 cents.

Assume next that for some reason, people in Asia decide they want to eat more bananas, which raises the price to 68 cents a pound. People elsewhere in the world will respond to this price increase by consuming fewer bananas. How many fewer? Just enough fewer to make the additional bananas Asians want to buy at the higher price available to them.

Few, if any, consumers will know why the price went up. Nor will they know where the bananas they would have consumed at the lower price go. But the higher price tells them all they need to know to harmonize their preferences with those of Asians. The consumers who reduce their consumption cannot be expected to care as much about Asian consumers as they do about themselves. But in response to price communication, they are motivated to act *as if* they do.

Two-Way Communication

When consumers want more bananas, the resulting price increase communicates that fact to banana producers. Given enough time, producers will respond by investing more, working longer and outbidding competitors for the resources needed to produce more bananas.

These responses all require sacrifice. But as long as the value of the sacrifice necessary to get another pound of bananas into stores (marginal cost) is less than the price (marginal value), more bananas will be provided. Producers are not as concerned for banana consumers around the world as they are for themselves and their loved ones. But in response to price communication, they will act *as if* they are.

On the other hand, if consumers want fewer bananas, they'll send this message with a drop in price. This will encourage the purchase of bananas that are already available. But because the lower price will not cover the marginal cost of producing as many bananas as before, growers will respond to consumers' message by reducing production, with some of the less productive growers possibly going out of business. Producers will act *as if* they are saying, "Consumers are telling us they value other things that could be produced with the resources we are using by more than they value bananas. Because of this, we will release some of those resources to those who will use them to provide more benefit to consumers." Banana growers don't reduce their production because they care as much about the interests of consumers as they care about their own. But price signals motivate them to act as if they do.

We not only want producers to consider consumer interests when deciding how many bananas to make available. When consumers decide how many to buy, we want them to consider the sacrifices producers are making to grow bananas and transport them to local stores. And because of the two-way communication of market prices, they will. The price of bananas allows producers to communicate to consumers the cost (sacrifice) of making an additional (marginal) pound available in a way that motivates appropriate responses.

Private property is an essential element in the social cooperation of the marketplace.

Assume, for example, it is discovered that working on banana plantations increases the chances of developing an uncomfortable skin rash. Wages for workers growing and harvesting bananas will rise to help compensate them for this risk. Of course, this raises the marginal cost of banana production, which will be communicated to consumers with a higher price for bananas.

Although consumers may not know the price increased because of the newly discovered risk to banana workers, the higher price will tell them all they need to know to respond as if they did and as if they were as concerned about the well-being of the workers as they are about their own. Consumers will reduce their consumption of bananas until bananas' marginal value to them increases enough to equal the higher marginal cost of producing them.

THE FREE MARKET ECONOMY

The communication and cooperation that take place through market prices are the secret to the superior wealth creation of free market economies. Americans aren't richer than people in other countries because they are smarter or work harder. Our population is composed of people from all over the world, so we certainly aren't smarter than people from other countries. And though most of us work hard, we don't work harder than people elsewhere. We are richer than most people because our economy relies more on market prices to harmonize our diverse talents and aspirations.

Nobody would claim that markets work perfectly. But given the magnitude of the task involved, they work amazingly well. Certainly, no other type of economic system comes close.

Private Property Promotes Cooperation

Market cooperation depends on private property, since market prices emerge only when exchange occurs, and most exchanges involve private property. The importance of private property to social cooperation is nicely illustrated by the cooperation that existed for many years between the Audubon Society and hot-rodders.

We all know the Audubon Society wants to protect the environment and fragile habitats for birds and other animals. Not surprisingly, it opposes drilling for oil in environmentally sensitive areas such as the Arctic National Wildlife Refuge (ANWR) in Alaska. But because of private property, hot-rodders communicated their desire for cheaper gas to the Audubon Society so effectively that it accommodated them by exposing a fragile environment to risk.

The Audubon Society owns a wilderness area in Louisiana known as the Rainey Preserve, an ideal habitat for birds and other wildlife. It also contained commercial quantities of petroleum and natural gas, which the society allowed oil companies to drill for from the 1940s until 1999.

