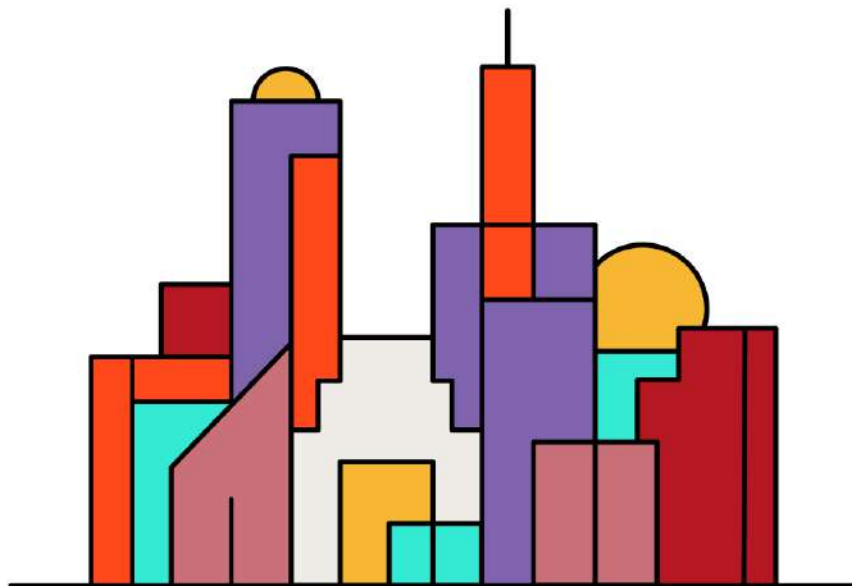


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Tawni H. Ferrarini, Joseph P. Calhoun,  
Jane Shaw Stroup, Randall K. Filer*

# **Common Sense Economics**

*What Everyone Should Know About  
Personal & National Prosperity  
Second Edition*



# **Common Sense Economics**

## **What Everyone Should Know About Personal & National Prosperity**

**Revised for Central and Eastern Europe and the Former Soviet Union**

**Second Edition**

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*Common Sense Economics: What Everyone Should Know About Personal & National Prosperity* by James D. Gwartney, Dwight R. Lee, Tawni H. Ferrarini, Joseph P. Calhoun, Jane Shaw Stroup, and Randall K. Filer.

First published 2020, Second Edition 2024

Economic Fundamentals Initiative (EFI), 110 Jabez Street 1060, Newark, New Jersey NJ 07105, USA.

Revised for Central and Eastern Europe and the Former Soviet Union from the fourth edition of *Common Sense Economics: What Everyone Should Know About Wealth & Prosperity* by James D. Gwartney, Dwight R. Lee, Tawni H. Ferrarini, Joseph P. Calhoun, and Jane Shaw Stroup.

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ISBN 978-1-952729-31-7

[www.econfun.org](http://www.econfun.org)

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# Dedication

In 1993, James Gwartney and Richard Stroup wrote *What Everyone Should Know About Economics and Prosperity*. After thirty years of teaching college economics, their goals were simple: present the insights of economics that really matter and write in a manner that is concise and organized. This first edition laid the foundation for those that followed.

Dwight Lee joined the authoring team in 2005. The title was changed to *Common Sense Economics: What Everyone Should Know About Wealth and Prosperity*, and the book was expanded to include “Part 4: Twelve Key Elements of Practical Personal Finance.” Later editions added coauthors Tawni Hunt Ferrarini, Joseph Calhoun, and Jane Shaw Stroup. Randall K. Filer joined the author team in 2020 to revise the work for the post-communist transition countries.

We lost Rick in November 2021 and Jim in January 2024. These two esteemed individuals left an indelible mark through their contributions. They taught thousands of undergraduates and impacted hundreds of thousands more through their textbooks. Their other scholarly works and op-eds have influenced countless individuals. They provided invaluable guidance to graduate students, their colleagues, and policymakers.

The remaining coauthors are forever grateful for the impact Rick and Jim have had on our lives. They were faithful husbands, cherished friends, and beloved colleagues. Though they may not be here with us physically, this edition of *Common Sense Economics* will keep their spirit and memory alive.

Thank you, Rick and Jim. You made our lives and the world better. This book is dedicated to you and your legacy.

# Preface

The authors of this book want you to live a successful and fulfilling life. We also want you, and all people, to live in a world that allows and encourages everyone to reach their maximum potential. We believe that accomplishing these goals requires both leaders and citizens in general to understand the basic principles of economics. Economic decisions and policies affect each of us in almost every aspect of our daily lives, often in ways we do not fully comprehend. We are continually amazed by the degree of economic illiteracy among politicians and voters. Bad economics is dangerous everywhere, but is especially common, and harmful, in developing and post-communist transition economies. The fundamental purpose of the Common Sense Economics project is to make the key understandings of our profession accessible to all.

Because time is valuable, we have crafted this publication in a way that minimizes the requirement to learn new terms, memorize formulas, or master intricate details important only to professional economists. Rather, we focus on the fundamental insights of economics that really matter—those that will help you make better choices, improve your understanding of our increasingly complex world, and live a more satisfying life.

Regardless of your current knowledge of economics, this book will provide you with important insights. We have tried to make it concise, thoughtfully organized, and reader-friendly. As the work's title suggests, we believe that the basic principles of economics primarily reflect common sense. The work puts these principles to work, demonstrating their power to explain real world events.

While we don't want to claim too much, even the fact that you are reading this book is the result of economic transactions made thousands of years ago. Many claim that economic needs lead to the invention of writing and all that this ability made possible.

**Video:**

**Written Language**

We aim to help you understand why some nations prosper and others do not. The political process is examined and differences between government and market allocation investigated. Even advanced students of economics and business should benefit from our efforts to pull together the “big picture.” You can temporarily set aside the complex formulas, sophisticated models, and technical mathematics of the profession and concentrate on the questions that attracted you to economics in the first place. Why do some nations prosper and other do not? Why do some people retire rich while others end their lives in poverty? Is big business bad or good for a society? Does my government know what it is doing? How do I know what to believe among all the noise in the internet?

In his masterwork *Human Action*, Ludwig von Mises put our obligation very well, saying:

*“Whoever neglects to examine to the best of his abilities all the problems involved voluntarily surrenders his birthright to a self-appointed elite of supermen. In such vital matters blind reliance upon “experts” and uncritical acceptance of popular catchwords and prejudices is tantamount to the abandonment of self-determination and to yielding to other people’s domination. As conditions are today, nothing can be more important to every intelligent man than economics. His own fate and that of his progeny is at stake. Very few are capable of contributing any consequential idea to the body of economic thought. But all reasonable men are called upon to familiarize themselves with the teachings of economics. This is, in our age, the primary civic duty. Whether we like it or not, it is a fact that economics cannot remain an esoteric branch of knowledge accessible only to small groups of scholars and specialists. Economics deals with society’s fundamental problems; it concerns everyone and belongs to all. It is the main and proper study of every citizen.”*

Our materials are designed to make economics accessible to every citizen, providing a strong foundation, especially for students who may not take another economics course as well

as for the general public who want an insight into the workings of the world around them. It is written to be appropriate for secondary school students, for university students in fields other than economics (such as law or journalism), and, especially, for all citizens. In addition to the book you are reading now, we are constantly providing new materials and updates on our activities on our website: [www.econfun.org](http://www.econfun.org). Check them out! Our fellow teachers of economics will also find many suggestions for involving and motivating classroom materials.

The *Common Sense Economics* team is anxious to share these materials with everyone. Please help us by posting on your social media. As one of our readers in Central Asia said to us: “I’ve shared it with my friends, with my teachers, with my parents, with my grandparents, and with my little sister. Our vision is that ideas encountered in *Common Sense Economics* will be shared over dinner tables world-wide.

Over thirty years after the fall of the Berlin Wall, many are questioning the pace and direction of the transition. It is especially important that citizens of the region are not sucked in by the false promises of “illiberal democracy” or “state capitalism.” Many individuals have sacrificed their time, their careers, and even their lives to secure the blessings of political and economic freedom to this region. Unfortunately, many still are. We dedicate this book to those heroes of liberty.

## PART 1

# Twelve Key Elements of Economics

## **ECONOMICS**

**THE STUDY OF HOW INDIVIDUALS, GOVERNMENTS, BUSINESSES, AND OTHER ORGANIZATIONS MAKE CHOICES THAT AFFECT THE ALLOCATION AND DISTRIBUTION OF SCARCE RESOURCES**

### **Elements:**

1. Incentives Matter.
2. All Choices Involve Costs.
3. Decisions Are Made at the Margins.
4. Voluntary Trade Promotes Economic Progress.
5. Transaction Costs Are Obstacles to Trade.
6. Prices Align Buyers and Sellers.
7. Profits Are a Guide to Productivity.
8. The “Invisible Hand” Promotes the General Welfare.
9. Beware of Unintended Consequences.
10. Value Creates Income and Wealth.
11. Productivity Is the Key to High Living Standards.
12. There Are Multiple Sources of Progress.

# Introduction

Life is about choices, and economics is about how incentives affect those choices and shape our lives. Choices about our education, how we spend and invest, what we do in the workplace, and many other personal decisions will influence our well-being and quality of life. Moreover, the choices we make as voters and citizens affect the laws or “rules of the game,” and these rules exert an enormous impact on our freedom and prosperity. To choose intelligently, both for ourselves and for society, we must understand some basic principles about how people choose, what motivates their actions, and how their actions influence their personal welfare and that of others. Thus, economics is about human decision-making, the analysis of the forces underlying choice, and the implications for how societies work.

The economic way of thinking involves integrating key concepts into your thought processes. The section presents twelve concepts that are crucial for the understanding of economics, and will help you understand why some countries grow and achieve high income levels while others stagnate and remain poor. You will learn such things as the true meaning of costs, why prices matter, how trade enhances prosperity, and why production of things people value underpins our standard of living. In the subsequent parts of the book, these concepts will be used to address other vitally important topics.

## ELEMENT 1.1

# 1. Incentives Matter

*“Call it what you will, incentives are what get people to work harder.”*

— Nikita Khrushchev

All of economics rests on one simple principle: Changes in **incentives**<sup>(?)</sup> influence human behavior in predictable ways. Both monetary and nonmonetary factors influence incentives. If something becomes more costly, people will be less likely to choose it. Correspondingly, when the benefits of an option increase, people will be more likely to choose it. This simple idea, sometimes called the basic postulate of economics, is a powerful tool because it applies to almost everything we do.

People will be less likely to choose an option as it becomes more costly. Think about the implications of this proposition. When late for an appointment, a person will be less likely to take time to stop and visit with a friend. Fewer people will go picnicking on a cold and rainy day. Higher gas prices will reduce the number of gallons sold. Attendance in college classes will be below normal the day before spring break. In each case, the explanation is the same: as the option becomes more costly, less is chosen.

Similarly, when the payoff derived from a choice increases, people will be more likely to choose it. A person will be more likely to bend over and pick up a Euro or a Dollar than a cent. Students will attend and pay more attention in class when they know the material will be on the exam. Customers will buy more from stores that offer low prices, high-quality service, and a convenient location. Employees will work harder and more efficiently when they are rewarded for doing so. All of these outcomes are highly predictable, and they merely reflect the “incentives matter” postulate of economics.

**Read:**

**The Power of Incentives by Dwight Lee**

This basic postulate explains how changes in **market**<sup>(?)</sup> prices change incentives in ways that work to coordinate the actions of buyers and sellers. If buyers want to purchase more of an item than producers are willing (or able) to sell, its price will soon rise. As the price increases, sellers will be more willing to provide the item, while buyers will want to purchase less, until the higher price brings the amount demanded and the amount supplied into balance. At that point the price stabilizes.

What happens if it starts out the other way: if sellers want to supply more than buyers are willing to purchase? If sellers cannot sell all of a good at the current price, they will cut the price. In turn, the lower price will encourage people to buy more—but it will also discourage producers from producing as much, since it is less attractive to them to supply the product at the new, lower price. Again, the price change works to bring the amount demanded by consumers into balance with the amount produced by suppliers.<sup>(1)</sup>

Consider what happens when strong demand pushes a price up. Take gasoline, for example. The higher price will make it more costly to purchase gasoline. Consumers will respond by driving less, combining trips, and carpooling more often. In time, consumers will also shift to electric-powered and smaller, more fuel-efficient vehicles to reduce expenditures on gasoline. At the same time, the higher price will entice sellers to produce more. If not restricted, producers of gasoline will increase their drilling, develop new techniques such as fracking to recover more oil from existing wells, and intensify their search for new oil fields. This combination of forces will bring the amount demanded by consumers into balance with the amount supplied by producers. Over time, the larger supply will reverse the price increases. Price signals provide both buyers and sellers with incentives to make adjustments and bring their choices into harmony.

For instance, during the summer of 2014 in Georgia, peach prices saw a dramatic increase of 180% compared to the previous summer. This significant price hike didn't result in long lines of consumers at markets, eager to buy peaches. Instead, the steep increase prompted

many to switch from peaches to other fruits, avoiding the high costs. In reaction to the higher peach prices, the behavior of sellers adjusted as well. Peach suppliers expanded their orchards by planting more trees, and some farmers even transformed their apple and pear orchards into ones dedicated to peaches. These changes gradually increased the supply of peaches. By the time these newly planted trees started to produce fruit two years later, the increased supply led to a reduction in peach prices.

One can observe the principle that people react to incentives through the example of the collective farming system (kolkhoz) in former Soviet Union countries. Under this system, farmers were required to meet quotas by delivering a fixed amount of produce to the state. Any production above that quota, however, they could sell at the local market. Initially, the quotas were set very high, leaving little to no surplus for the farmers to sell for their own profit. This created little incentive for the farmers to produce more than the bare minimum required by the state since the additional effort did not yield any personal financial benefit. Recognizing the lack of motivation and the resulting inefficiencies in production, the Kolkhoz system underwent several changes and reforms throughout its history, reflecting the ongoing interaction between state policies and farmers' responses to the incentives those policies provided.

Just as incentives influence choices in the marketplace, they also influence political choices. Voters will be more likely to support those candidates and policies they think will provide them with the most personal benefits, net of their costs. Voters will tend to oppose policies when the personal costs are high relative to the expected benefits. For example, senior citizens consistently vote against candidates and proposals that would reduce their Social Security or Medicare benefits. Similarly, polls indicate that students disproportionately support candidates promising loan forgiveness and “free” education. Producers in businesses ranging from sugarcane and beet farming to steel and lumber tend to support candidates that favor trade restrictions, pushing up the prices of the goods they sell and reducing foreign **competition**<sup>(?)</sup>. As discussed later, social programs and trade policies can often be counterproductive once costs are compared to the benefits.

There's no way to get around the importance of incentives. They are a part of human nature. Incentives matter just as much under **socialism**<sup>(?)</sup> as under **capitalism**<sup>(?)</sup>. In the former

Soviet Union, managers and employees of glass plants were at one time paid according to the tons of sheet glass produced. Because their revenues depended on the weight of the glass, sheet glass at some factories was so thick that you could hardly see through it. In response, the rules were changed so that compensation was based on the number of square meters of glass produced. Under these new rules, Soviet firms made glass so thin that it broke easily.<sup>(2)</sup> Similarly, when quotas for the number of shoes were set for Polish factories which were, in turn, provided with too little leather, is it any wonder that there was a glut of children's shoes on the market?

Some people think that incentives matter only when people are greedy and selfish. This is untrue. People act for a variety of reasons, some selfish and some charitable. But the choices of both the self-centered and the altruistic will be influenced by changes in personal costs and benefits. For example, both the selfish and the altruistic person will be more likely to attempt to rescue a child in a shallow swimming pool than in the rapid currents approaching Iceland's Dettifoss waterfall, the most powerful one in Europe. And both are more likely to give a needy person their gently used clothes rather than their best ones.

Even though no one would have accused the late Mother Teresa of greediness, her self-interest caused her to respond to incentives, too. Consider Mother Teresa's organization, the Missionaries of Charity. It attempted to open a shelter for the homeless in New York City, but the city government required expensive (and, in Mother Teresa's view, unneeded) alterations to its building. The organization abandoned the project. This decision did not reflect any change in Mother Teresa's commitment to the poor. Instead, it reflected a change in incentives. When the cost of helping the poor in New York increased, Mother Teresa searched for alternative locations where her **resources**<sup>(?)</sup> could do more good compared to costs.<sup>(3)</sup> Changes in incentives influence everyone's choices and drive decisions, regardless of the mix of greedy, materialistic goals on the one hand and compassionate, altruistic goals on the other.

## ELEMENT 1.2

# 2. All Choices Involve Costs

*“There are no solutions, only tradeoffs.”*

— Thomas Sowell

The reality of life on our planet is that **productive resources**<sup>(?)</sup> are limited, while human desire for goods and services is virtually unlimited. Would you like to have some new clothes, a luxury boat, or a new smartphone? How about more time for leisure, recreation, and travel? Do you

dream of driving your brand-new electric sports car into the driveway of your home? Most of us would like to have all of these things and many others! However, we are constrained by the **scarcity**<sup>(?)</sup> of resources, including a limited availability of time.

In the late nineteenth century, many taverns offered a “free lunch” to anyone who bought a drink. Of course, since you had to buy a drink, the lunch wasn’t actually free—in addition (the story goes), the lunch had salty foods like ham, cheese, and peanuts, causing customers to buy more drinks. Thus, they paid in full for their “free lunches.”

This led to a phrase popular among economists: “There is no such thing as a free lunch.” The phrase was popularized in economics by the famous economist, Milton Friedman, who used it as the title of a book in 1975. An example of free lunch thinking could be a system of subsidized housing. During the Soviet era, housing was often provided “free” by the state. This, however, wasn’t actually without cost. The apparently “free” housing was paid for



indirectly by citizens through other means, such as long working hours, low wages, and the lack of choice or freedom to live where they wished. We cannot have as much of everything as we would like. So we choose among alternatives. (In the example of Soviet housing the consumer did not even make a choice – it was made for her by the state!) The choice to do one thing requires sacrificing the opportunity to do something else. This is why all costs are **opportunity costs**<sup>(?)</sup>, and all choices involve forgoing other opportunities.

**Read:**

**The Road Not Taken by Robert Frost**

Many costs are measured in terms of money, where the trade-off is easy to see. The money you spend one way is not available to spend in other ways or for savings. The opportunity cost of your purchase reflects the value you place on the options you have given up because of your initial purchase. Even when you don't have to spend money to do something, however, the action is not costless. You don't spend money to take a walk and enjoy a beautiful sunset, but there is an opportunity cost to taking the walk. The time you spend walking could be used to do something else you value, like visiting a friend, working out, or reading.