Because the society owns the preserve, the value others put on the oil there presented an opportunity the society would have sacrificed had it refused to allow drilling. The society doesn't face this opportunity cost in ANWR; because it doesn't own the property, it has no motivation to consider the interest others have in the oil it contains.

In allowing drilling in the Rainey Preserve, the Audubon Society was responding as most people do to the information and incentives that emerge when private property makes exchange possible. Private property not only motivated the Audubon Society to cooperate with hot-rodders (and gas consumers in general), it also motivated hot-rodders to cooperate with the Audubon Society. Their purchase of gas allowed the society to obtain and protect wildlife habitats that it believed at the time were more valuable than what was being sacrificed in the Rainey Preserve.

Audubon Society members and hot-rodders may not have a lot in common. But they both considered the concerns of the other and acted to promote the other's interest when private property allowed them to harmonize their interests through market prices.

CHAPTER 3 Messing with the Market

When we take important things for granted because they work so well, we often don't really appreciate them until something goes wrong. Certainly, we never appreciate our health more than when illness interferes with the proper functioning of our bodies. Similarly, one of the best ways to appreciate how well the market economy works is to consider the consequences of policies that interfere with it.

PRICE CONTROLS

No matter how well price communication works, people will be dissatisfied. The unrelenting message of market prices is "Scarcity is real—take it seriously." This is not a message we enjoy receiving. Despite the impressive social coordination enabled by market prices, buyers always wish prices were lower and sellers always wish they were higher. Governmental officials sometimes respond to complaints about high or low prices by imposing price controls.

Gasoline Price Controls

In the 1970s, the federal government responded to consumers' complaints about rising gasoline prices by imposing ceilings on the price of gasoline. The price increases resulted from the normal working of price communication when the Organization of Petroleum Exporting Countries greatly cut the cartel's exports to the United States.

A ceiling that holds the price of a product below its market level will increase the cost of that product to consumers.

OPEC's action reduced the oil available to American refineries, which reduced the gasoline available to American motorists. This meant that consumers wanted more gasoline than was available. So consumers communicated to producers that they wanted more gas—and to each other that everyone should use gas more sparingly—by bidding up its price.

Left alone, the adjustment would have continued until producer and consumer desires were in balance. This could have been achieved by producers finding new, but more expensive, sources of petroleum and spending more to obtain additional gasoline from each barrel and by consumers reducing their gasoline use by driving more slowly, carpooling more, relying more on mass transit and employing other energy-saving measures.

But consumers disliked this message of scarcity and sought immediate relief. Congress responded by putting a ceiling on the price of gas, preventing it from reaching the market level that would have balanced the amount supplied with the amount demanded.

Unfortunately, the price ceiling didn't provide relief. In fact, by outlawing price communication, the ceiling caused consumers to pay far more for gas than they would have paid without it. That's right: The price ceiling that was billed as a way to protect consumers against high gas prices increased the cost of gas.

Both consumers and producers would have been better off without the price ceiling. Consumers could have communicated their desire for more gas with a higher price, and producers could have sold more gas at a higher price.

Because consumers wanted more gas than was available with the price ceiling, the marginal value of gas to them was greater than the controlled price. Without the ceiling, producers would have responded to the higher demand by increasing the amount of gas available. This would have lowered the marginal value of gas and therefore lowered the price people were willing to pay. But the price would still have been higher than the price ceiling.

So how can we say people would have been better off without the price ceiling? The answer is competition among consumers.

Just because consumers can't legally compete for additional gas by paying a higher price doesn't mean they can't compete. As discussed in Chapter 1, in our world of scarcity, competition is inevitable. With price controls, people commonly compete by waiting in line. How long will people wait? In our gasoline example, they will wait until the cost per gallon (the controlled price plus the opportunity cost of their time) is equal to its marginal value to them. Since the price ceiling increased the marginal value of gas, the cost of gas ended up higher than it would have been without the ceiling.

Draw Your Own Demand and Supply Curves

You can draw a demand and supply diagram to illustrate the effects of imposing a binding price ceiling on any product. A binding price ceiling is one that is lower than the equilibrium, or market, price (the price determined by the intersection between the demand and supply curves). This is an effective way of showing that the price people are willing to pay for a product is greater with a price ceiling than it would be without it.

Consumers clearly communicated their desire for more gas through their willingness to endure long lines. This communication allowed consumers to inform each other that it had become more important to conserve gas, but it didn't motivate mutual accommodation and cooperation. Instead, it created tremendous hostility among consumers. Fights between people frustrated by long lines were common during the gas shortages.

When consumers communicate the desire for more gas by waiting in line, it does nothing to motivate suppliers to respond to their desires. The cost of waiting in line is simply wasted, since it neither motivates nor provides the means for suppliers to make more gas available and make it available more conveniently.

Discrimination and Favoritism

Outlawing price communication with price controls also increases the likelihood of discrimination and favoritism. Without price controls, it is costly for sellers to discriminate against minorities, women, the handicapped or any other group. Refusing to sell to them reduces the number of potential buyers. Therefore, those who discriminate have to either sell for less or sell fewer units than those who don't.

This doesn't mean sellers won't discriminate when there are no price controls; obviously, some do. But price controls increase discrimination by lowering its cost. Since buyers are anxious to buy more than sellers are willing to sell when a ceiling keeps the price below its market level, it costs sellers nothing to discriminate against some people. They can discriminate and still sell all they want at the controlled price.

This type of discrimination was widespread with the price ceiling on gasoline, as was favoritism. Before opening to the general public each day, station owners would let family members and friends fill up, even though this was illegal and meant less gas for other customers.

Helping the poor is often the justification for price controls. But by censoring the price communication that promotes cooperation, they harm people at all income levels.

Rent controls, common in some parts of the country, are another form of price ceiling and create the same shortages and higher cost for consumers. Rent controls also lower the cost of discrimination since there is always a long list of people anxious to get rent-controlled apartments.

Favoritism and discrimination are common ways to ration rent-controlled housing. People who are members of groups that tend to be discriminated against are less likely to get an apartment than those who are members of advantaged groups, have connections or are in a position to return favors.

Price controls don't always put ceilings on prices, holding them below market levels. Price floors set prices *above* market levels.

Like price ceilings, price floors lower the cost of discrimination and favoritism, but they lower this cost to buyers rather than to sellers. A price floor higher than the market price creates a surplus, with sellers anxious to sell more than buyers want to purchase. So it costs buyers nothing to discriminate against certain groups of sellers by refusing to buy their products or services.

An example of this type of discrimination is caused by minimum-wage laws, which keep wages for some workers (usually the young and unskilled) above the equilibrium wage. More people are looking for work (trying to sell their services) at the minimum wage than employers are willing to hire. As a result, employers (buyers) can hire more workers (sellers) than they want at the minimum wage, and so it costs them nothing to discriminate by refusing to hire women or minorities.

THE CENSORSHIP OF PRICE CONTROLS

Price controls are a harmful form of censorship because, as we have seen, they hamper the price communication that allows people to make the best use of our scarce resources through coordination and mutual accommodation. Consider the following examples of price censorship.

- **Minimum-wage laws.** Minimum-wage laws censor unskilled youth who would like to communicate the following to potential employers: "I have few skills, and college is not possible for me. Because of this, I am willing to work for a low wage now, while I have few financial responsibilities, to acquire the on-the-job training that will allow me to be more productive later."

This censorship does far more harm to teenagers from poor families—who are more likely to be discriminated against and more dependent on an entry-level job for training—than it does to teenagers from families with higher incomes.

- **Agricultural price floors.** Agricultural price floors harm many children by censoring the ability of dairy farmers, for example, to communicate to parents, "I can lower my cost of production, which will allow me to make more milk available to you and your children at a lower price."

  This censorship is particularly harmful to poor children because their parents devote a larger percentage of their budgets to basic foods than do parents with higher incomes.

- **Rent controls.** The censorship of rent controls prevents people from communicating their desire for housing space by sacrificing more of other things. The result is that people who would be willing to provide additional housing don't have adequate information on how valuable the housing is and little motivation to provide the right amount, even if they did.

  Rather than helping the poor—the purported beneficiaries of rent controls—the available housing stock generally goes to well-connected, nonpoor families. The poor end up with less housing—and housing in more dangerous neighborhoods—than they would have been willing to pay for.