**Video:**

**Opportunity Cost**

**Video:**

**Opportunity Cost: The Hidden Cost of Everything**

Everyone has heard people claim that some things are so important that costs do not matter. Making such a statement may sound reasonable at first and may be an effective way to

encourage other people to spend more money on things that we value (and for which we would like others to help pay). But the unreasonableness of ignoring cost becomes obvious once the costs of the forgone alternatives are considered. Saying that something should be done without considering the costs is really saying that we should do it without considering the value of the alternatives. When we choose between mutually exclusive alternatives, the one that costs least relative to the benefits it yields is the most valuable one.

The choices of both consumers and producers involve costs. As consumers, the cost of a good, as reflected in its price, helps us compare our desire for a product against our desire for alternative products. If we do not consider the costs, we will probably end up using our income to purchase the “wrong” things. You know—Buyer’s remorse—you bought something without seriously considering the more valuable alternatives.

Producers face costs, too—the costs of the resources used to make a product or to provide a service. For example, using resources such as labor, lumber, steel, and sheetrock to build new houses takes resources away from the production of other goods, such as hospitals and schools. High costs signal that the resources have other highly valued uses, as judged by buyers and sellers in other markets. Profit-seeking firms will heed those signals and act accordingly, such as seeking out less costly substitutes.

Government policies can distort and override these signals; they can introduce taxes or subsidies that help those interest groups inconvenienced by the competitive prices that emerge in free and **open markets**<sup>(?)</sup>. But such policies reduce the ability of market incentives to guide resources to where consumers ultimately, on balance, value them most highly.

A classic example occurred in the country of Georgia between 1991 and 1994. The government froze bread prices at a below market level, resulting in consumers standing in queues that could stretch for more than a kilometer. The day **price controls**<sup>(?)</sup> were removed, shops were all of a sudden well stocked and there were no queues! A similar phenomenon also from Georgia occurred in the winter of 2006 when a pipeline delivering gas from Russia exploded, resulting in a huge increase in demand of kerosene to provide heat. To prevent **price gouging**<sup>(?)</sup>, controls were imposed on kerosene, again resulting in long lines until prices were freed and allowed to rise to the market-clearing level.

Politicians, government officials, and lobbyists often speak of “free education,” “free

medical care,” or “free housing.” This terminology is deceptive. These things are not free. Production of each requires the use of scarce resources that could have been used to produce other things. For example, the buildings, labor, and other resources used to produce schooling could have been used to produce more food or recreation, protect the environment, or provide health care. The cost of the schooling is the value of those goods that must be sacrificed. Governments may be able to shift costs, but they cannot eliminate them.

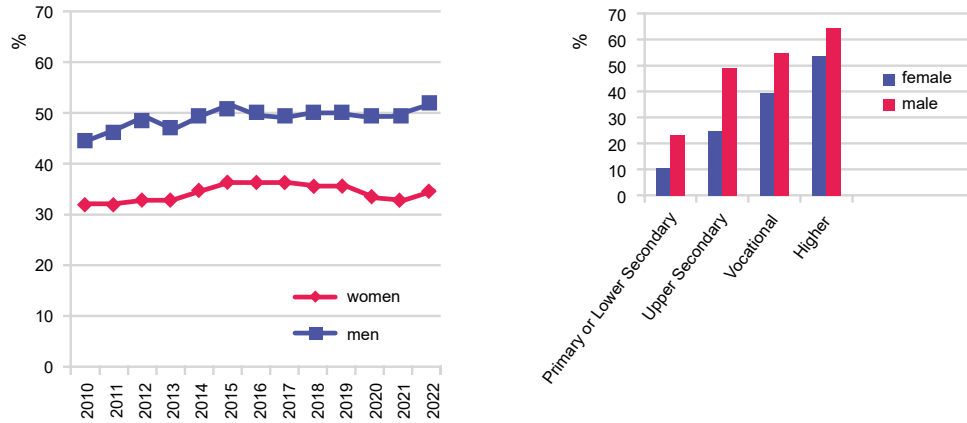
Opportunity cost is an important concept. Everything in life is about opportunity cost. Everyone lives in a world of scarcity and, therefore, must make choices. By looking at opportunity costs, we can better understand the world in which we live. Let us consider the impact of opportunity cost on workforce participation, the birth rate, and population growth, topics many would consider outside the realm of opportunity-cost application.

Have you ever thought about why women with more education are more likely to work outside the home than their less-educated counterparts? Opportunity cost provides the answer. The more highly educated women will have better earning opportunities in the workforce, and therefore, it will be more costly for them to stay at home. The data are consistent with this view.

In 2022, in Georgia, about 53% of women in **labor force**<sup>(?)</sup> with higher education were employed. This contrasted with a 39% employment rate for those with vocational education and roughly 25% for those with only upper secondary education. At the lower end of the spectrum, only about 10% of women with primary or lower secondary education were employed. These figures align with economic predictions that the greater the potential loss of income — or opportunity cost — from not working, the more likely women are to seek employment. Just as economic theory predicts, when it is more costly for a woman not to work outside the home, fewer will choose this option.<sup>(4)</sup>

## Exhibit 1: Employment-to-Population Ratio by Gender (Population Aged 15+) in Georgia, in percent

- a) Employment-to-population ratio by gender, 2010-2022  
 b) Employment rate by educational attainment level, 2022



Source: National Statistics Office of Georgia. [www.geostat.ge](http://www.geostat.ge)

What do you think happens to the birth rate as an economy grows and earnings rise? Time spent on household responsibilities reduces the time available for market work. As earnings rise, the opportunity cost of having children and raising a large family increases. Therefore, the predicted result is a reduction in the birth rate and slower population growth. During the past two centuries, as the per capita income of a country increased, a reduction in the birth rate and a slowdown in population growth soon followed. Moreover, this pattern has occurred in every country. Even though there are widespread cultural, religious, ethnic, and political differences among countries, the higher opportunity cost of having children exerted the same impact on the birth rate in all cases. Over the past six decades, the global fertility rate has halved, dropping from an average of 4.6 births per woman in 1961 to 2.3 in 2021. This decline in births per woman has varied by country. In Armenia, the fertility rate fell from 4.7 to 1.6, while Azerbaijan saw a decrease from 5.9 to 1.5. Georgia experienced a decline from 2.9 to 2.1, and Ukraine's fertility rate dropped from 2.2 to 1.2 during the same period, according to

the World Bank data.

Opportunity cost is a powerful tool. It will be applied again and again throughout this book. If you integrate this tool into your thought process, it will greatly enhance your ability to understand the real-world behavior of consumers, producers, business owners, political figures, and other decision-makers. Even more important, the concept will also help you make better personal choices.

**Read:**

**Opportunities and Costs by Dwight Lee**

## ELEMENT 1.3

# 3. Decisions Are Made at the Margins

*“Great things are not done by impulse, but by a series of small things brought together.”*

— Vincent van Gogh

To get the most value from our scarce resources, economics provides a simple rule: pursue those actions that generate more benefits than costs; avoid those actions that generate more costs than benefits. This principle of sound decision-making applies to individuals, businesses, government officials, and society as a whole.

Nearly all choices are made at the margin. That means that they almost always involve additions to (or subtractions from) current conditions, rather than “all-or-nothing” decisions. The word “additional” is a substitute for “**marginal**”<sup>(?)</sup>. We might ask, “What is the marginal cost of producing or consuming one more unit?” Marginal decisions may involve large or small changes. The “one more unit” could be a new shirt, a new house, a new factory, an additional investment, or even an expenditure of time, as in the case of a student choosing how to spend some more time among competing activities after pulling back from others. All these decisions are marginal because they involve consideration of additional costs and benefits.

People do not make “all-or-nothing” decisions, such as choosing between eating or wearing clothes. Instead, they compare the marginal benefits of a little more food, with the marginal costs of a little less clothing or doing without as much of something else. In making decisions individuals don’t compare the total value of food and the total value of clothing and choose one or the other. Rather, they compare their marginal values—a little more of one item and a little less of others. Incentives guide us to choose options only when their marginal benefits exceed the marginal costs.

Marginal decisions may also involve the costs and benefits of changes in the characteristics of what we buy or do. “Should I run an extra mile in my workout today?” “Do I want a three-bedroom house or a two-bedroom one?” “What about Nike shoes versus those from Walmart?” Similarly, a business executive planning to build a new factory will consider whether the **marginal benefits**<sup>(?)</sup> of the new factory—for example additional sales revenues—are greater than the **marginal costs**<sup>(?)</sup>—that is, the expenses of constructing the new building and the sacrifice of other things. If not, the executive and the company are better off without the new factory.

Effective political actions also require marginal decision-making. Consider the policy decision of how much effort and resources to put into cleaning up pollution. If asked how much pollution is acceptable, many people would respond “none.” In other words, pollution levels need to move to zero. In the voting booth they might vote that way. But marginal thinking reveals that this would be extraordinarily wasteful.

When there is a lot of pollution—so much, say, that we are choking on the air we breathe—the marginal benefit of reducing pollution is quite likely to exceed the marginal cost of the reduction. But as the amount of pollution goes down, so does the marginal benefit—the value of the additional improvement in the air. There is still a benefit to an even cleaner atmosphere (for example, we would be able to see distant mountains), but this benefit is not nearly as valuable as protecting our lungs. Before the pollution disappears 100 percent, the additional benefit of pollution reduction approaches zero.

As the marginal benefit of reducing pollution by an additional unit goes down, the marginal cost rises. As more and more resources are diverted away from other viable uses, the cost of cleaner air becomes higher. The marginal cost is the value of things that are sacrificed to reduce pollution a little bit more. Spending on health care, education, improved infrastructure, and other expenditures are but a few examples. They must be considered when evaluating the wisdom of reducing pollution to still lower levels. Once the marginal cost of a cleaner atmosphere exceeds the marginal benefit, additional pollution reduction is wasteful and counterproductive. It would simply not be worth the cost. The basic rule is “do the easiest things first!”

To continue with the pollution example, consider the following hypothetical situation:

Assume that pollution is doing €100 million worth of damage, and only €1 million is being spent to reduce pollution. Given this information, are we doing too little or too much to reduce pollution? Most people would say that we are spending too little. This may be correct, but we need more information before drawing a conclusion.

The €100 million in damage is total damage, and the €1 million in cost is the total cost of cleanup. To make an informed decision about next steps, we need to know both the marginal benefit and the marginal cost of cleanup. If spending another €10 on pollution reduction would reduce damage by more than €10, then we should spend more. The marginal benefit exceeds the marginal cost. But if an additional €10 spent on antipollution efforts would reduce damages by only a dollar, additional spending would be unwise.

People commonly ignore the implications of marginalism in their comments and votes but seldom in their personal actions. Consider food versus recreation. When viewed as a whole, food is far more valuable than recreation because it allows people to survive. When people are poor and living in impoverished communities, they devote most of their income to securing an adequate diet. They devote little time and money, if any, to expensive pursuits like playing golf, waterskiing, or other recreational activities.

But as people become wealthier, the opportunity cost of acquiring food declines. Although food remains vital to life, they have can more than meet their basic needs so continuing to spend most of their money on more food becomes unnecessary. At higher levels of affluence, people find that at the margin—as they make decisions about how to spend each additional euro—food is often worth less than recreation. So as people become wealthier, they spend a smaller portion of their income on food and a larger portion of their income on recreation. Armenia and France are both renowned for their cuisine but in 2022 Armenian households, on average, spent 47% of their income on food while those in much wealthier France only spent 13.3% of their income on food.<sup>(5)</sup>

The concept of marginalism reveals that marginal costs and marginal benefits are relevant to sound decision-making. If we want to get the most value out of our resources, only actions for which the marginal benefits are greater than marginal costs must be undertaken. Both individuals and nations are more prosperous when personal and policy choices reflect the implications of marginalism.

**Read:**

**Markets and Marginalism by Dwight Lee**

Making decisions at the margin is tightly linked to time. Many decisions cannot be undone once made so are no longer relevant when making a decision at the margin. Once a plant is built, a producer can't unbuild it. These costs are called "sunk costs" or "fixed costs." In economic theory these costs should not affect making decisions about variable things such as how many workers to hire even if, in a world of time travel, the firm might not have chosen to build the plant at all. Similarly, individuals operate in a world where costs, once incurred, cannot be taken back. If a student spends time and tuition obtaining a degree in, say, sociology, those costs are sunk if she then discovers there are more or better paying jobs in tourism.

**Video:**

**Sunk Cost Fallacy: Not Knowing When It's Time to Stop**

## ELEMENT 1.4

# 4. Voluntary Trade Promotes Economic Progress

*“We rail at trade but the historian of the world will see will see that it was the principle of liberty.”*

— Ralph Waldo Emerson

**Video:**

**[The Economics of Cast Away](#)**

The foundation of voluntary trade is mutual gain. People agree to an exchange because they expect it to improve their well-being. Voluntary trade is a win-win transaction. Both parties gain more than they give up; if they did not, they would not agree to the exchange. This positive-sum activity permits each of the trading partners to get more of what they value at a relatively low cost. There are three major sources of gains from trade.

First, trade moves goods from those who value them less to those who value them more. Thus, trade can increase the value of goods even when nothing new is produced. For example, when used goods are bought and sold, the exchanges do not increase the quantity of goods available (as new products do). But the trades do create value by moving products toward the buyers who value them more than the sellers. Both gain. Otherwise, the voluntary exchange would not occur.

People’s preferences, knowledge, and goals vary widely. A product that is virtually worthless to one person may be a precious gem to another. A highly technical book on artificial

intelligence may be worth nothing to an art collector but valued at hundreds of dollars by an engineer. Similarly, a painting that an engineer cares little for may be cherished by an art collector. Someone with cancer might be willing to pay many thousands of dollars (or more) for a life-saving drug that has a negative value (due to side effects) to a healthy person. Voluntary exchange that moves the AI book to the engineer and the painting to the art collector will increase the net benefit derived from both goods. The trade will increase the wealth of both people and also of their nation. It is not just the amount of goods and services produced in a nation that determines the nation's wealth, but how those goods and services are allocated to create value.

Second, trade expands production and consumption possibilities. Trading partners will be able to produce a larger output when each specializes in production of items they can produce at a low opportunity cost, and acquires everything else through trade. When people specialize, they can then sell these products to others. Revenues received can be used to purchase items that would be costly to produce themselves. This **specialization**<sup>(?)</sup> and voluntary exchange makes it possible for people to produce larger quantities of goods and services than would be otherwise possible. Economists refer to this principle as the **law of comparative advantage**<sup>(?)</sup>. This law applies to trade among individuals, businesses, regions, and nations.

The law of comparative advantage is just common sense. If someone can provide you with a product at a lower cost (remember, all costs are opportunity costs) than you can supply it yourself, voluntary trade makes sense. You can then use your time and resources to produce more of the things for which you are a low-cost provider. In other words, produce what you produce best, and trade for the rest. The result is that you and your trading partners will mutually gain from specialization and trade, leading to greater total production, higher incomes, and elevated standards of living. In contrast, trying to produce everything yourself and being self-sufficient requires using your time, talents, and treasures to produce many things for which you are a high-cost provider. This would result in lower production and income while sacrificing the items and benefits others can offer.

**Video:**

**Specialization and Trade**

For example, even though most doctors might be good at record-keeping and arranging appointments, hiring someone to perform these services is generally in everyone's best interest. The time doctors use to keep records is time they could spend caring for patients. Because the time with patients is worth a lot, the opportunity cost of doctors keeping records will be high. Thus, doctors will almost always find that hiring specialists to manage their records is advantageous for themselves, their office staff, and, most important, their patients. Moreover, when doctors specialize in the provision of physician services and hire others with comparative advantages in recordkeeping and office management, costs will be lower, services will be better, and combined output in health care will be larger. It is possible to grow wine in Siberia with extensive greenhouses refrigerate ponds enough to raise arctic trout in Azerbaijan but why bother when a simple swap would be so easy!

Third, voluntary exchange allows businesses to achieve lower per-unit costs by adopting large-scale production methods. Trade allows businesses to expand their market areas so they can plan for larger outputs and adopt processes that take advantage of **economies of scale**<sup>(?)</sup>, as happened after 1989 when juices from Moldova entered the global market. Such processes often lead to substantially lower per-unit costs and enormous increases in output per worker. Without trade, these gains could not be achieved. **Market forces**<sup>(?)</sup> are continuously reallocating production toward low-cost producers (and away from high-cost ones). As a result, open markets tend to allocate products and resources in ways that maximize the value, amount, and variety of the goods and services channeled to paying consumers. China is a perfect example of a controlled economy whose citizens, after it joined the global trading system in 1995, were able to take advantage of the signals given by trade and comparative advantage to lift literally billions of people (in both China and other countries in the region) out of poverty.

**Read:**

**Specialization and Wealth by Dwight Lee**

The importance of trade in our modern world can hardly be exaggerated. In fact, the World Bank credits global trade and lowering trade barriers for helping eradicate extreme poverty.<sup>(6)</sup> Trade grants people living in extreme poverty access to products and resources far beyond what is available within their borders. The net benefits of trade move across nations, income groups, races, genders, and people of differing political views and cultural values. Can you imagine the difficulty involved in and costs associated with producing your own housing, clothing, and food, to say nothing of computers, smart devices, dishwashers, automobiles, and vaccines without trade? People who acquire these things have them largely because their economies are organized in ways that motivate individuals to cooperate, specialize, and trade. Countries that impose obstacles to exchange—either domestic or international—reduce the ability of their citizens to achieve gains from trade and to enjoy more prosperous lives.

**Video:**

**Economics of Voluntary Exchange**

## ELEMENT 1.5

# 5. Transaction Costs Are Obstacles to Trade

*“A large part of what we think of as economic activity is designed to accomplish what high transactions costs would otherwise prevent.”*

— Ronald Coase

Voluntary exchange promotes cooperation and helps us get more of what we need, want, and value. Trade itself, however, is costly. It takes time, effort, and other resources to search out potential trading partners, negotiate terms, determine risks, and complete exchanges. Resources spent in these ways are called **transaction costs**<sup>(?)</sup>, and they are obstacles to the creation of wealth. They limit both our productive capacity and the realization of gains from mutually advantageous trades.

Transaction costs are sometimes high because of physical obstacles, such as oceans, rivers, and mountains, which make getting products to customers difficult. Investment in roads, transportation, and communication improvements can reduce these transaction costs. In other instances, transaction costs may be high because of the lack of information. For example, you may want to buy a used car, but you don't know someone willing to sell a reliable car at an attractive price. The time and energy spent searching for a car, assessing trustworthiness, and negotiating a price are part of your transaction costs. In still other cases, transaction costs are high because of political obstacles, such as taxes, licensing requirements, price controls, and **tariffs**<sup>(?)</sup>. Regardless of whether the roadblocks are physical, informational, or political, high transaction costs reduce the potential gains from trade.

People who help others arrange trades and make better choices reduce transaction

costs. They help promote economic progress. Such specialists are sometimes called **middlemen**<sup>(?)</sup>. They include campus bookstores, real estate agents, stockbrokers, automobile dealers, and a wide variety of merchants. Many people claim that middlemen merely increase the price of goods and services without providing benefits. If this were the case, people would not choose to use their services. Transaction costs are obstacles to trade, and middlemen reduce these costs and benefit others through their services. This is why people value their services and are willing to pay for them.