Pointing out the harm done by wage and price controls doesn't mean we have to be complacent about low wages, low farm incomes or high rents. It's simply recognizing that these are not the problems but the messages communicating information on the problems. Low wages inform us that productive skills are lacking, low farm incomes send a message that some farmers would create more value elsewhere in the economy, and high rents tell us housing stock should be expanded.

We may not like the news communicated through market prices, but that is no reason to censor it. Who would suggest that we censor news of natural disasters, political and business scandals, the horrors of genocide or devastating epidemics? We may not like to hear such news, but suppressing it would hamper responses that lower the costs and reduce the probability of such events.

Similarly, censoring price communication reduces the information and incentives needed to respond effectively to the problems created when our efforts and resources are not directed into their most valuable uses.

Some may argue that freedom of price communication puts those with few financial resources at a disadvantage. This argument is true in the same way as saying that freedom of expression disadvantages those lacking the education and ability to express themselves well. But no one is put at an absolute disadvantage by the freedom to communicate through either prices or words. The best hope for the poor is through the free flow of market communication, which informs them of their best opportunities, motivates them to increase their productivity by taking advantage of those opportunities, and keeps others responsive to their preferences and concerns.

Another objection is that price communication is often inaccurate. True enough. No one would argue that price communication is always completely accurate and honest. But who is prepared to argue that distortions and misrepresentations are not common in politics, news and advertising? Such imperfections can never be eliminated, but the most effective way to moderate them is not through censorship but through the competition of free expression, as any defender of freedom of speech will tell you.

Similarly, the most effective way to moderate the imperfections in price communication is to allow more competition in price communication, not stifle that competition with price censorship.

Making Discrimination Less Costly

In the late 1940s and early 1950s, the unemployment rate for 16- and 17-year-old black males was roughly comparable to that for white males of the same age. But a series of minimum-wage increases that started in 1956 and continued into the ’60s and ’70s reduced the cost of discriminating. The unemployment rate soon became higher for black than for white teenage males and has remained that way ever since. Few would argue against the need for laws against employment discrimination. But the minimum wage makes such laws more needed than they would otherwise be.

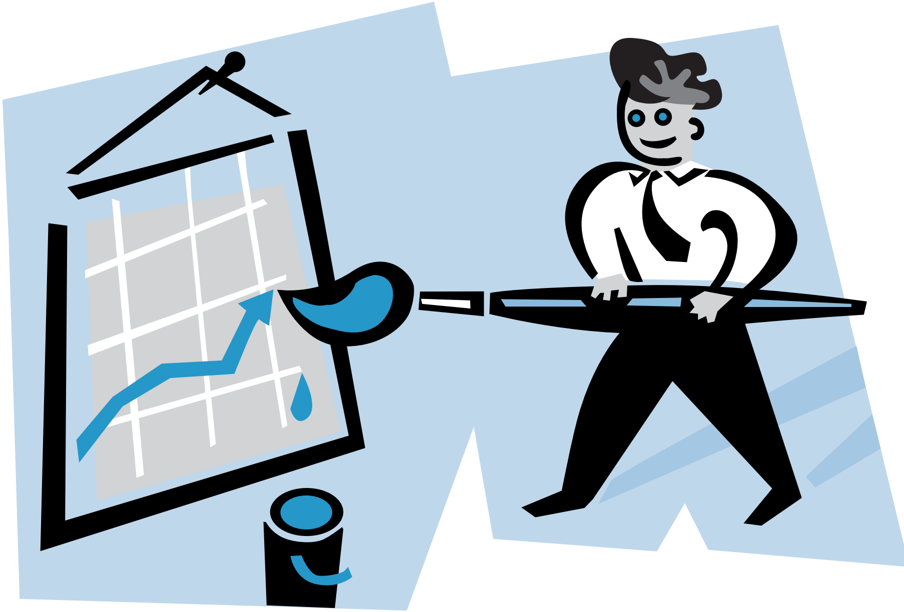
CHAPTER 4 Profits: The Consumer's Best Friend

Few economic concepts are as misunderstood as profits. The common view is that firms increase profits at the expense of consumers. It seems plausible that firms' profits rise when they charge higher prices, so there must be a conflict between the well-being of consumers and the profitability of firms.

The truth is that profits are the consumer's best friend. The most effective consumer protection policy is one that allows firms to make as much profit as possible (without the help of government protections or subsidies). Profits are the most effective means consumers have of communicating their preferences to firms.

Consumers will reward a firm with a profit only if the firm is using resources to produce the goods consumers value most. If a firm uses resources to produce less value than other firms could produce with the same resources, consumers will punish that firm with a loss and reward the other firms with profits. This allows the firms providing the most value to expand production by bidding resources away from firms providing less value.

Furthermore, consumers' ability to reward some firms with high profits and punish others with low (or negative) profits results in lower prices. Indeed, firms with the highest profits often charge the lowest prices.



PROFITS AND MOTIVATION

High profits empower consumers by giving firms the incentive to produce better goods and services at lower prices.

To understand the role of profit, we first have to know what it is. *Profit* is the difference between the revenue received from producing and selling goods and services and the cost (always opportunity cost) of the resources used to produce them.

The owner (or owners) of a firm is vitally interested in how much profit it makes; the more the better. In small firms, the owner decides directly what to produce, how much to produce and how to produce it. Economists refer to these owners as *residual claimants* because they have a legal claim on the firm's profits, or the residual between revenue and cost.

In large corporations the residual claimants are the shareholders, who are so numerous that instead of making corporate decisions themselves, they hire managers to run the firm. But even here, tying management pay and tenure to the company's stock performance can motivate managers to act like residual claimants by encouraging them to make profits as large as possible.

So while profits may seem like an extra cost to consumers, profits actually lower prices by motivating firms to produce the right products, in the right amounts, as cheaply as possible.

Consider what occurs when there is no residual claimant. Government agencies don't make a profit; they receive appropriations at the beginning of each fiscal year. Any money not spent at year's end goes back into the general fund, and the agency may get a smaller appropriation the following year. To avoid this, managers will desperately search for something to spend excess money on—more computers, travel, office space, anything—regardless of whether it adds to the value of the service provided.

The result is that the cost of providing government services is much higher than it needs to be, and citizens pay far more in taxes than they would if the services were provided efficiently. Obviously, the residual-claimant owner of a business would never panic at the prospect of revenues exceeding cost and waste the difference. Instead, the owner constantly looks for ways to reduce costs and thereby increase profits.

Lower Prices

The case for patent protection is based on the fact that free market competition erodes the profits that motivate innovation.

While finding ways to reduce costs increases profits, it will generally not do so for long. Much of the cost decrease will be passed on to consumers in lower prices, since a firm's long-run profitability depends on meeting or beating the competition.

Even if a firm ends up with lower costs than its competitors, it can still find it profitable to pass some of the cost savings on to consumers to increase its market share. A small price decrease can attract a large increase in customers. But in the longer run, firms either match the cost decreases of rival firms or go out of business. So most—and often all—of a cost reduction is soon passed on to consumers through lower prices. The only way a firm can hope to maintain higher than normal profits is by continuously cutting costs faster than its competitors.

Innovation

The competition for higher profits also motivates firms to develop new products. For example, personal computers, and the many products made possible by the miniaturization of electronic circuits, now provide benefits to people that science fiction couldn't anticipate a few decades ago. The cost of developing and producing new products is often very high, but doing so can be profitable because a few wealthy people will pay big bucks to possess hot new products.

Fortunately for those of us who aren't rich, the desire for profits causes the price of innovative products to start falling and soon become cheap enough for almost everyone to afford.

It should not be surprising that falling prices result from firms competing for higher profits. After all, there will never be more than a relatively few extremely rich people. So selling only to the rich is not the best way to make large profits.

The most successful firms are those that figure out how to reduce the cost of goods and services so that the masses can afford them. Andrew Carnegie did it with steel, John D. Rockefeller with oil, Henry Ford with cars, Richard Sears and Sam Walton with retail stores. Michael Dell is doing it with computers and Bill Gates with software.

No matter how successful a business, or how rich its owners, most of the benefits from profitable firms go to consumers in the form of better products at lower prices. Profits motivate producers to anticipate and cater to the desires of consumers and enable consumers to transfer more resources to the firms doing the most to enrich their lives.

Profits also allow consumers to impose discipline on producers, making possible the freedom firms need to research and innovate. The result is constantly improving goods and services and ever-lower costs. The connection between discipline and freedom is the topic of the next chapter.