**Video:**

**[The Economics of the Shawshank Redemption](#)**

The grocer, for example, is a middleman. Of course, today's giant supermarkets reflect the actions of many people, but together their services are those of a middleman. Without the grocer, think of the time and effort involved in preparing even a single meal. You would have to deal directly with farmers when purchasing vegetables, citrus growers when buying fruit, dairy operators if you want milk or cheese, and ranchers or fishermen if you want to serve beef or fish. Grocers make these contacts for you and other consumers, place the items in convenient selling locations, and maintain reliable inventories. The services of grocers and other middlemen reduce transaction costs significantly, helping potential buyers and sellers realize gains from trade. These services increase the volume of trade, promote economic progress, and release resources for other uses.

The amazing growth of online marketplaces such as Amazon, Alibaba, AliExpress, Lazada, and others illustrate the importance of reductions in transaction costs. In just two decades, Amazon grew from a small online bookstore to the world's largest retailer. Alibaba, in less than three decades, has emerged as one of the top ten most valuable companies globally. How was this achieved? The reduction in transaction costs is the key. These platforms, among others, have rapidly expanded by cutting down the costs associated with buying and selling. Customers no longer need to go from one physical store to another to find what they need. Instead, they can easily compare products, prices, and reviews online. With just a few clicks,

their purchases are made and the products are shipped directly to their homes.

In recent years, technology has reduced the transaction costs of numerous exchanges. In a few swipes on a device, buyers can now acquire information about potential sellers of almost every product. Apps are routinely used to shop for groceries, clothing, household items, and homes. They locate hotel rooms and flights, obtain tickets for major events, and even share rides.

Similarly, technological improvements and discovery of better ways of doing things have vastly reduced the cost of shipping goods in recent decades. Adjusted for inflation, the cost of shipping per ton via both ocean and air is now less than 50 per cent of what it was the early 1970s. These reductions in transaction costs, including transport costs, have increased the volume of trade, expanded our production, and enhanced our living standards. They have played a central role in the worldwide rapid growth of per-person income and huge reductions in poverty.

## ELEMENT 1.6

# 6. Prices Align Buyers and Sellers

*“Lowering prices is easy. Being able to afford to lower prices is hard.”*

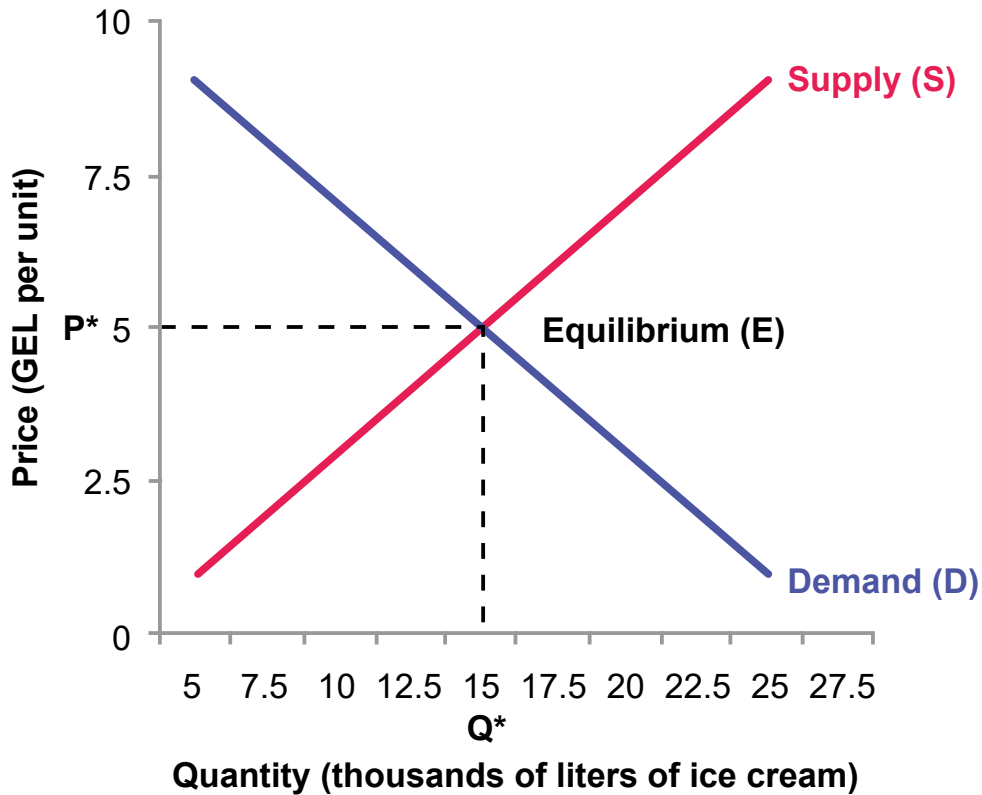
— Jeff Bezos

Market prices influence the choices of both buyers and sellers. When the price of a product rises, purchasing the item is more expensive and consumers normally choose to buy less. Thus, there is a negative relationship between the price of a good or service and the quantity demanded. This negative relation is known as the **law of demand**<sup>(?)</sup>.

For sellers, the rise in the price of a product brings extra revenue that makes them willing to supply more. Thus, there is a positive relationship between the price of a good and the quantity producers will supply. This positive relationship is known as the **law of supply**<sup>(?)</sup>.

Economists often use graphics to illustrate the relationships among price, quantity demanded, and quantity supplied. When doing so, the price of a good is placed on the vertical y-axis and the quantity per unit of time (for example, a week, month, or year) on the horizontal x-axis. Using ice cream as an example and the Georgian Lari (GEL) as the currency, Exhibit 2 illustrates the classic demand-and-supply graphic. The demand curve indicates the various quantities of ice cream that consumers will purchase at alternative prices. Note how the demand curve slopes downward to the right, indicating that consumers will purchase more ice cream as its price declines. This is merely a graphic representation of the law of demand. (Note, that a “curve” is any set of points along a line. This means that a straight line is simple one type of curve. In other works, demand and supply curves may not be shown as a straight line. Don’t get confused!)

**Exhibit 2: Demand, Supply, and Equilibrium Price**



The supply curve indicates the various quantities of ice cream that producers are willing to supply at alternative prices. As Exhibit 2 illustrates, the curve slopes upward to the right, indicating that producers will be willing to supply larger quantities at higher prices. The supply curve provides a graphic representation of the law of supply.

Now for a really important point: The price will tend to move toward a level—GEL 5 per liter of ice cream in our example—that will bring the quantity demanded into equality with the quantity supplied. At the **equilibrium**<sup>(?)</sup> price of GEL 5, consumers will want to purchase 15,000 liters of ice cream per day. This is the same quantity that ice cream producers are willing to supply. Price coordinates the choices of both consumers and producers of ice cream

and brings them into balance.

If the price is higher than GEL 5, for example GEL 7, producers will want to supply more ice cream than consumers will want to purchase. This means that at GEL 7, producers will be unable to sell as much as they would like. Inventories will rise, and this excess supply will lead some producers to cut their price to reduce their inventories. The price will tend to decline until the GEL 5 equilibrium price is reached. As long as the price is above equilibrium, market forces will push the price downward.

Correspondingly, if the price of ice cream is less than GEL 5, for example GEL 3, consumers will want to purchase more than producers are willing to supply. This GEL 3 price generates excess demand, leaving producers without adequate inventories. Upward pressure on price will move it back toward the equilibrium of GEL 5. The choices of buyers and sellers will be consistent with each other only at the equilibrium price, and the market price will gravitate toward this level.

The auction system on eBay illustrates the operation of demand and supply in a setting that is familiar to many. On eBay, sellers enter their reserve prices—the minimum prices they will accept for goods. Buyers enter their maximum bids—the maximum prices they are willing to pay. The auction management system will bid on behalf of the buyers in predetermined monetary increments. Bidding ensues until the trading period expires or a person agrees to pay the stated “Buy It Now” price. Exchange occurs only when buyers bid a price greater than the seller’s minimum asking price. But when this happens, an exchange will occur, and both the buyer and seller will gain. Remember, voluntary trade is mutually beneficial.

Though somewhat less visible than the electronic market eBay, the forces of demand and supply in other markets work similarly. The height of the eBay demand curve indicates the maximum amount the consumers are willing to pay for another unit of the good, while the height of the supply curve shows the minimum price at which producers are willing to supply another unit. When the price is between the maximum the consumer is willing to pay and the minimum offer price of a seller, potential gains from trade are present. Moreover, when the equilibrium price is present, all potential gains from exchange will be realized by both consumers and producers.

Marginal thinking explains why, when the equilibrium price is present, buyers and

sellers will have an incentive to make mutually advantageous exchanges and the outcome will be efficient. Consumers purchase only those units that bring them more value than the actual price. Similarly, producers supply only those units that can be sold at a price that covers cost. When the equilibrium price is present, units will be produced and purchased as long as the value of the good to consumers exceeds the cost of the resources required for their production. The implication: market prices not only bring the quantity demanded and quantity supplied into balance, but they also direct producers to supply those goods that consumers value more than their cost of production. This holds true in any market.

Of course, we live in a dynamic world. Through time, changes will occur. They will alter the demand and supply of goods and services. Factors such as consumer income, prices of related products, expectations about future prices, government policy changes, and the number of consumers in the market area will influence the demand for a good. Changes in any of these factors will change the amount of a good consumers will want to purchase at the various possible prices. Put another way, changes in these factors will cause a change in demand, a shift in the entire demand curve.

It is important to distinguish between a change in demand—a shift in the entire demand curve—and a change in quantity demanded, a movement along a demand curve as the result of a change in the price of the good. It is important note to students: failure to distinguish between a change in demand and a change in quantity demanded is one of the greatest challenges students face. Questions on this topic are favorites of many economics instructors, so make sure you understand this difference!

**Read:**

**Sacrificing Lives for Profits by Dwight Lee**

**Exhibit 3: An Increase in Demand Leads to a Higher Price**

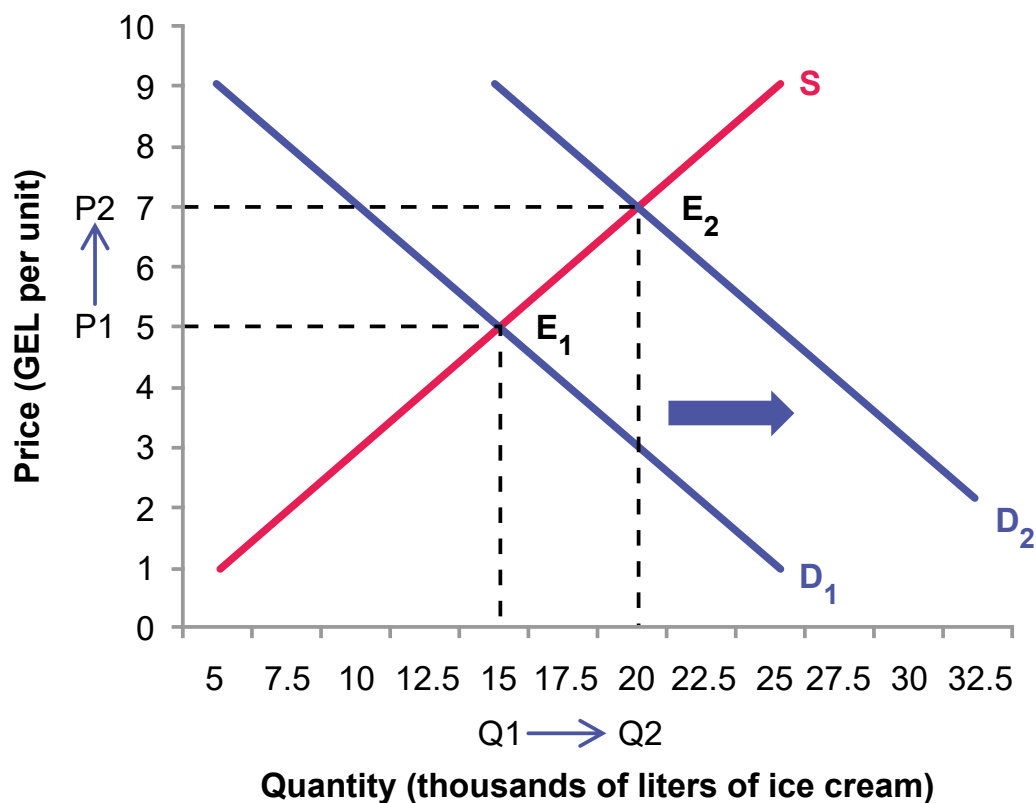


Exhibit 3 illustrates the impact of an increase in demand on the market price of a good. Suppose there is an increase in consumers' incomes or a rise in the price of frozen yogurt, a common substitute for ice cream. These changes will increase the demand for ice cream, causing the demand curve to shift to the right, from  $D_1$  to  $D_2$ . In turn, the stronger demand will push the equilibrium price of ice cream upward from GEL 5 to GEL 7. At the new higher equilibrium price, the quantity demanded by consumers will once again be brought into balance with the quantity supplied by producers. Note: The increase in demand (the shift in the entire demand curve) will result in an increase in the quantity supplied from 15,000 to 20,000 (a movement along the existing supply curve).

A reduction in consumers' incomes or lower frozen-yogurt prices would exert the opposite impact. These changes would reduce the demand for ice cream (shift the demand curve to the left), lower the price, and reduce the equilibrium quantity exchanged.

**Video:**

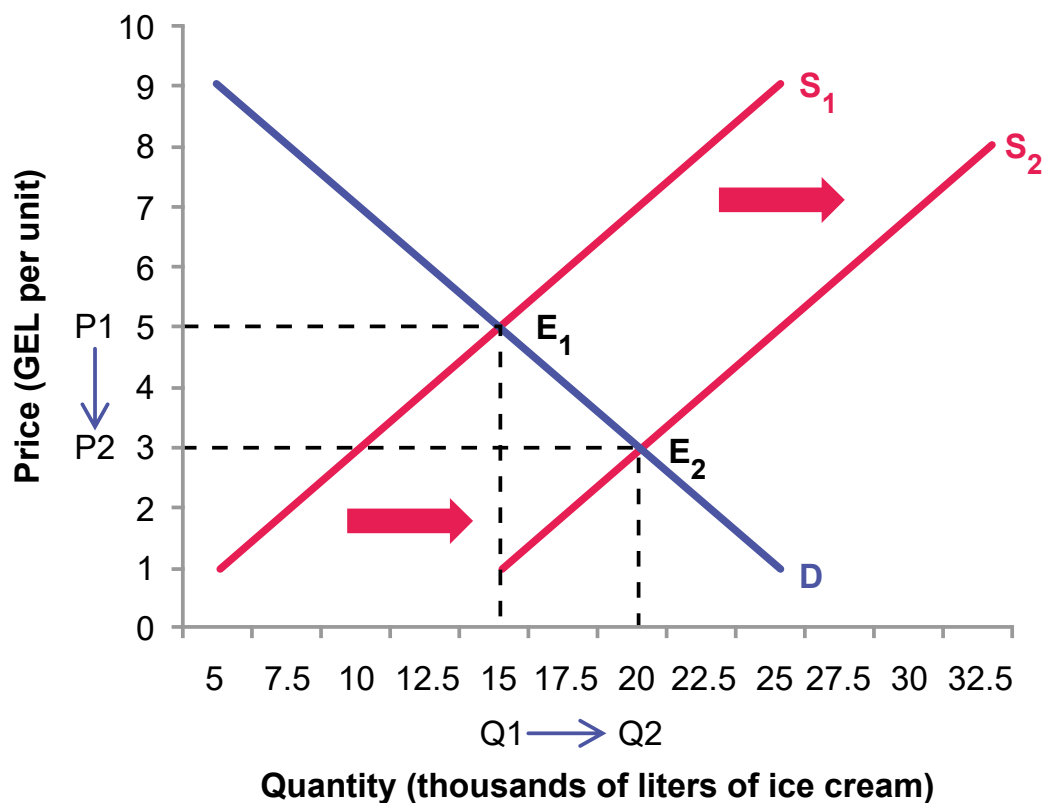
**Is “Price Gouging” Bad?**

Now let's turn to the supply side of a market. Changes that alter the per-unit cost of supplying a good will cause the entire supply curve to shift. For example, an improvement in technology, lower prices for the resources used in production, or subsidies to the producers will increase supply, causing the entire supply curve to shift to the right. In contrast, changes that make it more expensive to produce the item—such as higher prices for the materials used to produce the item or higher taxes imposed on the producers—will reduce supply, causing the supply curve to shift to the left.

Suppose there is a reduction in the prices of cream and milk, ingredients used to produce ice cream. What impact will these resource price reductions have on the supply and market price of ice cream? If your answer is that supply will increase and the market price will decline, you are correct. Exhibit 4 illustrates this point within the demand-and-supply framework. The lower prices of cream and milk will reduce the per-unit cost of producing ice cream, causing the supply curve to shift to the right (from  $S_1$  to  $S_2$ ). As a result, the equilibrium price of ice cream will decline from GEL 5 to GEL 3. At the new lower price, the quantity demanded will increase and once again equal the quantity supplied at 20,000 liters per day. Note: The increase in the supply—that is, the shift of the entire curve — lowered the price of ice cream and increased the quantity demanded, a movement along the existing demand curve.

What if changes had occurred that increased the cost of producing ice cream—for example, higher prices for the ingredients? Then the results would be just the opposite: a decrease in supply—that is, a shift in the curve to the left—an increase in the price of ice cream, and a reduction in the quantity exchanged.

**Exhibit 4: An Increase in Supply Leads to a Lower Price**



Market adjustments like the ones outlined here do not take place instantaneously. It takes time for both consumers and producers to adjust fully to new conditions. In fact, the adjustment process we are describing is constantly changing in a dynamic world.

Technological developments make the dynamism and price adjustments reacting to shifts in demand and supply even more noticeable. Have you taken an Uber or Yandex ride recently? The price for a given ride can vary minute-to-minute. On a rainy day more people decide not to walk (demand goes up) and more drivers stay home (supply goes down) so the price rises.

The impact of changes in demand and supply and factors that underlie shifts in these

curves are central to the understanding of the market process. Demand-and-supply analysis will be utilized again and again throughout this book.

**Video:**

**[The Economics of the Hudsucker Proxy](#)**

## ELEMENT 1.7

# 7. Profits Are a Guide to Productivity

*“Profit is not the proper end and aim of management – it is what makes all of the proper ends and aims possible.”*

— David Packard

**Video:**

**Economic Profit and Costs**

Businesses purchase (or rent) natural resources, labor, capital (machines, tools, and other productive assets), and entrepreneurial talent. These productive resources are then transformed into goods and services that are sold to consumers. In a market economy, producers must bid resources away from their alternative uses because the owners of the resources will supply them only at prices at least equal to what they could earn elsewhere. The payments required to bid the resources away from their other potential uses are a producer’s opportunity cost of supplying a good or service.

There is an important difference between the opportunity cost of production and standard accounting measures of cost of the business firm. Accountants focus on the calculation of the firm’s net income, which is slightly different from economic **profit**<sup>(?)</sup> because it omits the opportunity cost of assets owned by the firm. Economists consider the fact that the assets can be used in alternative ways. Accountants also omit the value of the time and effort that owners put into their business over and above what they are paid in salary.

While accountants omit these opportunity costs, economists do not.<sup>(7)</sup> The butcher on the corner might close down and rent her shop to another store. She might also take a job in the

local supermarket. Both of these are real costs of remaining a butcher. As a result, the firm's net income will overstate profit, as measured by the economist. Unless these opportunity costs are covered, profits will eventually diminish and resources will be shifted to other productive activities.

A firm's profit can be calculated in the following manner:

$$\text{Profit} = \text{Total Revenue} - \text{Total Cost}$$

The firm's total revenue is simply the sales price of all goods sold (P) times the quantity (Q) of all goods sold. In order to earn a profit, a firm must generate more revenue from the sale of its product than the opportunity cost of the resources required to make it. Thus, a firm will earn a profit only if it is able to produce a good or service that consumers value more than the cost of the resources required for its production.

Consumers will not purchase a good unless they value it as much, or more, than the price. If consumers are willing to pay more than the production costs, then the decision by the producer to bid the resources away from alternative uses is a profitable one. Profit is a reward for transforming resources into something of greater value than costs.

Business decision-makers will seek to undertake production of goods and services that will generate profit. On the other hand, things do not always turn out as expected. Sometimes business firms are unable to sell their products at prices that cover costs. **Losses**<sup>(?)</sup> occur when the total revenue from sales is less than the opportunity cost of the resources used to produce a good or service. Losses impose a penalty on firms when they produce goods and services that consumers value less than the resources required for their production. The losses indicate that the resources would have been better used producing other things.

Suppose, in Bulgaria (where the currency is the Bulgarian Lev, BGN), it costs a shirt manufacturer BGN 20,000 per month to lease a building, rent the required machines, and purchase the labor, cloth, buttons, and other materials necessary to produce and market one thousand shirts per month. If the firm sells the one thousand shirts for BGN 22 each, monthly revenue is BGN 22,000. Profit is BGN 2,000. The firm has created wealth. By their willingness to pay more than the costs of production, consumers reveal they value the shirts more than the resources required for their production. The firm's profit is a reward for increasing the value of resources by converting them into the more highly valued product.

On the other hand, if the demand for shirts declines and they can be sold only for BGN 17 each, then the firm will earn BGN 17,000, losing BGN 3,000 a month. This loss occurs because the firm's actions reduced the value of the resources used. The shirts—the final product—were worth less to consumers than the value of other things that could have been produced with the resources. We are not saying that consumers consciously know that the resources used to make the shirts would have been more valuable if converted into some other product. Their combined choices, however, and the prices they are willing to pay provide valuable information to the firm, along with creating an incentive to take steps to reduce the loss. In the example above, the firm was in some sense “surprised” by the unexpected low price of their shirts, for this reason, producers typically spend a great deal of money and effort trying to anticipate demand for their products, thereby creating a large number of jobs for economists as well as tailors.

In a market economy, losses and business failures work constantly to bring inefficient activities—such as producing shirts that sell for less than their cost—to a halt. Losses and business failures will redirect the resources toward the production of other goods that are valued more highly. Thus, even though business failures are often painful for the owners, investors, and employees involved, there is a positive side. They release resources that can be directed toward wealth-creating activities.

The people of a nation will be better off if resources—available land, buildings, labor, and entrepreneurial talent—produce valuable goods and services. At any given time, an endless array of investment activities can be undertaken. Some of these investments will increase the value of resources by transforming them into goods and services that consumers value more highly than cost. These will promote economic progress. Other investments will reduce the value of resources and slow economic progress. If we are going to be wise stewards of available resources, activities that increase value must be encouraged, while those that use resources counterproductively must be discouraged. This is precisely what profits and losses do.

We live in a world of changing tastes and technology, changing government policies, imperfect knowledge, and uncertainty. Business owners cannot know with certainty the future of market prices or production costs. Their decisions are based on expectations. As a student

you may spend far more this year for tuition and books than you could possibly earn now in the job you give up in order to study. You do this because you expect the rewards to increase in future periods.

A researcher (often a firm) with an idea for a new breakthrough drug to treat cancer may spend hundreds of millions of dollars before making a single sale. On the other hand, unless the government regulates prices in a way that these “up-front” costs cannot be recovered, the investment in the new cure will be made. It is still the reward-penalty structure of a market economy that is clear. If you think about it, the issue of drug invention is interesting. The sales of a medication that works must also recover all the money invested in ones that don’t work out. A pill that sells for thousands of dollars may actually cost only pennies to produce once it passes all the tests to get to market. Many developed nations ban imports of drug from abroad, not because they don’t think they are safe, but more often (although they don’t tell consumers this) as a form of “foreign aid” whereby life-saving medications can be sold to citizens in developing countries at close to their production cost while the health care system in the developed country bears the development cost.

**Entrepreneurs**<sup>(?)</sup> who produce efficiently and correctly anticipate the goods and services that attract consumers at prices above production costs will prosper. Those that do not, will not prosper. Entrepreneurship and business ownership are not synonymous. There is an inclination to think that entrepreneurs are always the owners of a firm, but this is not necessarily the case. Owners, particularly large corporations with many shareholders, often retain entrepreneurs who provide the firm’s strategy and direction. Similarly, entrepreneurs often seek investors who provide financial capital in the form of ownership shares, even though the entrepreneur will determine the direction of the business.

Entrepreneurship typically involves high degrees of financial risk. Some criticize the fact that business failures can accompany the market process. Business owners who allocate resources inefficiently, into areas where demand is such that the firm is unable to cover its costs, will face losses, financial difficulties and, if they don’t adapt will eventually go out of business. Think for a moment about how this private enterprise behavior differs from that of governments which, as we will discuss later, can force customers (taxpayers) to buy services to which they attach little value.

Interestingly, many entrepreneurs who initially flounder or fail eventually succeed in a big way. For example, after leaving Apple in 1985 Steve Jobs founded NeXT, the firm he thought would produce the next generation of personal computers. After Apple suffered a three-year tailspin of serious losses and falling stock prices in the 1990s, it bought NeXT and brought back Steve Jobs in 1997. Soon after, he reorganized Apple and introduced the iPhone, the iPad, plus many other innovative, highly profitable products and services that have continued to succeed spectacularly in the marketplace.

The bottom line is straightforward: profits direct business investment toward productive projects that promote economic progress, while losses channel resources away from projects that are counterproductive. This is a vitally important function. Economies that fail to perform this function well will almost surely stagnate or even regress.

**Video:**

**[The Price System](#)**

## ELEMENT 1.8

# 8. The “Invisible Hand” Promotes the General Welfare

*“Every individual is continually exerting himself to find out the most advantageous employment for whatever capital he can command. It is his own advantage, indeed, and not that of the society, which he has in view. But the study of his own advantage naturally, or rather necessarily, leads him to prefer that employment which is most advantageous to society. . . . He intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was not part of his intention.”<sup>(8)</sup>*

— Adam Smith (1776)

**Video:**

**Invisible Hand Steak**

Self-interest is a powerful motivator. As Adam Smith noted long ago, as if directed by an **invisible hand**<sup>(?)</sup>, self-interested individuals have a strong incentive to undertake actions that promote the general prosperity of a community or nation. The “invisible hand” to which Smith refers is the price system. The individual “intends only his own gain” but is directed by the invisible hand of market prices to promote the goals of others, contributing to greater prosperity.

The principle of the “invisible hand” can be difficult to grasp. There is a natural tendency to perceive that orderly outcomes can only be achieved when someone is in charge or

through directions from a centralized authority. Yet Adam Smith contended that pursuing one's own advantage creates an orderly society in which demands are routinely satisfied without centralized planning. This order occurs because when private property and freedom of exchange are present, market prices will direct self-interested individuals toward actions that promote the general welfare. One statistic—the current market price of a particular good or service—provides buyers and sellers with what they need to bring their actions into harmony with the preferences and choices of others. Market prices register the choices of millions of consumers, producers, and resource suppliers. They reflect information about consumer preferences, costs, and matters related to timing, location, and circumstances—information that in any large market is well beyond the comprehension of any individual or central-planning authority.

Have you ever thought about why your local grocery stores have approximately the right amount of milk, bread, vegetables, and other goods—quantities large enough that the goods are nearly always available but not so large that it results in a lot of spoilage and waste? How is it that refrigerators, automobiles, and touch-screen tablets produced at diverse places around the world, are available in your local market in about the quantities that consumers desire? Of course, this is given the costs of their production. We would all “desire” more if they were produced for nothing or someone or somebody (perhaps the government) gave them to us for free! Unfortunately, almost nothing we value can be produced costlessly except perhaps love and laughter, so free lunches are never really free – somebody else always pays. Where is the technical manual for businesses to follow to get this done? Of course, there is no manual. The invisible hand of market prices performs the task. It directs self-interested individuals into cooperative action and brings their choices into line with each other through price signaling, as described in Element 1.6.

The 1974 Nobel laureate F. A. Hayek called the market system a “marvel.” A single indicator, the market price, spontaneously carries so much information that it guides buyers and sellers to make decisions that help both obtain what they want.<sup>(9)</sup> The market price of a product reflects thousands, even millions, of decisions made around the world by people who don't know what the others are doing. For each product or service, the market acts like a cloud-based network grinding out an indicator that gives all participants both the information they

need and the incentive to act on it.

Throughout human history, no individual or central-planning authority has been able to obtain or consider all the information needed for millions of consumers and producers to coordinate their actions the way markets do. Moreover, market prices contain this information in a distilled form. They direct producers and resource suppliers toward production of those things that consumers value most (relative to their costs). No one has to force a farmer to raise apples or tell a construction firm to build houses or convince a furniture manufacturer to produce chairs. When the prices of these and other products indicate that consumers value them as much or more than their production costs, producers seeking personal gain will supply them.

Nor is it necessary for anyone to remind producers to search for and use low-cost methods of production. Self-interest directed by market prices provides suppliers with the incentive to seek out the best combination of resources and the most cost-effective production methods. Because lower costs mean higher profits, each producer strives to keep costs down and quality up. In fact, competition virtually forces them to do so. In a modern economy, the cooperation that comes from self-interest directed by the invisible hand of market prices is truly amazing. The next time you prepare a nice dinner, think about all the people who helped you make it possible. It is unlikely that any of them, from the tractor producer, to the farmer, to the truck driver, to the grocer, was motivated by concern that you have an enjoyable meal at the lowest possible cost. Market prices, however, brought their interests into harmony with yours. Farmers who raise the best beef or turkey receive higher prices. Truck drivers and grocers earn more money if their products are delivered fresh and in good condition to the consumer, and so on, while always using the lowest-cost means to do so. Literally tens of thousands of people, most of whom we will never meet, make contributions that help each of us consume a bundle of goods that is far greater than what we could produce for ourselves.

Further, the invisible hand works so quietly and automatically that the order, cooperation, and vast array of goods available are largely taken for granted. Even though underappreciated, the combination of self-interest and the invisible hand is nonetheless a powerful force for economic progress.

**Video:**

**The Invisible Hand**

## ELEMENT 1.9

# 9. Beware of Unintended Consequences

*“When making choices, or setting policies about the economy, education or medicine, society is best served by electing people who are particularly hardworking, intelligent and interested in long-term thinking.”*

— Bill Gates

In 1946, Henry Hazlitt, a famous economic journalist, wrote a book titled *Economics in One Lesson*. This economics primer, which builds on an 1850 essay by Frédéric Bastiat, a French economist and member of the French parliament, is perhaps the all-time best-selling treatise on economics.

The book starts with the story of a young boy whose thrown ball breaks the window of a shopkeeper. As a result, the shopkeeper hires a glazier to fix it. Some observers, noting the highly visible employment of the glazier, argue that the broken window is a good thing. It created a job for the glazier. As Hazlitt stresses, however, this is shortsighted because it ignores **secondary effects**<sup>(?)</sup>.

If the shopkeeper had not spent the funds fixing the window, he would have spent them on other things, perhaps a pair of shoes, new clothes, or similar items. If the window had not been broken, employment in these other areas of production would have been larger. The community would have had both the window and the items purchased by the shopkeeper. Once the secondary effects are considered, it is clear that destructive actions, such as the broken window or those resulting from floods, hurricanes, and counterproductive policies, harm a society. They reduce the availability of goods and fail to expand net employment: Jobs gained in one place are lost in other areas. The view that destructive acts create employment and are good for the economy is now known as the “broken-window fallacy,” which we discuss in

more detail in section 1-11.

Hazlitt's one lesson was that when analyzing an economic proposal, a person

*“. . . must trace not merely the immediate results but the results in the long run, not merely the primary consequences but the secondary consequences, and not merely the effects on some special group but the effects on everyone.”<sup>(10)</sup>*

Hazlitt contended that failure to consider the future effects of today's policies is the most common error in public economic decision-making. He wrote extensively on the economy during the Great Depression of the 1930s. He highlighted, especially in politics, the tendency to stress the short-term benefits of a policy while ignoring the longer-term, often unintended consequences.

Let's consider a couple of examples that illustrate the potential importance of secondary effects. In an effort to reduce gasoline consumption, different governments mandate that automobiles be more fuel-efficient, by imposing a higher excise tax for the vehicles with higher weight and bigger engines. Is this regulation a sound policy? It may be, but the secondary effects must be considered when evaluating the overall impact of the policy.

In order to achieve the mandated fuel efficiency, auto manufacturers reduced the size and weight of cars, making them less crash-worthy. As a result, there are more highway deaths than would otherwise have occurred. Furthermore, because the higher mileage standards for cars and light trucks make driving cheaper, people tend to drive more than they otherwise would. This increases congestion and results in a smaller reduction in gasoline consumption than initially projected. Once you consider the secondary effects, the fuel efficiency regulations are less beneficial than the projections of their proponents. They may even be counterproductive.

Proponents of trade restrictions, such as tariffs and **import quotas**<sup>(?)</sup>, often argue that they increase employment. This may be true in the industries protected from international competition. But consideration of the secondary effects on consumer behavior and other industries should cause one to seriously question the view that the restrictions increase overall employment.

The Common Agricultural Policy (CAP) of the European Union, launched in 1962, restricts the sales of foreign-produced agri-products through imposed quotas and tariffs. Among its aims, the CAP policy seeks to support farmers, enhance agricultural productivity, and ensure a stable supply of affordable food. Undoubtedly, the sector ends up being larger than it would otherwise be. What about the secondary effects, however? Shouldn't they also be considered?

The budgetary expenditure on the CAP, amounting to €386.6 billion from the EU budget (2021-2027) has ramifications beyond the agricultural sector. It crowds out potential allocations for other European public goods activities, hindering the diverse use of EU funds. Simultaneously, border protection maintains local prices higher than the competitive price. Proponents argue that the CAP contributes to maintaining the EU farm and food sectors up to 8% larger than if the CAP did not exist. Consequently, EU consumers pay more for agricultural products. Individual families find themselves paying twice for their food. They pay higher prices due to the protectionist approach in the agricultural sector, which raises prices in stores. Additionally, they contribute through taxes to subsidies supporting the agricultural sector. Moreover, the CAP indirectly affects other firms involved in producing food by processing agri-products. Because foreigners sell fewer agri-products in the EU market, they have less purchasing power to buy EU exports. This, in turn, reduces EU employment.

When the secondary effects of trade restrictions, like the EU's Common Agriculture Policy, are taken into consideration, there is no reason to expect net EU employment to increase. There may be more jobs in favored industries, but there will be less employment in others. Trade restrictions reshuffle employment rather than increase it. Clearly, when evaluating policies, informed consideration of secondary effects is an important ingredient of the economic way of thinking.

Secondary effects are not just a problem with political decision-making. They can also lead to unanticipated outcomes for individuals. The experience of a first-grade teacher in West Virginia illustrates this point. Her students constantly lost their pencils, so she reasoned that paying them 10 cents per stub would incentivize them to hang on to their pencils until all was used up. To her dismay, the students soon formed long lines at the pencil sharpener, creating stubs just as fast as she could pay for them. In one famous experiment, two economists studied

what happened when a day care center in Israel decided to start charging parents for being late for picking up their children. Once it was clear there was only a small money price rather than shaming for such tardiness, the share of parent being late increased significantly. Despite this evidence, in early 2024 a school in Colorado announced that parents between 1 and 5 minutes late would pay a fine of \$10, but those minutes late would pay \$35. It shouldn't take an economic genius to predict what will happen to traffic accidents in that neighborhood! It always makes sense to be alert for unintended consequences!

**Read:**

**What Is Seen and What Is Not Seen by Frédéric Bastiat**

## 10. Value Creates Income and Wealth

*“The secret of making progress is to get started.”*

— Mark Twain

People differ in many ways—in their productive abilities, specialized skills, career preferences, work attitudes, and willingness to take risks. These differences influence people’s incomes because they affect the value of the goods and services they are willing and able to provide to others at attractive prices and wages.

In a market economy, it is advantageous to produce goods, develop skills, and take actions others value highly. There is a moral here: If you want to earn a lot of income, figure out how to provide others with goods and services they value highly relative to their cost. Even if you don’t strive to earn a lot of income and, instead, want to help the world, use the economic way of thinking to choose which charitable works, social endeavors, and nonprofit activities make the most sense among the various alternatives. In all scenarios, gather information about available resources and consider opportunity costs to make those choices that help you gain the most by supplying what is valued at the least cost. If you are unable or unwilling to help others in ways they value, your income will be low.

This direct link between helping others and receiving income gives each of us a strong incentive to acquire skills, develop talents, and cultivate habits that help us provide others with valuable goods and services. College students study for long hours, endure stress, and incur financial costs in order to become doctors, teachers, accountants, and engineers. Other people acquire training, certification, and experience that will help them become electricians, maintenance workers, or web-site designers. Still others invest and start businesses. Why do people do these things? How do they survive and thrive?

Some people think that high-income individuals must be exploiting others. But people who earn high incomes in the marketplace generally do so by providing consumers with what they value and at attractive prices. Consider billionaire David Steward, the chair of World Wide Technology. Steward was born in the segregated southern US states a child in a family of ten. His father worked in a variety of jobs in the service sector, including as a mechanic, janitor, and trash collector. These beginnings influenced Steward in many ways. After earning a college degree, he worked many jobs before launching World Wide Technology in 1990. Through various trials and tribulations, Steward customized existing computer technologies and improved information systems to help for-profit businesses and nonprofit organizations lower their production costs, improve overall efficiency, reach new markets, and enhance customer experiences at lower prices.