The Real Cost of Living

New goods and services are often very expensive for consumers and very profitable for producers. But because profits attract competitors and motivate a constant search for ways to improve quality and lower costs, consumers benefit from better products at less cost.

Even when the price goes up, the product often costs consumers less. That's because the real cost of a good is best determined by how many hours of work it takes to buy it. So if salaries and wages rise faster than the price of a good, the good is getting cheaper, even if its price is going up.

Consider some examples of how the cost of goods has changed for the average American production worker:

- In 1915, a three-minute coast-to-coast telephone call cost $20.70, or 90 hours of work. In 2002, the same call—easier to dial and with a much clearer connection—costs 15 cents, or 39 seconds of work.
- In 1930, a 1,000-mile plane trip cost $83, or 152 hours of work. In 2000, the same trip—only faster and safer—cost $145.70, or 10 hours of work.
- In 1970, 1 megahertz of computer-processing speed cost $7,600, or 2,129 hours of work. In 1999, it cost 17 cents, or 44 seconds of work.
- In 1984, a cell phone cost $4,195, or 456 hours of work. In 2002, a far better phone costs $99.99, or seven hours of work.

CHAPTER 5 Entrepreneurs and Economic Freedom

Entrepreneurs are risk-takers who engage in enterprises with the hope of making a profit. Those who start small businesses such as restaurants and shoe repair shops are entrepreneurs, as are those who improve existing services and products or create new ones.

Entrepreneurs of all types are important to our economic well-being, but the most dramatic progress comes from the ventures of a relatively few. These are the entrepreneurs who challenge the conventional vision of what is possible and turn one generation's fantasies into the next generation's necessities.

Every country and culture has men and women with the spirit of bold entrepreneurship, but this spirit alone will not result in economic progress. Market economies provide the freedom and discipline needed for entrepreneurship to flourish.

Achieving great success requires taking great risks—attempting things that few would dare and that most would consider impractical, if not impossible. Most such bold ventures do fail. The only way to discover what works and what doesn't is by turning people loose with the freedom to pursue their dreams.

Market economies allow the productive energy of entrepreneurs to be unleashed by ensuring that they are accountable to consumers.

CONSUMER COMMUNICATION AS DISCIPLINE

Consumers discipline entrepreneurs by letting them know what they think of projects as they develop, in ways that cannot be ignored.

First, the prices entrepreneurs pay for the inputs they use reflect the inputs' value in the production of other goods, and consumers communicate that value through the prices they are willing to pay for those goods. So entrepreneurs receive a clear message—one that hits them in their bank accounts—on the sacrifice their activities impose on consumers. Second, the price consumers pay for an entrepreneur's product communicates how much value they realize from her venture.

Of course, when an entrepreneur is getting started, her product won't be fully developed and on the market, so the only consumer feedback will be through the cost of the inputs. This is where entrepreneurial confidence is important. It helps the entrepreneur persuade others to help fund the project and motivates her to put up much of the money herself, with the expectation of a large return if the venture succeeds.

Often, entrepreneurs and venture capitalists fund good ideas—or what seem like good ideas—for a long time without generating enough revenue to cover cost. These undertakings often catch on eventually, with consumers rewarding entrepreneurs and investors with large profits, communicating that the new goods are worth more than the old goods being sacrificed.

But no matter how confident an entrepreneur, if consumers continue to indicate the project is worth less than its cost, she will eventually have to respond. A lack of sales is a powerful signal, forcing entrepreneurs to respond by acting as if they are saying, "Although I am convinced my venture is worth more than it costs, consumers are telling me the opposite. They are telling me they value other things that could be produced with the resources I am using more than they value what I am producing. So I will call off my venture to free up resources to produce more of what consumers value more."

OBSTACLES TO SUCCESS

The market economy keeps entrepreneurs accountable to consumers by giving consumers the power to pull the plug on some ventures and encourage others. It is this accountability that makes entrepreneurial freedom possible and entrepreneurial ventures such a powerful force for progress.

Yet some object to the success of entrepreneurial ventures. Entrepreneurial activity always disrupts established ways of doing things, particularly when it makes consumers better off. Indeed, the greater the potential benefit from an entrepreneurial venture, the more likely it is to provoke opposition from those with a vested interest in the status quo.