Billionaire and millionaire athletes and entertainers have done the same for their fans and customers. They have earned income and accumulated wealth by specializing, developing, and selling their talents and merchandise to others. Even those with enormous talent maximize their income by investing in developing that talent. Ask Russian-Ukrainian choreographer Alexei Ratmansky how many hours he spent honing his talent. Ask Albanian opera star Ermonela Jaho about the sacrifices needed to be successful even for those with great natural talent.

Those who succeed in big ways do so by bringing products to millions of consumers at attractive and acceptable prices. The late Sam Walton, who founded Walmart, became one of the richest individuals in the United States by figuring out how to manage large inventories effectively and selling brand-name merchandise at discount prices to small-town America. Bill Gates and Paul Allen, cofounders of Microsoft, earned their billions by developing a set of products that dramatically improved the efficiency and compatibility of desktop computers. Billions of consumers who have never heard of Steward, Walton, Gates, or Allen have benefited from their entrepreneurial talents and products. These individuals made a lot of money because they helped a lot of people by providing them with things they valued at attractive prices.

**Read:**

**I, Pencil, My Family Tree by Leonard Read**

**Video:**

**Exchange Wealth Creation**

Such examples of “good capitalists” can also be found throughout transition economies. Perhaps not as well-known as Bill Gates, the Czech Pavel Baudiš (Avast), Armenian Hovhannes Avoyan (PicsArt) and Ukrainian Dmytro Zaporozhets (GitLab) have all built multi-billion dollar businesses in the software industry along with vast personal fortunes.

Many people are hostile toward entrepreneurs and the profits they earn. When considering this view, it is important to recognize that the actions of entrepreneurs are a driving force of economic progress. Our living standards today are vastly higher than those of our forbearers fifty or one hundred years ago primarily because entrepreneurs have discovered and developed new products and lower-cost production methods that have improved the quality of our lives. Further, their compensation—profit derived from successful innovative actions—is only a small fraction of the gains they generate for consumers. William Nordhaus, longtime professor of economics at Yale University, estimates that the compensation of entrepreneurs was only 2.2 percent of the total gains their innovative actions generated for consumers during 1948–2001.<sup>(11)</sup> Wow, what a deal! For every \$2.20 earned by entrepreneurs, they generate an estimated gain of \$97.80 for others. Given these figures, it is not surprising that Steward, Walton, Gates, Allen, and millions of other entrepreneurs have exerted such a strong impact on our living standards.

## ELEMENT 1.11

# 11. Productivity Is the Key to High Living Standards

*“Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to only so far as it may be necessary for promoting that of the consumer.”<sup>(12)</sup>*

— Adam Smith

As Adam Smith noted nearly 250 years ago, consumption is the objective of all production. But consumption comes before production only in the dictionary. Income and living standards cannot increase without an increase in the production of goods and services people value.

Elon Musk, Tesla founder and aerospace innovator, recently high-lighted this point artfully when he stated, “If you don’t make stuff, there’s no stuff.” Musk was criticizing the view that government checks could replace lost production during the COVID-19 pandemic. As Musk put it, “This notion that you can just sort of send checks out to everybody and things will be fine are not true.” His point is right on target. The government checks will not buy more if there are not more goods and services available. Instead, they will merely lead to higher prices, which is what happened in 2021 and 2022.

The linkage between more goods and services valued by people and higher living standards is straightforward. Similarly, destruction of goods and services people value will make a society worse off. These propositions are so intuitively obvious, it would seem unnecessary to highlight them. But policies based on the fallacious idea that destroying goods will benefit society have sometimes been adopted. In 1933, the US Congress passed the Agricultural Adjustment Act (AAA) in an effort to reduce the supply of agricultural products

and thus prevent their prices from falling. Under this New Deal legislation, the federal government paid farmers to plow under portions of their cotton, corn, wheat, and other crops. Potato farmers were paid to spray their potatoes with dye to make them unfit for human consumption. Healthy cattle, sheep, and pigs were slaughtered and buried in mass graves to keep them off of the market. Six million baby pigs were killed under the AAA in 1933 alone. The Supreme Court declared the act unconstitutional in 1936, but not before it had kept millions of valuable agricultural products from American consumers. Moreover, under modified forms of the act, even today governments continue to pay various farmers to limit their production, increasing the prices to consumers. While the political demands of those benefiting from the policies are understandable, such programs destroy valuable resources and create artificially high prices. These types of policies make the nation poorer and increase the burden on at-risk communities and low-income households.

The United States is not alone in responding to political pressure to “support” farmers at an enormous cost to taxpayers and consumers. The European Union’s Common Agricultural Policy (CAP) is one of the largest and most controversial parts of the EU’s budget (as was discussed in element 9).

The 2009 US “Cash for Clunkers” program provides another example of politicians attempting to promote prosperity by destroying productive assets—used cars, in this case. Under the Cash for Clunkers program, car dealers were paid between \$3,500 and \$4,500 to destroy older cars traded in for new vehicles. Dealers were required to ruin the car engines with a sodium silicate solution, then smash the cars and send them to the junkyard, assuring that not even the parts could be used in the future. Proponents argued that this policy would stimulate recovery by inducing people to buy new cars even though new cars cost more than used ones. Because of the decline in supply, the price of used vehicles increased. As a result, consumers spent more on both new and used automobiles, meaning that less money was available for saving or spending elsewhere. Thus, the Cash for Clunkers program failed to stimulate total demand. In essence, taxpayers provided \$3 billion in subsidies for new-car purchases, while destroying approximately 700,000 used cars valued at about \$2 billion. Those who could afford new cars were subsidized, while low and middle-income people who depend on used cars were punished. Not surprisingly, new car sales plunged when the program

expired.<sup>(13)</sup> Germany also introduced a scrappage program, which has been estimated to cost taxpayers over \$7 billion, more than twice as much as in the United States.

Similar programs existed in many East European countries, including Russia and Slovakia. Operating between 2005 and 2015 in Romania under the program called “Rabla” (the wreck) over 525,000 cars, eight years or more in age, were scrapped for vouchers worth up to €1,500. An individual could turn in up to three older cars for vouchers to be applied towards new cars.

If destroying automobiles is a good idea, why not require everyone to destroy their automobiles every year? Think of all the new-car sales this would generate. All of this is unsound economics. You may be able to help specific producers by increasing the scarcity of their products, but you cannot make the general populace better off by destroying marketable goods with consumption value. Policies of this type are counterproductive and harmful to society.

A more subtle form of destruction involves government policies that increase the opportunity cost of obtaining various goods. The World Bank Publication *Detox Development 2023* shows that global subsidies for fossil fuels, agriculture, and fisheries are driving degradation of clean air, land, and oceans and harming people, the planet, and economies.<sup>(14)</sup> According to this publication, worldwide subsidies for fossil fuels, agriculture, and commercial fisheries are over \$7 trillion, equivalent to about 8% of the global GDP. Direct government spending in these sectors, known as explicit subsidies, is approximately \$1.25 trillion. Beyond these explicit subsidies, the broader impact on people and the planet, referred to as implicit subsidies, amounts to over \$6 trillion each year. Moreover, agriculture, the essential sector for feeding the world and employing a billion people, is subsidized in ways that foster inefficiency, inequality, and unsustainability. Subsidies play a role in 14 percent of annual deforestation by incentivizing the cultivation of crops near forested areas. Unfortunately, the burden of these implicit subsidies falls disproportionately on the poor. Countries worldwide spend \$35.4 billion a year on commercial fisheries subsidies (2018 data). These transfers leave thousands of fishing-dependent communities struggling to compete with subsidized rivals and threaten the food security of millions of people as industrial fleets from distant lands deplete their oceanic stocks. West Africa, where fishing can be a matter of life and death for the local

people, is being particularly hard hit. Since the 1990s, when foreign vessels, primarily from the EU and China, began to fish on an industrial scale off its shores, it has become impossible for many local fishers to make a living or feed their families.

Politicians and proponents of government spending programs generally exaggerate their benefits and boast about the jobs created. This makes economic literacy particularly important. While employment is often described as a means to create wealth, we must remember that it is not simply more jobs that improve our economic well-being, but rather jobs that produce goods and services that people value. When that elementary fact is forgotten, people are often misled into acceptance of programs that reduce wealth rather than create it.

The focus on artificially creating jobs can be extremely misleading. As we have already discussed in Element 1-9, the great early French economist Frédéric Bastiat clearly pointed out the fallacy in his parable of the broken window from his essay “*Ce qu’on voit et ce qu’on ne voit pas*” (“What is Seen and What is Unseen,” 1850):

*Have you ever witnessed the anger of the good shopkeeper, James Goodfellow, when his careless son has happened to break a pane of glass? If you have been present at such a scene, you will most assuredly bear witness to the fact that every one of the spectators, were there even thirty of them, by common consent apparently, offered the unfortunate owner this invariable consolation—“It is an ill wind that blows nobody good. Everybody must live, and what would become of the glaziers if panes of glass were never broken?”*

*Now, this form of condolence contains an entire theory, which it will be well to show up in this simple case, seeing that it is precisely the same as that which, unhappily, regulates the greater part of our economical institutions.*

*Suppose it cost six francs to repair the damage, and you say that the accident brings six francs to the glazier’s trade—that it encourages that trade to the amount of six francs—I grant it; I have not a word to say against it; you reason justly. The glazier comes, performs his task, receives his six francs, rubs his hands, and, in his heart, blesses the careless child. All this is that which is seen.*

*But if, on the other hand, you come to the conclusion, as is too often the case, that it is a good thing to break windows, that it causes money to circulate, and that the encouragement of industry in general will be the result of it, you will oblige me to call out, “Stop there! Your*

*theory is confined to that which is seen; it takes no account of that which is not seen.”*

*It is not seen that as our shopkeeper has spent six francs upon one thing, he cannot spend them upon another. It is not seen that if he had not had a window to replace, he would, perhaps, have replaced his old shoes, or added another book to his library. In short, he would have employed his six francs in some way, which this accident has prevented.<sup>(15)</sup>*

Bastiat properly refocuses our attention on wealth rather than production. Creating demand for new production by destroying already existing valuable assets is not an effective way to make a society better off.

**Read:**

**Creating Jobs vs. Creating Wealth by Dwight Lee**

It is critical to remember, however, that the argument is not to destroy things in order to replace them. If they are destroyed by accident (say a hail storm) or by someone who seeks personal gain from the destruction (say the window is broken by a robber who gains privately from the jewelry he steals even though society loses) then repairing the window even at the cost of foregone production elsewhere makes sense. Bastiat’s “broken window fallacy” is very different from James Q. Wilson and Thomas Kelling’s equally famous **broken window hypothesis**<sup>(?)</sup><sup>(16)</sup> which claims that a prevalence of disorder creates fear in the minds of citizens who become convinced that the area is unsafe. This withdrawal from the community weakens social controls that previously kept criminals in check. Once this process begins, it feeds itself. Disorder causes crime, and crime causes further disorder and even more crime. This is a clear example of what economists call a “negative” externality.

## ELEMENT 1.12

# 12. There Are Multiple Sources of Progress

*“The law of unintended consequences is the only real law of history.”*

— Niall Ferguson

On the first day of an introductory economics class, the authors of this book often inform students that Americans produce and earn approximately thirty times as much per person today as in 1750. Then we solicit student views on the following question: “Why are workers so much more productive today than two and a half centuries ago?” Think for a moment how you would respond to this question. In fact, you can go back even further. Economists have calculated standards of living going back to the dawn of recorded time. Remarkably, for the average person Thomas Hobbes’ description in his 1651 masterpiece Leviathan of most peoples’ lives as “poor, nasty, brutish and short” was remarkably accurate.

While there is still inequality in the world, developments in recent years have totally changed the picture. Life expectancy at birth in Africa (the world’s poorest continent) has risen from 37.6 years in 1950 to over 68 years today, even accounting for the HIV plague affecting the continent. According to the World Bank the majority of poor residents globally own both a television and a cell phone. Between 2000 and 2022 the fraction of people in Central Asia who are “undernourished” according to the Food and Agriculture Organization of the United Nations has fallen from over 14% to 3%. This remarkable and sustained increase in material standards of living means that the longstanding debate over how to define “poverty” has become increasingly important. Are people poor if they cannot afford an acceptable standard of living (which may rise as a society becomes richer as a whole)? Or, are they poor if they have

incomes below a certain fraction of a country's average income, no matter how large that may be? There is no right answer to this debate. It poses what economists (and philosophers) call a **normative question**<sup>(?)</sup>. What do you think?

What happened in the 18<sup>th</sup> and 19<sup>th</sup> centuries to cause this amazing change, not only in the US but world-wide? Invariably, our students mention three things: First, today's scientific knowledge and technological abilities are far beyond anything imagined in 1750. Second, complex machines and factories, far better roads, and extensive systems of communications make work both easier and more productive. Finally, students mention that in 1750 individuals and families directly produced most of the items that they consumed, whereas today we typically purchase them from others through markets.

Basically, the students provide the correct explanation for human progress even though they have little or no prior knowledge of economics. They recognize the importance of technology, capital (productive assets), trade, and sound **economic institutions**<sup>(?)</sup>. Their responses reinforce our view that economics is the "science of common sense".

We have already highlighted gains from trade and the reduction of transaction costs as sources of economic progress. Economic analysis pinpoints three other sources of higher income levels and living standards: **investments**<sup>(?)</sup> in people and productive assets, advancements in technology, and improvements in economic organizations. Let's consider each of these sources of economic progress.

First, investments in **physical capital**<sup>(?)</sup> (such as tools, machines, and buildings) and **human capital**<sup>(?)</sup> (education, skills, training, and experience of workers) enhance our ability to produce goods and services. Workers can produce more if they use better machines and technology. A logger can produce more when working with a chain saw rather than a hand-operated, crosscut blade. Similarly, a transport worker can haul more with a truck than with a mule and wagon. Likewise, an experienced, highly trained mechanic can fix your automobile more quickly and at a lower cost than an unskilled person can.

Second, advances in technology (the use of brainpower to discover new products and less costly methods of production) spur economic progress. Since 1750, the steam engine, followed by the internal combustion engine, electricity, and nuclear power, replaced human and animal power as the major sources of energy. Automobiles, buses, trains, and airplanes

replaced horses and buggies (and walking) as popular methods of transportation. Technological improvements continue to change our lifestyles. Consider the impact of personal computers, microwave ovens, smart devices, streaming services available anywhere and anytime, heart bypass surgery, hip replacements, air conditioners, and even voice-controlled personal assistants. The introduction and development of these products during the last sixty years have vastly changed the way that we work, play, and entertain ourselves. They have vastly improved our well-being.

Sometimes uniformed people claim that technical progress is bad because it “destroys jobs.” The facts say otherwise. Yes, the jobs in demand will shift and investing in education will become more important, but the primary effect of technical progress is to enable citizens to enjoy much greater material comfort while working far less. In the last 150 years the average number of hours worked per year among workers in developed countries has fallen from over 3,000 to between 1,400 (Germany) to 1,700 (US). The average industrial workers in advanced countries who worked 12 hours a day 6 days a week in 1900 now works an 8-hour day 4 days a week. Average years of schooling among young adults have risen from about 5 in 1900 in the United Kingdom to almost 13 now. And most workers even get time off for vacations. In the early 19<sup>th</sup> century bands of textile workers known as “luddites” burned factories and smashed automatic looms to “save jobs.” Who today would even want those jobs, especially when they produced cloth that today sells for \$1 a yard at an equivalent price of \$25 a yard?

Investment and improvements in technology do not just happen. They rely on investments in human capital. They also reflect the actions of entrepreneurs, people who face risks in hope of profits. No one knows what the next innovative breakthrough will be or just which production techniques will reduce costs. Furthermore, entrepreneurs are often found in unexpected places. Thus, economic progress depends on a system that allows a very diverse set of people from all walks of life to test their ideas to see if they are profitable. This simultaneously discourages the squandering of resources and the pursuit of counterproductive projects.

For this progress to occur, markets must be open so that individuals are free to test their innovative ideas. An entrepreneur with a new product, process, or technology needs to attract

the support of enough investors to finance and sustain the project. But innovative new products must also face the “reality check” of consumers. Do consumers value what an entrepreneur is bringing to the market enough to pay a price sufficient to cover the cost of production? In a competitive market setting, consumers ultimately become judges and jury. If they do not value an innovative product enough to cover its costs, the entrepreneur-producer had best terminate production and move on to other activities. Failure to do so will lead to sustained losses and eventual bankruptcy.

Third, improvements in economic organization promote growth. By “economic organization” we mean the systems that organize human activities and the rules under which people operate—factors often taken for granted or overlooked. How easily can people engage in trade or organize businesses? The legal institutions of a country to a large extent determine the level of trade, investment, and economic cooperation undertaken by its residents. A just and objective legal system protects individuals and their property, enforces contracts fairly, and settles disputes efficiently. It is an essential ingredient for economic progress. In countries and communities without such a legal system, investment will be lacking, trade will be stifled, and the spread of innovative ideas will likely be absent. In Part 2 of this book, we will examine in more detail the importance of the legal structure, economic institutions, peace, and the primary sources of human progress and living standards.

## PART 2

# Seven Major Sources of Economic Progress



### Elements:

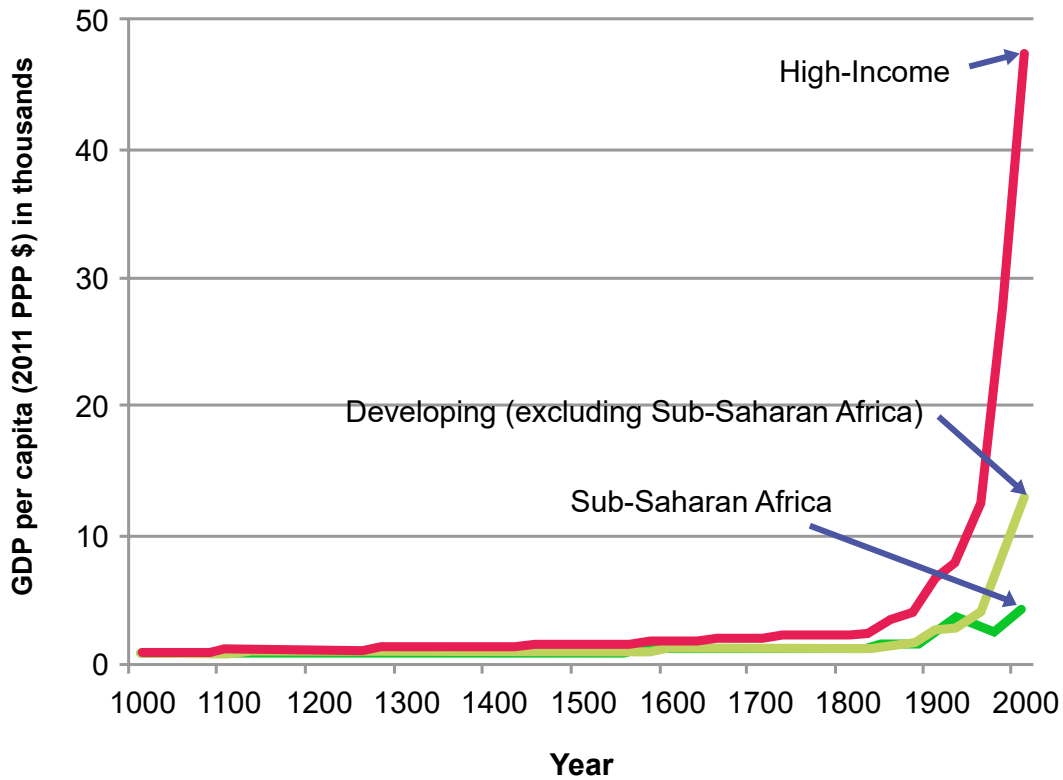
1. The Legal System.
2. Competitive Markets.
3. Sensible and Limited Regulation.
4. Efficient Capital Markets.
5. Monetary Stability.
6. Prudent Fiscal Policy.
7. Free Trade.