Freedom is necessary for the proper functioning of market economies, and the proper functioning of market economies is necessary for much of our freedom.

Entrepreneurial success results from the most potent and ruthless form of competition—one that allows the new and improved to sweep away the old and threatens the existence of well-established and profitable firms. As economist Joseph Schumpeter pointed out, the most important competition is "from the new commodity, the new technology, the new source of supply, the new type of organization…competition which commands a decisive cost or quality advantage and which strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives."

All competition is unpopular with producers because it forces them to remain vigilant to consumer interests. But it is the competition from successful entrepreneurs that, because it benefits consumers the most, poses the greatest threat and prompts the greatest reaction.

If established firms responded by trying to develop better and less expensive products or by passively going out of business, there would be no problem. But these firms commonly wield significant political influence because of the many jobs they provide and their long-standing support for powerful officeholders. When faced with either making painful changes or being driven out of business, firms often use their influence to hamper entrepreneurs' freedom to get their products and services to market.

Entrepreneurial Davids are able to slay the status quo Goliaths on the field of market competition, but the Goliaths have the advantage when the battle shifts to the political arena. Those with the better products can capture the patronage of large numbers of consumers in open competition, but they may not be able to mobilize large numbers of voters to overcome political barriers. So while the market makes it possible to tolerate the risk of entrepreneurial failure, the political process often has difficulty tolerating entrepreneurial success.

The political obstacles to successful entrepreneurs are more limited in the United States than in many other countries, thanks to the Constitution and public opinion. Still, organized interest groups have been able to use the political process to slow the introduction of technology and products. Consider the following examples.

- As motorized vehicles gained popularity, groups such as the Horse and Mule Association of America, the Master Horseshoer National Protection Association and the National Hay Association lobbied legislatures, with some temporary success in the 1920s, to limit the use of automobiles, trucks and tractors.

Properly functioning markets allow people to enjoy both more freedom and more wealth.

- In the 1920s and '30s, local retailers sought legislation restricting competition from lower cost chain stores. Today, many retailers lobby local governments to prevent, or at least delay, the opening of large discount stores such as Wal-Mart.
- Responding to dairy interests, many states once banned the sale of yellow margarine. Consumers had to tint their margarine at home, with coloring provided by the manufacturer. Such laws began to fall in the early 1950s but held on in Wisconsin until 1967.
- Despite the general enthusiasm for the Internet, many existing retailers have fought some types of e-commerce. In a number of states, it is illegal to use the Internet to buy out-of-state wine or purchase automobiles directly from manufacturers.

ECONOMIC FREEDOM

Centrally planned economies fail because they deny people the freedom to act on the information that only they possess to innovate, start businesses, and buy and sell. Substituting the direction of political authorities for the market choices of individual producers and consumers guarantees that economic decisions are made in an informational vacuum.

A productive economy requires using the information dispersed throughout the population, but this cannot be done unless individuals are free to interact in the marketplace. Destroy freedom, and you destroy the information flows necessary for sound economic decisions.

The connection between freedom and markets also runs the other way. Freedom depends on properly functioning markets as much as properly functioning markets depend on freedom.

The market protects freedom by establishing the only setting in which it can be tolerated. Freedom without accountability soon becomes license and cannot endure for long. The only freedom that can survive is one exercised in ways that take into account the concerns of others—freedom subject to the discipline of the marketplace.

In a market economy, I can tolerate your freedom to buy the clothes you prefer, eat the foods you like and pursue almost any objective you desire. When you use resources to pursue your objectives, you take my concerns, and those of others, into consideration. As discussed earlier, the price you pay for the things you buy reflects the value others place on them, so you buy them only as long as their marginal value to you is at least as great as their marginal value to others. Similarly, you can tolerate my freedom to pursue my objectives in the marketplace.

But when markets are undermined, so is the discipline necessary for freedom to survive. There is no mystery about why people are denied basic freedoms in countries where markets are suppressed. Freedom without discipline is unacceptable, and without markets, the discipline will come from central direction and bureaucratic red tape.

In the absence of market discipline, turning entrepreneurs loose to pursue bold innovations could easily result in wealth destruction instead of wealth creation.

Even in primarily free market economies, market incentives aren't always operating, and when they aren't, bureaucratic limits on our freedom are imposed.