## **Economic Growth and Development: The Historical Record**

Robert Lucas, the 1995 Nobel laureate, stated, “Once you start thinking about economic growth, it is hard to think about anything else.”<sup>(17)</sup> Why do Lucas and many other economists place so much emphasis on economic growth? Because the growth of real GDP per capita is the only way for a nation to achieve higher income levels and living standards.

Throughout most of human history, economic growth has been extremely rare. The late Angus Maddison, an economist for the Organization for Economic Cooperation and Development (OECD), is widely recognized as the leading authority on historical income figures. Exhibit 5 presents his estimates of per-person income during the past thousand years. (Income is expressed in 2011 dollars.) Data are presented for the West—twenty-one high-income countries of Western Europe, North America, Oceania, and Japan—along with the parallel figures for developing countries.<sup>(18)</sup>

**Exhibit 5: GDP per Capita (in 2011 PPP dollars) for High-Income and Developing Countries (1000-2018)**



Sources:

1. J. Bolt and J. van Zanden, "Maddison Style Estimates of the Evolution of the World Economy: A New 2020 Update," Groningen Growth and Development Center, October 2020, [www.rug.nl/wp15.pdf](http://www.rug.nl/wp15.pdf)
2. J. Bolt, R. Inklaar, H. de Jong, and J. van Zanden, "Rebasing 'Maddison': New Income Comparisons and the Shape of Long-Run Economic Development" (Maddison Project Working Paper No. 10, 2018), [www.rug.nl/gd174.pdf](http://www.rug.nl/gd174.pdf)

Look at the income figures of Exhibit 5 prior to 1800. There was virtually no change in income per person in either the West or the rest of the world during the eight hundred years before 1800. During this time, people throughout the world worked hard for fifty, sixty, and

seventy hours per week to obtain enough food and shelter for subsistence. They had a constant struggle for survival, and many lost the battle. Even in 1800, living standards were not much different from those a thousand years earlier, or even two thousand years earlier during the time of ancient Rome. Every time incomes rose a bit, what Thomas Malthus called the “iron law of population” kicked in and incomes for the vast majority of humanity fell back to subsistence levels.<sup>(19)</sup>

In the West, this bleak economic story began to change around 1800. In your history and civics classes, you were probably told how the Industrial Revolution changed the world. Newly developed machines, technological improvements, and capital investment resulted in higher income levels and living standards.

This Industrial Revolution certainly made a difference in the West. As Exhibit 5 shows, per-person income in Western Europe, North America, and other parts of the West rose dramatically, from \$1,460 in 1820 to \$2,506 in 1870 and \$5,413 in 1913. By 1950 the per capita income in these regions had soared to \$8,464. Thus, in the West, income rose from \$4 per day in 1820 to \$23 per day in 1950, an increase of nearly 500 percent in 130 years. These figures are based on 2011 prices so they have accounted for price changes over time, meaning that consumers in the West in 1950 were able to buy over 5 times as much food, clothing and other goods as they were in 1800.<sup>(20)</sup>

But only about 15 percent of the world’s population live in developed countries, and the change was much less transformative in other regions. From 1820 to 1950, the **gross domestic product (GDP)**<sup>(?)</sup> per person in the developing countries in Asia, Latin America, the Middle East and North Africa rose from \$816 (a little more than \$2 per day) to \$1,426 (approximately \$4 per day), again in 2011 dollars. This is an average growth rate of only half of a percent per year. The \$4 per day income level of the developing countries in 1950 was still near the subsistence level and approximately the same as that of the high-income countries in 1820. Sub-Saharan Africa was even poorer, with many averaging a per capita GDP of close to \$1 dollar a day, a figure that had not changed in hundreds of years.

**Read:**

**Gross Domestic Product—What is it and how is it measured?**

In other words, while the Industrial Revolution generated growth in Western Europe, North America, Oceania, and Japan, its impact on the 85 percent of the population living elsewhere was minimal. People in some of these countries did a little better during this period than prior to 1800, but not much. Now look at what has happened during the past half century. Since 1950, something like a second economic revolution has occurred, and this time it has moved through the entire world. For the first time in history, the rest of the world has also achieved sustained economic growth and income levels well above subsistence. The latest wave of rising per-person real-income levels occurred first in developing countries outside of sub-Saharan Africa, but more recently, sustained growth has also occurred in even the latter region. As Exhibit 5 shows, the real per capita GDP (adjusted for inflation) of the developing countries outside of sub-Saharan Africa rose from \$1,698 in 1960 to \$11,820 in 2018, a whopping increase of 596 percent. This increase in just 58 years was even larger than the growth of per capita GDP in the West during the 130 years following 1820. Moreover, during 2000–2018, the per capita GDP of sub-Saharan African countries rose by 67 percent in just 18 years.<sup>(21)</sup>

After a bleak period at the start of the transition, post-communist countries have also seen rapid growth. Between 2002 and 2022, Azerbaijan, Armenia, and Georgia experienced remarkable economic growth, with their real GDP per capita more than tripling. Indeed, in 2022 alone each of these countries saw growth rates in excess of 10%. In the same period, Kazakhstan, Mongolia, Tajikistan, and Uzbekistan also saw substantial progress, with their real GDP per capita more than doubling.<sup>(22)</sup>

As history illustrates, economic growth does not happen automatically. What are the key sources of economic growth and human progress? Why do some countries grow and achieve high levels of income while others stagnate? How can the pattern of economic growth shown in Exhibit 5 be explained?

The modern view of development recognizes that institutions and policies exert a major

impact on growth. By institutions we mean the rules, laws, and customs that guide behavior. This section will analyze the key institutional and policy factors underlying the growth process and how they lead to differences among nations. While there is no one single formula for economic growth, we now have a pretty good idea of what helps and what should be avoided.

## ELEMENT 2.1

# 1. The Legal System



*“[A] private property regime makes people responsible for their own actions in the realm of material goods. Such a system therefore ensures that people experience the consequences of their own acts. Property sets up fences, but it also surrounds us with mirrors, reflecting back upon us the consequences of our own behavior.”<sup>(23)</sup>*

— Tom Bethell, Economic Journalist

The legal system provides the foundation for the protection of property rights and enforcement of contracts. “Property” is a broad term that includes ownership of oneself, one’s ideas, and

one's labor services, as well as physical assets such as buildings and land. The legal system protects owners against violence, theft, or fraud.

Private ownership is an institution that involves three things: (1) the right to exclusive use; (2) legal protection against invaders—those who would seek to use or abuse the property without the owner's permission; and (3) the right to transfer (sell or give) property to others.

**Video:**

**Eusebio's Dream Property Rights**

Private owners can decide how they will use their property, but they are held accountable and responsible for their actions. People who invade or infringe on the property rights of another will be subject to the same legal forces that protect their own property. For example, **private property rights**<sup>(?)</sup> prohibit me from using my hammer to break your windshield, because doing so would be violating your property right to your car. Your property right restricts me and everyone else from using (or abusing) your car without your permission. Similarly, my ownership of my hammer and other possessions restricts you and everyone else from using them without my permission.

The important thing about private ownership is the incentives that flow from it. There are four major reasons why the incentives accompanying clearly defined and enforced private ownership rights propel economic growth and progress.

First, private ownership provides strong incentives to maintain and take good care of property. If private owners fail to maintain their property or allow it to be abused or damaged, they will bear the consequences. Their property's value will decline. For example, if you own an automobile, you have a strong incentive to change the oil, service it regularly, and maintain its interior. Why? If you do not, the car's value to both you and future owners will decline. If kept in good running order, it will be of greater value to you and others potentially interested in buying it. The market price will reflect that stewardship. Good stewardship is rewarded, but bad stewardship is penalized by a reduction in the value of the asset.

In contrast, when property is owned by the government or owned in common by a large

group of people, each user's incentive to care for it weakens. Striking examples are easy to find. Did you ever watch an American cowboy movie and ask, "why are there cows everywhere but buffalo were almost driven to extinction? The answer: nobody owned the buffalo!

When the government owns housing, no individual or small group of owners has a strong financial incentive to maintain the property. Why? Because no individual or small group will pay the costs of a decline in the value of the property or benefit from its improvement. That is why government-owned housing, compared to privately owned housing, is more often run down and poorly maintained. This is true in both capitalist and socialist countries. Laxity in care, maintenance, and repair reflects the weak incentives that accompany government ownership of property, even in the midst of working markets for privately owned assets. A common saying in Soviet times captured this problem: "When everybody is the owner, nobody is the owner." A good example is government-owned communal apartments, or 'kommunalki,' which were widespread across the Soviet Union. These apartments housed multiple families, each with their own room, while sharing common areas like the kitchen and bathroom. These government-owned properties often suffered from neglect and poor maintenance. Residents frequently faced issues such as leaking roofs and outdated plumbing.

It is not just the lack of private ownership itself that causes problems so much as the differing interests between the users of property and the group or individual who bears the cost of misuse. Much the same problem occurs in the rental market where the private owner differs from the user. This is why rental contracts often contain long lists of how the property can and cannot be used. In Eastern Europe before the transition, it was not uncommon to climb filthy stairs past broken elevators and burned out light bulbs, only to enter gloriously maintained apartments because people cared about where they lived privately but not for common spaces.

Early in the transition, how to assign ownership rights to the housing stock became a major issue. It was clear that the units should become private property, but whose property? For houses and apartments built in the recent past, the answer was easy—give them (or sell them for a low price) to the occupants. But what about older buildings that had been seized from their owners when the communists came to power? Should ownership be given to those who lived in the unit or to those (or the descendants of those) who had their property "stolen?"

The answer adopted by the Czechs was to give back (restitute) the property to its former owners but leave the sitting tenants in place covered by rent controls. This approach ran into obvious problems, as owners did not have sufficient income to maintain the property and resented not being able to sell it for its market worth.

Second, private ownership encourages people to use their property productively and to develop it in ways others value highly. While private owners can legally do what they want with their property, they can gain from actions that enhance its value to others. If they employ and develop their property in ways attractive to others, its market value will increase. On the other hand, changes that others dislike—particularly if they are customers or potential buyers—will reduce the value of one’s property.

Private ownership also affects personal development. When people can keep the fruits of their labor, they have a powerful incentive to improve their skills, work harder, and work smarter. Such actions will increase their income and satisfaction. Why are college students willing to endure long hours of study and incur the cost of a college education? Private ownership of labor services provides the answer. Because they have an ownership right to their labor services, their future earnings will be higher if they acquire knowledge and develop skills valued highly by others.

Similarly, private ownership provides the owners of land, buildings, and other physical assets with motivation to use, protect, and develop them in beneficial ways. Moreover, those failing to do so will bear the costs in terms of lower-valued assets.

Consider the owner of an apartment complex who has no interest in providing attractive landscaping, convenient parking, on-site laundry facilities, a workout room, or a swimming pool complex. Finding renters will be difficult if potential tenants value these things highly, that is, more than the costs of providing them. If so, the apartment owner has a strong incentive to provide them. Apartment owners will be able to increase their net incomes (and the market value of their complexes) by providing consumers with what they value highly relative to cost. By contrast, owners who do not will find that their earnings and the value of their capital (their apartments) will decline. Keep in mind, however, that if renters aren’t willing to pay the cost of an amenity—such as an indoor swimming pool—the apartment owner would be making a mistake in providing it.

Private ownership even influences the productivity of resources in socialist countries. Farming in the former Soviet Union illustrates this point. Under the Communist regime, families on small private plots, which ranged up to half a hectare in size, were permitted to keep or sell the goods they produced. These private plots made up only about 2 percent of the total land under cultivation; the other 98 percent consisted of huge, collectively owned farms where the land and the output belonged to the state. As reported by the Soviet press, approximately 25 percent of the total value of Soviet agricultural output was raised on that 2 percent privately farmed land. This indicates that the output per acre on the private plots was about sixteen times that of the state-owned farms.<sup>(24)</sup>

Even a modest move away from state ownership toward private ownership can produce impressive results. In 1978 the Communist government of China began a de facto policy of letting farmers keep all rice grown on the collective farms over and above a specified grain quota that had to be given to the state. The result was an immediate increase in productivity because farmers had an incentive to produce efficiently. Once the quotas were met, the farmers were permitted to keep all of their additional output. When the word got out that the government was ignoring the official policy against such “privatization,” the practice spread like wildfire, leading to rapid increases in agricultural output and freeing farmers to move into nonagricultural sectors of the economy.<sup>(25)</sup>

The privatization of state-owned enterprises in Poland in the early 1990s serves as another good example of improved productivity. The transition started in earnest after the fall of communism in 1989, with Poland implementing one of the most ambitious privatization programs in Eastern Europe. This transformation contributed to Poland's rapid economic growth in the years following the reforms, establishing it as one of the success stories of post-communist economic transition in Eastern Europe.<sup>(26)</sup>

There were many different forms of privatization in post-communist countries. Some clearly put assets in the hands of so-called “**oligarchs**<sup>(?)</sup>” while others distributed assets more equally or sold them to foreign investors with the funds going to the state budget. Even the oligarchs, however, had an incentive as profit-seeking owners to make their firms operate efficiently.

Third, private ownership makes owners legally responsible for damages they impose on

others. Courts of law recognize and enforce the authority granted by ownership, but they also enforce the responsibility that goes with that authority. Private ownership links control with responsibility. This link provides owners with a strong incentive to use their property responsibly and to take steps to reduce the likelihood of harming others and their property.

**Video:**

**Economics of Private Property Rights**

Consider the following examples:. Dog owners have an incentive to leash or restrain their dogs if they are likely to bite. Car owners will be held accountable if, say, poorly maintained brakes cause damage to someone else’s property. A chemical company is legally liable for damages if chemicals are mishandled and harm others.

Fourth, private ownership promotes resource conservation as well as wise development. Using a resource may generate revenue, which reflects the desires of present consumers who want what the resources can provide. But future consumers, too, have a voice, thanks to property rights. An owner of a resource, say a woodlot or small forest whose trees could be harvested now or later, faces a decision. Will the timber be more valuable today or in the future? In other words, will the expected value of the trees be greater when mature or if logged today? And will that future value exceed their present value now by more than the cost of holding and protecting them for future use? If so, the owner has an incentive to conserve—that is, hold back from current use—to make sure that the resource will be available when it is more valuable. In recent years many African countries have realized that assigning private ownership (or small communal village ownership) to local wildlife results in a market for tourism including limited big-game hunting that has led to rapid increases in previously endangered species.

Private owners will gain by conservation whenever the future value of a resource is expected to exceed its current value. This is true even if the current owner does not expect to be around when the benefits accrue. Suppose a sixty-five-year-old tree farmer plants a crop of Douglas fir trees that typically take fifty years to grow to their optimal harvesting level. Does

this elderly tree farmer have an incentive to conserve the trees for future use? With private ownership rights, the answer is “yes.” With private ownership, the market value of the farmer’s land will increase as the trees mature and the expected day of harvest moves closer. So even though actual logging may not take place until well after the farmer’s death, the owner will be able to sell the trees (or the land including the trees) at any time, capturing their increasing value. As long as the growth of the mature trees is expected to increase future revenue more than alternative investments would, the farmer will gain by conserving the trees for the future.

For centuries pessimists have argued that we are about to run out of trees, critical minerals, and various sources of energy. Again and again, they have been wrong. Why? They fail to recognize the role of private property. It is instructive to reflect on these doomsday forecasts. In sixteenth-century England fear arose that the supply of wood—widely used as heating fuel—would soon be exhausted. Higher wood prices, however, encouraged conservation and led to the development of coal. The wood crisis soon dissipated.

Even when a specific resource is not owned, the market for other resources that are privately owned can often solve problems. In the middle of the nineteenth century, dire predictions arose that the world was about to run out of whale oil, at the time the primary fuel for artificial lighting. Because there was no private ownership of whales, there was no incentive to conserve them for future use. As the whale population dwindled, the price of whale oil soared. But the higher whale oil prices increased the incentive for entrepreneurs to find and develop substitutes. With time, this led to the discovery of commercially profitable sources of petroleum, the private development of relatively cheaper kerosene, and the end of the whale oil crisis.

Later, as people switched to petroleum, predictions emerged that this resource, too, would be exhausted. In 1891, the U.S. Geological Survey concluded that finding oil in Texas was unlikely. In 1926 the Federal Oil Conservation Board estimated that the U.S. supply of oil would last only another seven years.<sup>(27)</sup> In 1972, the Club of Rome's report "Limits to Growth" predicted that economic growth would lead to resource depletion and eventual societal collapse within the 21<sup>st</sup> century.<sup>(28)</sup> While the report raised valid concerns about unsustainable resource use, many of its near-term predictions have not come to pass, thanks to efficiency improvements, the discovery of new resources, and shifts towards more sustainable

development practices. In 1968 Paul Ehrlich's book "The Population Bomb" predicted that rapid population growth would lead to mass starvation and societal collapse in the 1970s and 1980s. Indeed, Ehrlich claimed that England would "cease to exist" by the year 2000. In a famous, but true, anecdote economist Julian Simon offered Ehrlich a bet. "You pick any five resources you want and any year in the future and I bet their prices will have fallen (after adjusting for inflation)." Ehrlich took the bet and he and his advisers picked five raw materials: chromium, copper, nickel, tin, and tungsten. The bet was made in 1980 and by its end in 1990 the prices of all five had fallen, despite global population having grown by almost a billion people.

While overpopulation remains a concern, the dire predictions of global famine did not materialize on the scale forecasted. Advances in agricultural technology (the Green Revolution), improvements in crop yields, and family planning initiatives helped to avert the predicted crises.

All of these doomsday forecasts and many others have proven to be not only wrong but spectacularly wrong. Why? Private ownership provides the answer. When the scarcity of a privately owned resource increases, the price will rise. The increase in price provides consumers, producers, innovators, and engineers with incentives to (1) conserve on the direct use of the resource, (2) search more diligently for **substitutes**<sup>(?)</sup>, and (3) develop new methods of discovering and recovering larger amounts of the resource. To date these forces have pushed doomsday ever farther into the future, and there is every reason to believe that they will continue to do so for resources that are privately owned.