For example, excessive pollution results from not having markets to discipline waste emissions into the environment. If such markets existed, polluters would have to pay prices that reflect the cost their emissions impose on others, and this accountability would motivate polluters to voluntarily limit their discharges. But without markets for the right to pollute, we accept bureaucratic restrictions on polluting activities that we would consider unacceptable in most areas of our lives.

We all value freedom, and few want our own freedoms denied. But it is easy to lose our freedoms a little at a time, without noticing the loss.

First, many of the benefits we realize from freedom are the result of the freedom exercised by others. For example, most of us are not entrepreneurs and are not directly affected by government restrictions on entrepreneurial ventures that threaten well-established producers with new and improved products and technologies. Even though they receive most of the benefits from the progress fueled by entrepreneurs, few consumers object to these restrictions because they don't notice the loss of benefits they never had.

Second, it is always possible to provide very visible benefits to identifiable groups through restrictions on freedom. For example, the government greatly benefits a handful of U.S. sugar growers by restricting American consumers' freedom to buy sugar from foreign countries. Growers are fully aware of the millions of dollars in benefits they receive from these restrictions, and they use campaign contributions to show their appreciation to those in Congress who support them. The cost of these restrictions to consumers exceeds the benefits to sugar growers, but because it is spread over 270 million consumers, few ever notice it.

And even when a consumer does notice, he has no motivation to take political action to eliminate the restriction on his freedom. The cost of the action would greatly exceed the cost he would save from lower sugar prices, even if he succeeds. And because of the difficulty of organizing people to take action, success is unlikely.

Finally, every restriction on our freedom erodes market discipline a little more, making it just a little easier to justify further restrictions. If this destructive dynamic goes unrecognized, our freedom and prosperity can be gradually undermined.

Freedom and Wealth

In recent years, attempts have been made to rank countries by the economic freedom their citizens enjoy. Such attempts require the construction of indexes, which are always somewhat arbitrary but do provide rough and useful measures of economic freedom. Of particular interest is the connection between how free a country is economically and how wealthy its citizens are. The evidence is clear: The more economic freedom in a country, the wealthier its citizens tend to be. The following table is based on one of the most widely cited studies of economic freedom.

Freedom Ranking	Country	Per Capita GDP in U.S. Dollars
1	Hong Kong	$ 23,997
2	Singapore	28,184
3	New Zealand	17,210
4	United States	31,567
(tie) 9	United Kingdom	21,736
9	Australia	24,240
15	Canada	22,575
20	Austria	31,550
35	Japan	43,119
38	South Korea	12,086
45	France	28,959
(tie) 60	South Africa	3,904
60	Mexico	3,613
79	Brazil	4,479
(tie) 121	China	818
121	India	450
131	Russia	2,211
(last) 155	North Korea	n.a. (but very low)

SOURCE: O'Driscoll, Holmes and O'Grady (2002).

OUR BEST HOPE

No economic system is perfect, and market economies are no exception. A more extensive discussion than is possible here would explain why prices do not always communicate information accurately. An important reason for studying economics is to gain a better understanding of the economy's flaws. Then we can attempt to reduce them, even though we can never eliminate them entirely.

But another reason—maybe a more important reason—for most people to study economics is to gain an appreciation for the difficulty of the task faced by any economy and how impressively market economies perform that task. The goal of every economy is to generate the most value with the resources, skills and technologies available, while creating opportunities and incentives to expand these factors over time. This requires giving people the maximum degree of freedom to use the information that only they have, consistent with taking others' concerns into consideration.

No economic system does a better job than the market system of realizing the advantages of both individual freedom and social cooperation. But no matter how well the market works, people will still be dissatisfied with the outcomes it produces because they always reflect the unavoidable reality of scarcity. People will always want, and are easily convinced they deserve, more than is available.

Many of the criticisms of the market are really complaints about scarcity. Indeed, one reason the market is so effective at pushing back the limits of scarcity is that it forces us to face up to scarcity—and deal with it—through the information that market prices communicate.

Market economies address scarcity by keeping us informed and responsive to it. Understanding economics reduces the temptation to temporarily mask scarcity by restricting market communication. Our best hope for continued freedom and prosperity is the social cooperation made possible by communication through market prices.

—Dwight R. Lee

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