Well-defined and enforced property rights are also crucially important for the realization of gains from trade. As discussed in Element 1.4, trade moves goods toward people who value them more and makes greater production possible as the result of gains from specialization and large-scale production methods. A legal system that provides evenhanded enforcement of contracts and protection of property rights reduces the uncertainties accompanying trade. In turn, this results in more trade, thereby expanding both the gains from trade and economic progress.

A legal system that protects property rights and enforces contracts in an evenhanded manner provides the foundation for the mainsprings of economic growth: gains from trade,

**capital formation**<sup>(?)</sup>, and resource development. In contrast, insecure property rights, uncertain enforcement of agreements, and legal favoritism undermine trade, investment, and the productive use of resources. Throughout history people have tried other forms of ownership, such as large-scale cooperatives and government ownership, under both socialism and communism. On any scale beyond the small village with a strong cultural harmony, these experiments have ranged from unsuccessful to disastrous. To date, no institutional arrangement other than private ownership within the framework of the **rule of law**<sup>(?)</sup> has provided individuals with as much personal freedom and as strong an incentive to serve others by using resources productively and efficiently.

**Video:**

**[The Power of Property Rights](#)**

It should be noted that for them to be effective in promoting growth they must be clearly known and enforced. While everyone in a village in a developing country may know who “owns” a particular piece of land it is hard to sell that land or use it as **collateral**<sup>(?)</sup> to borrow money to invest in a new tractor. One of the most cost effective development strategies focuses on providing clear ownership titles to traditional users of land. For example, in 2013 Rwanda formally registered over 11.3 million out of the estimated 11.5 million land parcels in the country at a cost of about \$6 each. Within a few years these titles had been used to support 2.6 BILLION dollars of investment loans.<sup>(29)</sup>

**Read:**

**[Private Property and Opportunity Costs by Dwight Lee](#)**

## ELEMENT 2.2

# 2. Competitive Markets



*“Competition is conducive to the continuous improvements of industrial efficiency. It leads producers to eliminate wastes and cut costs so that they may undersell others. It weeds out those whose costs remain high and thus operates to concentrate production in the hands of those whose costs are low.”<sup>(30)</sup>*

— Clair Wilcox, Former Professor of Economics, Swarthmore College

Competition is the lifeblood of a market economy. Competition is present when the market is open and alternative sellers are free to enter. Rival firms may operate in local, regional, national, or even global markets. The competitive process places pressure on each to operate efficiently and cater to consumer preferences. Competition weeds out inefficient producers. Firms failing to provide consumers with quality goods at attractive prices will experience losses and eventually be driven out of business.

Successful competitors outperform rival firms. They may do so through a variety of methods, including quality of product, style, service, convenience of location, advertising, and price, but they must consistently offer consumers at least as much value relative to the cost of producing that value as is available from rivals.

What keeps McDonald's, Carrefour, Amazon, General Motors, or any other business firm from raising prices, selling shoddy products, and providing lousy services? Competition is the answer. If McDonald's fails to provide a tasty sandwich at an attractive price delivered with a smile, people will turn to KFC, Burger King, Wendy's, Subway, Taco Bell, and/or other rivals. Even the largest firms will lose business to small upstarts that find ways to offer better products at lower prices. Automobile manufacturing is dominated by large firms, but competition is still intense. Firms as large as Toyota, (Japan) and General Motors (US) will lose customers to Changan (China) or Maruti (India) and other automobile manufacturers, some we haven't even heard of yet if they fall even a step behind in providing the types of vehicles people want at competitive prices.

Competition gives firms a strong incentive to develop better products and discover lower-cost methods of production. No one knows precisely what products consumers will want next or which production techniques will minimize costs per unit. The discovery process of markets provides the answer. Is the online marketplace the greatest retail idea since the shopping mall? Or is it merely another idea that will soon be replaced by something even better? Profits and losses in open, competitive markets will constantly reveal the answer, which will change through time with changing consumer preferences, new technology, and discovery of better ways of doing things.

In a market economy, entrepreneurs are free to innovate. They need only the support of investors (often including themselves) willing to put up the necessary funds. The approval of central planners, a legislative majority, or business rivals is not required. Nonetheless, competition holds entrepreneurs and the investors who support them accountable because their ideas must face a "reality check" imposed by consumers. If consumers value an innovative new product enough to cover its costs, the new business will profit and prosper. But if consumers find that the new product is worth less than its per-unit costs, the business will suffer losses and fail. Consumers become the ultimate judges and jury of business innovation

and performance.

**Video:**

**Steve Forbes On Achievement – George Eastman**

When new products are introduced, they generally follow a predictable price-quality pattern. Typically, new products are initially very expensive and purchased by relatively few consumers, mostly those with high incomes. These consumers will pay dearly for the early availability, because during this initial phase, product quality tends to be lower as firms work out unexpected start-up issues but the price high due to limited levels of production. These initial purchasers play a vital role: They provide the revenue to cover the product's start-up costs and allow the firms to acquire experience, improve quality, and reduce per-unit cost in the future. With time, entrepreneurs will figure out how to make the product more affordable and expand its availability to more and more consumers.

### **Cell Phone Evolution 1973–2015**



Numerous goods, including automobiles, televisions, air conditioners, dishwashers, microwave ovens, and personal computers have gone through this same pattern.<sup>(31)</sup> All were highly expensive when initially introduced, but entrepreneurs figured out how to produce them more economically and improve their quality, making them more affordable to the overwhelming bulk of consumers. As we reflect on the role of both entrepreneurs and the competitive process, it is important to recognize this pattern of price and quality through time.

Smartphones illustrate this price-quality pattern. When cell phones were initially introduced in the 1980s, they sold for around \$4,000 (adjusted for inflation, nearly \$10,000 today), were about the size of a brick, and could not do much more than make calls. With time, their size shrank, their information processing power and functions exploded, and their prices fell. Today, they are available at a fraction of the initial price, and they are viewed as a necessity by many consumers in all income brackets in every country where the government allows, enabling friends, families and business associates to communicate instantly for pennies. In 1920, for example, a 10 minute telephone call from New York to Los Angeles costs over \$400 in 2024 prices. In 2024, however that call can be made for free using services such as Zoom or Whatsapp.

Producers who wish to survive in a competitive environment cannot be complacent. Today's successful product may not pass tomorrow's competitive test. In order to succeed in a competitive market, entrepreneurs must be good at anticipating, identifying, and quickly adopting improved ideas.

**Video:**

**Would You Give Up The Internet?**

Competition reveals the business structure and size of firm that can best keep the per-unit cost of a product low. Unlike other economic systems, a market economy does not mandate the types of firms that are permitted to compete. Any form of business organization is permissible. An owner-operated firm, partnership, corporation, employee-owned firm, consumer cooperative, commune, or any other form of business is free to enter the market. To

succeed it must pass only one test: cost-effectiveness. It must produce quality products at attractive prices if it is to profit and succeed. But if its structure results in higher costs than those of other forms of business organization, competition will drive it from the market. Of course, competition also ensures that products of different quality can coexist so long as some consumers opt for the differing quality/price trade-offs. A Mercedes can sell (at a high price) alongside a lower-priced Volkswagen. On the other hand, the East German car brand Wartburg and the Russian make Zhiguli were unable to survive without some form of interference with market forces—as was common among communist countries that banned or imposed high tariffs on imports from market economies.

The competitive process will also determine the size of firms in various sectors of the economy. In some sectors—airplane and automobile manufacturing, for example—firms will need to be quite large to take full advantage of economies of scale. A firm producing a few dozen automobiles would have an extremely high per-unit cost; in contrast, when the fixed costs are spread over many thousands of units, the costs of producing each car can plummet. Naturally, consumers will tend to buy from the firms that can produce goods economically and sell them at lower prices. In such industries, small firms will be unable to compete effectively and only large firms will survive. Another example is the telecommunications market. With substantial infrastructure costs, the telecommunications market is dominated by large firms in Europe, including Vodafone, Deutsche Telekom, Telefonica, and Orange.

In other sectors, however, small firms, often organized as individual proprietorships or partnerships, will be more cost-effective. When consumers place a high value on personalized service and individualized products, small firms tend to dominate while large firms struggle. This is generally the case in the markets for legal and medical services, gourmet restaurants, personal services, and specialized printing. Thus, these markets are usually dominated by small firms. The craft beer and microbrewery sector in Europe has seen a significant rise, with small breweries playing a major role in diversifying the beer market. Countries like Belgium, the UK, Germany, and the Czech Republic have vibrant scenes where small firms innovate in beer production, offering a wide range of styles and flavors not typically available from larger producers.

Paradoxical as it may seem, self-interest directed by competition is a powerful force for

economic progress. Dynamic competition among products, technologies, organizational methods, and business firms will weed out the inefficient and consistently lead to the discovery and introduction of preferred products and superior technologies. When the new methods improve quality and/or reduce costs, they will grow rapidly, often replacing the old ways of doing things.

History abounds with examples. The automobile replaced the horse and buggy. The supermarket replaced the mom-and-pop grocery store. Fast-food chains like McDonald's and Wendy's largely replaced the local diner. Carrefour and Metro Cash & Carry grew rapidly while other retailers shrank or even went out of business. Personal computers replaced typewriters, smartphones took the place of rotary-dial phones fixed in a particular sportless mobile computer devices. LED lighting is effectively phasing out incandescent bulbs and computers (or even phones themselves) replaced abacuses, slide rules or even fingers in doing math due to improvements in convenience, cost-effectiveness, and quality combined with reductions in price. Companies that were slow to adapt to the digital revolution, such as Kodak, faced significant business challenges. In contrast, those that embraced digital technology, like Canon and Nikon, continued to thrive and lead the market. One could go on and on with similar examples. The great economist Joseph Schumpeter referred to this dynamic competition as “**creative destruction**<sup>(?)</sup>” and argued that it formed the very core of economic progress.

Competition harnesses personal self-interest and puts it to work elevating our society's standard of living. As Adam Smith noted in *The Wealth of Nations*:

*“It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages.”<sup>(32)</sup>*

Taken together, private ownership and competitive markets provide the foundation for cooperative behavior and efficient use of resources. When private property rights are clearly defined and enforced, producers face the opportunity cost of their resource use. That is, as we

discussed in part 1, they must provide more value from the resources used or else more cost-effective producers will overwhelm them. The prices in open and competitive markets provide them with a strong incentive to keep costs low, cater to the desires of consumers, and discover superior products and better ways of doing things.

Competition is “pro-consumer” - consumers are the big winners. Competitive markets are not “pro-business.” In fact, businesses do not like to face competition, and, instead, they commonly lobby for government policies to protect themselves from it. They will often seek to erect barriers limiting the market entry of potential rivals. As we move on to the analysis of regulation in the next element and the political process in part 3, examples of businesses’ efforts to reduce the competitiveness of markets will arise again and again. The European Union, through the European Commission, has a comprehensive set of competition policies aimed at preventing anti-competitive practices. This includes the power to investigate companies, impose fines, and require divestments or changes in business practices to maintain market competitiveness. The goal is to ensure that consumers benefit from a wide choice of services and products at competitive prices. On the other hand, it is important to be on the lookout for **regulatory capture**<sup>(?)</sup> whereby a large firm already in an industry tries to get regulators to make rules that are so expensive to meet that small, start-up firms that might have a better product find it impossible to enter the industry. As an example the EU’s “General Data Protection Requirements” (GDPR) involve so much record keeping and administrative costs that potential new on-line business sites may find it to expensive to try out their possibly innovative idea.

**Read:**

**[Running Out of Agricultural Land by Dwight Lee](#)**

## ELEMENT 2.3

# 3. Sensible and Limited Regulation

*“If you make 10,000 regulations, you destroy all support for the law.”*

— Winston Churchill

Government regulation looks like an easy way to achieve various goals, such as lower unemployment, higher wages for low-skilled workers, or removal of low-quality products from a market. When we think about what can be achieved with regulation, however, it is important to keep three points in mind.

First, competition is a great regulator. Open, competitive markets provide individuals and businesses with a strong incentive to supply others with goods and services they value because this is the source of higher income levels. Under these conditions, it is usually unlikely that regulation will improve the situation.

**Video:**

**[Food Truck Roadblock](#)**

Second, regulation generates secondary effects that are often wasteful and at odds with intended objectives. In many cases, the secondary effects are directly opposite of the objectives stated by proponents.

For example, in the mid-1980s customs officials in Guatemala were permitted to waive tariffs if they thought that doing so was in the “national interest.” Such legislation is an open invitation for government officials to solicit bribes. It creates regulatory uncertainty and makes business activity costlier and less attractive, particularly for honest people.

**Video:**

**Risks of Good Intentions**

Third, regulation reflects the political process, which generally favors business and other interest groups that are much better organized than consumers, taxpayers, and the general public. While proponents of regulation often argue they are seeking to achieve some noble objective, the truth is they are almost always seeking to use the political process to gain at the expense of others.

All of these observations are subject to one major caveat. In general, we have been discussing economic transactions as if they took place between a buyer and a seller, each of whom reflects their own best interests. What if what I buy from you impacts someone else who does not even know that we are discussing this transaction? These effects are called “**externalities**<sup>(?)</sup>”. An externality can be either positive or negative. As an example of a positive externality, if my coworker gets a Covid vaccine, I am less likely to get sick. A negative externality will occur if my neighbor’s dog barks all night and I am unable to sleep.

Externalities create a complex issue for societies. Economist Ronald Coase established that in many cases nothing needs to be done. This is a somewhat complex argument but it is a good example of the power of economic logic. Consider the barking dog. Two people are involved, my neighbor who loves her dog and me, who loves my sleep. As long as the market is free, we can resolve the conflict between ourselves. If she values the barking more than I value my sleep, she can pay me money to put up with it or maybe go out and buy earplugs. If I value my sleep more than he values her dog’s barking, the reverse is true. I can pay her to stop the barking (maybe with a muzzle).

This **Coase theorem**<sup>(?)</sup> only works, however, in limited situations. More complex ones do create a role for limited government regulations, usually when there are so many people affected on each side that the difficulties of getting to work together prove impossible. Consider the citizens of a country who would be willing, in the aggregate, to pay a sufficient amount to get a factory to reduce the pollution it spills into the air. The problem is: “how do you organize all of them to do this and reign in the cheaters who say “well, if everyone else is

contributing, my little bit won't matter!'”

In such cases there may be a case for collective (i.e. government) action. In an ideal world, governments collectively representing citizens would accurately evaluate costs and benefits to deal with large-scale problems such as pollution. Even in these situations, however, most economists favor pricing each unit of pollution (called a “negative externality”) rather than passing rules. The reasoning is obvious. Once a price is set, say € a ton, factories can decide for themselves whether it is cheaper to clean up their emissions or pay the price. If the price set does not achieve the desired outcome, it is easy to raise or lower it. Profit maximization does most of the work.

Now consider an alternative. Perhaps a regulator decides how much pollution each factory can emit. How could it possibly know which factories would find it easiest to clean up their production? Without the massive information hidden in the market, inefficiencies must necessarily result.

Most regulations we are familiar with create more problems than they solve. Consider the impact of regulations that restrict entry into markets. Many countries impose regulations that make it difficult to enter and compete in various businesses and occupations. In those countries, if you want to start a business or provide a service, you must acquire a license, fill out forms, get permission from different bureaus, show that you are qualified, indicate that you have sufficient financing, and meet various other regulatory tests. Some officials may refuse your application unless you are willing to provide them with political contributions or pay them a bribe. Often, well-established and politically influential businesses that you would be competing against can successfully oppose your application.

Hernando de Soto, in his revealing book *The Mystery of Capital*, reports that in the early 2000s in Lima, Peru, it took 289 days for a team of people working 6 hours a day to meet the regulations required to legally open a small business to produce garments. In an earlier book, *The Other Path*, he revealed that along the way, ten bribes were solicited, and it was necessary to pay two of the requested bribes to get permission to operate legally.<sup>(33)</sup>

In 2020 the World Bank released a report on “Doing Business” in various countries around the world<sup>(34)</sup> that reported that the global average time to open a business has fallen from 52 days in 2003 to 20 days in 2019. This time required improved dramatically among

countries at every income level and in every region of the world except North America, where it declined from already low 3.5 days in 2003 to 2.85 days in 2019. Last place in the league table is held, not surprisingly, by Venezuela, where legally opening a business would take 230 days. Top ranked were New Zealand and Georgia, where the process could be completed in half a day. Among post-communist countries the longest time to open a business was in Bosnia and Herzegovina, where 80 days were required. Post-communist countries have actually made great strides in ease of opening businesses, which takes around 14 days on average across the region as compared to 23 days in East Asia & the Pacific and 28 days in Latin America & Caribbean in 2019.<sup>(35)</sup>

Moreover, when governments impose regulations that restrict market entry, existing businesses will push for additional regulations that will make it more difficult for potential rivals to enter the market. In turn, this reduction in competition will lead to higher prices and larger profits for the favored firms. It will also reduce productivity as businesses spend more time and money seeking government favors (for example, lobbying political decision-makers) and less time producing goods and services that people value. As a result, consumers are harmed and total output falls below its potential.

Regulations that interfere with voluntary exchange generally reduce the gains from trade, entrepreneurial discovery, and social cooperation. Price controls, mandated activities, and tariffs are examples. Consider how price controls affect the gains from trade. When the price of a good or service is set above the normal market level, buyers will purchase fewer units than they otherwise would. This reduces the volume of mutually advantageous exchanges, reducing trade. Alternatively, when prices are set below the market level, sellers will cut back on the quantity they are willing to supply, also causing the number of exchanges and the gains from trade to decline. Regardless of whether set above or below the market level, price controls will reduce the volume of trade and the gains from production and exchange.

**Video:**

**[Lessons from Africa](#)**

**Minimum wage**<sup>(?)</sup> rates are perhaps the most imposed price control throughout the world. A minimum wage rate establishes a **price floor**<sup>(?)</sup> that pushes the hourly wage of some workers (and jobs) above the market level. Minimum wages are a hot issue in many European countries. Minimum wage practices in European countries vary significantly, reflecting the diverse economic conditions, labor market structures, and social policies across the continent. As of January 2024, minimum monthly wages across EU Member States varied widely, starting at €477 in Bulgaria and reaching up to €2,571 in Luxembourg.<sup>(36)</sup> In non-EU post-communist countries they are generally lower even in 2024, equaling €376 a month for a person Albania and €173 in Kazakhstan, still high, however, in relation to levels of productivity of the least skilled workers.

Mandating higher wages looks like an easy way to help low-skilled workers, but there are secondary effects. As the basic postulate of economics indicates, a higher minimum wage will mean less employment for low-skilled workers. There is some controversy about the size of the employment reduction, but the weight of the empirical evidence indicates that each 10 percent increase in the minimum wage will reduce the employment of affected workers by between 1 and 3 percent.<sup>(37)</sup> There will also be other unintended secondary effects.

**Video:**

**[Josh Angrist: Did You Drive for Uber?](#)**

Employers will take steps to control or compensate for their higher wage costs. These will include fewer training opportunities for low-skilled workers, less convenient work schedules, and smaller fringe benefits. Moreover, the higher minimum wage will increase the earnings of some workers to levels where they lose their eligibility to food, health care, and other transfer benefits, which means their incomes after taxes and transfers will increase less, and sometimes substantially less, than the increase in the minimum wage.<sup>(38)</sup>

In essence, a minimum wage prohibits the employment of persons whose **productivity**<sup>(?)</sup> is less than the minimum—that is, whose output does not justify the payment of the minimum wage. Is this a sound idea? Do we really want to deny persons with

productivity less than the minimum wage the opportunity to work at all? This is precisely what minimum wages do.

To clearly see the harmful impacts of minimum wages, it helps to realize that these effects are not really captured by the number of workers are unemployed. Unlike what many people assume, official statistics in most countries require that a person not be working but *actively be looking for work*. Someone who is not working because the minimum wage required that they be paid more than their productivity is not called “unemployed.” They are, rather, a **discouraged worker**<sup>(?)</sup>. Supporters of a higher minimum wage often argue that it will reduce the poverty rate by increasing the income of poor workers. At first glance, this appears to be true, but examination of the data indicates it is highly questionable. There are three major reasons why this is the case.

First, the vast majority of minimum wage earners are not in poverty. In the US about 80 percent of minimum wage employees are members of households with incomes above the poverty level; one-third live in households with above-average incomes. Half of the minimum wage workers are between the ages of sixteen and twenty-four years and most of them work part-time. Only one out of every seven minimum wage workers (about 15 percent) is the primary earner for a family with one or more children. Thus, the typical minimum wage worker is a single, youthful, part-time secondary worker in a household with an income above the poverty level.

Second, many of the minimum wage workers are also consumers of products impacted by the higher minimum wage. A minimum wage will likely raise the price of goods such as groceries and fast-food meals. These higher prices will, at least partially, offset workers’ gains from the higher minimum wage.

Third, many poor families do not have anyone in the labor force, and therefore a higher minimum wage will not help them unless the increase is great enough, after adjusting down for the welfare benefits they would lose if they got a job, to induce them to enter the labor force.

Consistent findings were reported by different scholars for European countries. For example, a paper about Germany concludes that introducing a minimum wage could lead to fewer job opportunities for low-skilled workers.<sup>(39)</sup> The study "The Economic Impact of Minimum Wages in Europe" analyzed the effects of minimum wages in seventeen European

countries. The research found the evidence that minimum wages reduce employment of young workers.<sup>(40)</sup> Post-communist Russia provides an interesting laboratory to study the effects of minimum wages. In 2007, the country more than doubled the federal minimum wage (and increased it even more in some regions). Results suggest that this caused a decrease in employment of young people, some of whom took jobs in the informal (underground) economy while others simply dropped out of the labor force.<sup>(41)</sup>

When we think about the effects of the minimum wage on youthful low-skilled workers, it is important to consider the impact in both the short and long runs. Work experience provides youths with opportunities to develop self-confidence, good work habits, valuable skills, and positive attitudes, making them more valuable to future employers. Unless young people can prove their value to employers and develop on-the-job skills, it is unlikely that they will be able to move up the job ladder and realize higher earnings in the future.

Even when a worker receives a pay increase because of a higher minimum wage, they may not actually be better off. Employers need the value added by a worker to be at least what they pay their workers. If forced to raise wages, they can cut back on other, non-regulated parts of the worker's job. Breaks could become shorter, the assembly line could be sped up a bit, contributions to a retirement plan be reduced. Perhaps the most damaging impact of all is that employers will not invest in increasing workers' skills. If the employer provides costly training that increases productivity in other firms, they can only recover their costs by paying workers less than their productivity while they are being trained. This means that the worker's compensation (their wage plus the value of the training they are getting which will enable them to earn more in the future) will be equal to their current productivity.<sup>(42)</sup> This inability to provide the training that would enable workers to get promoted and earn more over time condemns some workers to a “**dead end job**”<sup>(?)</sup>.

The value of work experience and skill development is widely recognized in the case of college students. Members of Congress provide college students with low-wage employment and even unpaid internships, recognizing this experience helps them develop skills and generate higher future earnings. Ironically, however, these same politicians support minimum wage levels that reduce the on-the-job training opportunities available to less-educated youths. The adverse impact of minimum wages on apprenticeships and other training opportunities for

youths with less education is almost always ignored by minimum wage proponents, including the members of legislatures who institute them. Nonetheless, this is an important adverse secondary effect of minimum wages.

Many countries also impose other labor market regulations that undermine economic growth. Dismissal regulations are an example. In a number of European countries, employers who want to reduce the size of their workforce must (1) obtain permission from political authorities; (2) notify the employees to be dismissed months in advance; and (3) continue paying the dismissed employees for several months after they leave. Employment restrictions on migrant workers, particularly in some Asian countries, are notable examples. An International Labor Organization 2019 report<sup>(43)</sup> highlights that these restrictions, by increasing recruitment costs, often result in labor shortages in sectors like construction and agriculture. This, in turn, hampers productivity and economic growth.

Such regulations may appear to be in the interests of workers, but the secondary effects must be considered. Regulations that make it costly to dismiss workers also make it costly to hire them. Employers will be reluctant to take on new workers because of the high cost if they turn out to be unsatisfactory or unnecessary. As a result, jobseekers, especially entry-level workers, will find it difficult to find jobs, and the overall growth of employment will be slowed. In European countries, where restrictive labor market regulations are more pronounced than in the United States, the unemployment rates of Western European countries such as Italy, Spain, and France have been, on average, 4 or 5 percentage points higher than in the United States during the past couple of decades.<sup>(44)</sup> Research by Steve Hanke at Johns Hopkins University has found that between 2010 and 2015 unemployment rates in EU countries with mandated minimum wages were up to 50 percent higher than in those EU countries without mandated minimum wages.

Although hiring and dismissal regulations are generally less restrictive in the United States than in Europe, **occupational licensing**<sup>(?)</sup> is a major labor market restriction in the United States. Most of the occupational licensing occurs at the state level. To obtain licenses, people pay fees ranging from modest to exorbitant, complete training courses of six to twelve months, and pass examinations.

As recently as 1970, fewer than 15 percent of Americans worked in jobs that required a

license. Today, the figure is nearly 30 percent, and it is continuing to grow. In the mid-1980s, 800 occupations were licensed in at least one state. By 2023, according to the Council on Licensure, Enforcement and Regulation, more than 1100 occupations are regulated in at least one state. A national study of burdens from occupational licensing identified 2700 licenses across 50 states and the District of Columbia in 2022.<sup>(45)</sup> Recent studies find that approximately 22 percent of workers in the European Union are subject to occupational licensing requirements, although the number and impact of such requirements varies greatly across member countries, with Germany leading the pack at 33 percent. It has been estimated that licensing reduced employment in related industries in the EU by approximately 700,000 jobs in 2015. The same study also found that the above-market wages associated with restrictive licensing contributes to income inequality within the EU.<sup>(46)</sup>

The supporters of licensing argue that it is necessary to protect consumers from shoddy and potentially unsafe and unhealthy products. But licenses are required in numerous occupations that have little to do with public safety or protection of the consumer.<sup>(47)</sup> For example, one or more US states require licenses to work in the following occupations: interior designer, makeup artist, florist, barber, hair braider, shampoo specialist, athletic trainer, tour guide, auctioneer, potato dealer, casket seller, ferret breeder, and palm reader. The pressure for licensing seldom originates from consumer groups. Instead, it nearly always arises from those business owners already in the occupation who are trying to protect themselves from competition.

In many of these licensed occupations, individuals could acquire the skills necessary for high-level performance through on-the-job experience and working with others skilled in the trade. The licensing requirements prohibit persons from developing their skills via these methods and pursuing their desired career. Licensing, particularly when it mandates lengthy formal training and levies expensive fees, reduces supply and drives up the price of the goods and services provided by the licensed practitioners. Those currently in the occupation gain at the expense of consumers and unlicensed potential producers. Some research has even found that convicts who have completed their sentences are more likely to reoffend in states that have greater licensing requirements, presumably because they find it hard to get jobs.

An alternative to licensing is **certification**<sup>(?)</sup>. With certification, the government can

require suppliers to provide information about their education, training, and other qualifications to consumers without prohibiting anyone from working in his or her chosen field. In essence, certification makes information about the suppliers' qualifications readily available to consumers but does not restrict their choices. Furthermore, it allows practitioners to develop and demonstrate their competence, while still providing information consumers can use to make informed choices.

Regulation is a breeding ground for cronyism, political favoritism, and even corruption. Proponents of regulations restricting competition often use health and safety protection to obfuscate their real motivations. For example, thirty-five states and Washington, DC, have Certificate of Need regulations. These rules require those who want to start new hospitals, clinics, and other healthcare facilities to convince state boards or commissions that current providers cannot supply the quantity of health services demanded. Existing firms are permitted to argue that this is not the case. Similarly, regulations prohibit American consumers from purchasing prescription drugs from Canadian sellers even if the same drug is priced lower in Canada. Regulations of this type undermine both market competition and the confidence of citizens in the political process.

For example, The European Medical Device Regulation (EU MDR), a new set of regulations that govern the production and distribution of medical devices in Europe, was subject to concern within the medical device industry. Although the new regulation of medical device law at European level probably brings more safety for patients, it also leads to longer waiting periods for new drugs innovative products.<sup>(48)</sup> Critics argue that these regulations impose burdensome requirements that could slow down innovation, limit the availability of medical devices in the EU market.

The process for approving new pharmaceuticals and introducing them to both the EU and the US has faced criticism for being overly lengthy and complex. While it is often claimed that drug approval is slower in the United States compared to the EU, some research suggests that medications actually become available to the public faster in the U.S. than in EU.<sup>(49)</sup> In either case, seriously ill patients who would willingly undertake any risks involved are denied care they want and need. One study by researchers at the University of Ottawa who studied 21 cancer drugs approved between 2001 and 2015 found that worldwide 1 life was lost for every

12 seconds of delay.<sup>(50)</sup>

To the uninformed, regulation often looks like an easy way to solve problems. Want higher wages? Increase the minimum wage. Want a lower unemployment rate? Pass laws making it harder to fire workers. Want higher earnings in an occupation? Restrict the entry of those job seekers willing to work for lower wages. But these simplistic policies do not enhance society's total production and they ignore the secondary effects. As we have pointed out, mutually advantageous trade and competitive markets encourage low-cost production and discovery of better ways of doing things. They encourage us to obtain more value from our resources. Thus, regulatory policies that impose roadblocks against trade and entry into markets will almost always be counterproductive. If a country is going to grow and prosper, it should minimize regulations of this type.

**Read:**

**Censoring Pleas for Help by Dwight Lee**

The discussion so far has presented the choice between market and government mechanisms for dealing with externalities as a stark contrast between two alternatives. Actually, there is often a middle road. When the groups affected by externalities are relatively small they can negotiate agreements to reduce or eliminate externalities among their local community without government action. Indeed, in 2009 Elinor Ostrom became the first woman to win the Nobel Prize in economics for documenting such understandings in many different situations across the globe.

**Video:**

**Women in Economics - Elinor Ostrom**

## ELEMENT 2.4

# 4. Efficient Capital Markets



*“Prediction is very difficult, especially if it is about the future.”*

— Neils Bohr (also attributed to Yogi Berra)

While consumption is the goal of all production, providing consumer goods may require using resources to build machines, heavy equipment, and buildings, that are then used to produce the desired consumer goods. Productive investment increases future consumption. Thus, **capital investment**<sup>(?)</sup>—the construction and development of long-lasting resources designed to help produce more in the future—is an important source of economic growth. For example, the purchase of an oven by a local pizzeria will help enlarge its future output. Similarly, the purchase of additional trucks helps firms in the transport and logistics sector deliver more goods more rapidly.

Although the discussion below is in terms of physical goods, investment in developing skills or human capital is just as important and can be thought of in exactly the same way

(most of the time) – the biggest difference is that while investors can own machines and even ideas (through a **patent**<sup>(?)</sup>), they can only rent skills given that in civilized countries slavery is illegal!.

Resources (such as labor, land, and entrepreneurship) used to produce these **investment goods**<sup>(?)</sup> will be unavailable to produce consumer goods. If we consume all that we produce, no resources are available for investment. Therefore, investment requires **saving**<sup>(?)</sup>—a reduction in current consumption to make the funds available for alternative uses. Saving is an integral part of the investment process. Someone either the investor or someone willing to supply funds to the investor, must save to finance investment.

Not all investment activities, however, are productive. An investment will enhance the wealth of a nation only if the value of the additional output from the investment exceeds the cost. When it does not, the project is counterproductive and reduces wealth. Investments can never be made with perfect foresight, so even the most promising investment projects will sometimes fail to enhance wealth.

To make the most of its potential for economic progress, a nation must have mechanisms that attract savings and channel them into investments that create wealth. In a market economy, the **capital market**<sup>(?)</sup> performs this function. The capital market, when defined broadly, includes the markets for stocks, bonds, and loans. These institutions channel funds from those who do not want to use these funds now (savers) to those who do not have sufficient funds to undertake a project they believe will be profitable (borrowers). Financial institutions such as stock exchanges, banks, insurance companies, mutual funds, and investment firms play important roles in the operation of the wealth-enhancing capital market.

Private investors, such as small business owners, corporate stockholders, and **venture capitalists**<sup>(?)</sup> place their own funds at risk in the capital market. Investors will sometimes make mistakes and undertake projects that prove to be unprofitable. If investors were unwilling to take such chances, many new ideas would go untested and many worthwhile but risky projects would not be undertaken.

Consider the roles of entrepreneurship, risk-taking, and the capital market in the development of internet services. In the mid-1990s, Sergey Brin and Larry Page were graduate students at Stanford University, working on a research project designed to make finding things

on the internet easier. They might have seemed unlikely candidates for entrepreneurial success. But in 1998, Brin and Page founded Google, a business that provides free internet services while generating revenues through advertising. Their powerful internet search engine increases the productivity of millions of individuals and businesses each second. Consequently, they have earned a fortune by making Google a household name and by employing about 180,000 full-time individuals worldwide in 2023. Many other internet-based companies, such as eBay, Alibaba, Zalando and Amazon, were similar entrepreneurial ventures that have become household names and also earned enormous profits.

But the experience of numerous other internet-based firms was quite different. Many so called “dot-coms,” like Pets.com, Boo.com, Webvan and eVineyard are no longer in business their revenues did not sufficiently cover costs soon enough for investors to continue to believe in their futures. The high hopes of these firms did not materialize. They failed.

In a world of uncertainty, mistaken investments are a necessary price that must be paid for fruitful innovations in new technologies and products. Such counterproductive projects, however, must be recognized and brought to a halt. In a market economy, the capital market performs this function. If a business continuously experiences losses, eventually investors will terminate the project, stop wasting their money, and turn elsewhere. Note that a key word in the previous sentence is “continuously.” One of the key functions of capital markets is to enable entrepreneurs with ideas that would ultimately be successful to survive long enough for their potential to be realized, which may take more time than almost anyone’s personal resources would allow. One of the market-defining innovations of recent years, Uber, “lost” billions of dollars of investors’ money before turning almost \$2 billion in profit in 2023.

Given the pace of change and the diversity of entrepreneurial talent, the knowledge required for sound decision-making about the allocation of capital is far beyond the scope of any single individual. More important, it is beyond the ability of any government agency. Without a private capital market, there is no mechanism that can consistently channel investment funds into wealth-creating projects and out of counterproductive ones.

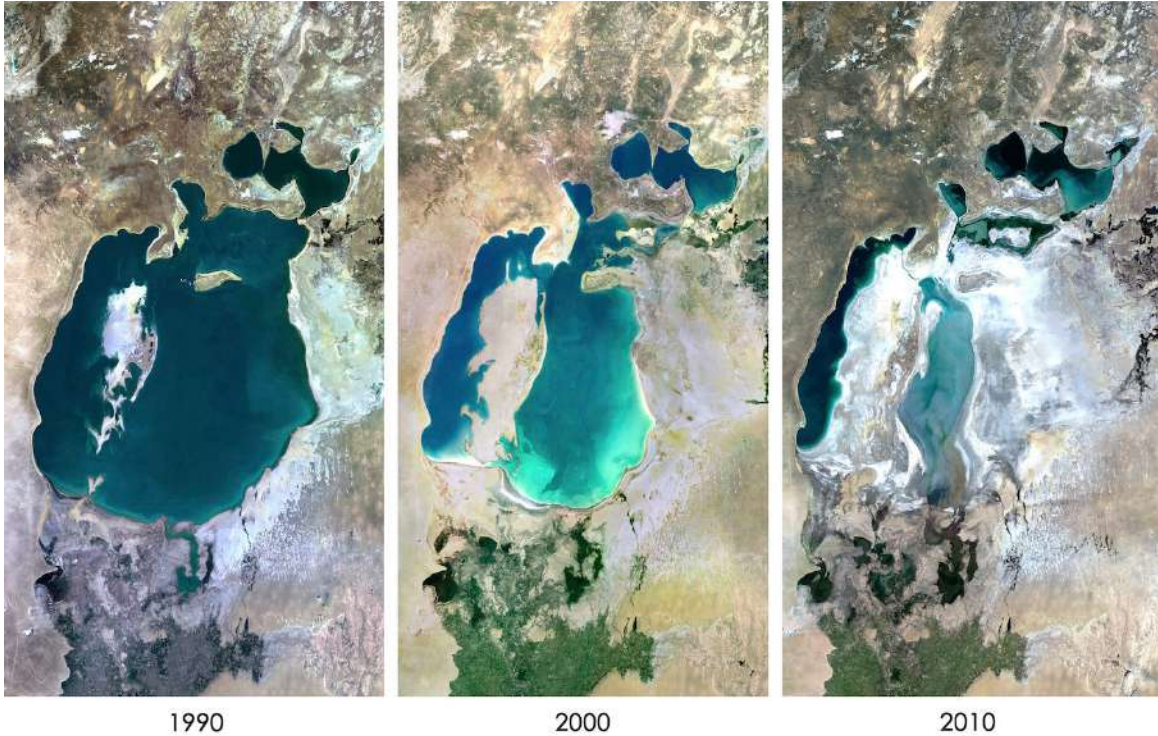
Why? When investment funds are allocated by the government, rather than by the market, an entirely different set of factors comes into play. Political influence rather than potential market returns determine which projects are undertaken. Investment projects that

reduce rather than create wealth become far more likely.

The experiences of the centrally planned socialist economies during the Soviet era illustrate this point. For four decades (1950–1990), the investment rates in these countries were among the highest in the world. Central planners channeled approximately one-third of the national output into capital investment. These high rates of investment, however, did little to improve living standards, because political rather than economic considerations determined which projects were funded. Resources were often wasted on projects with high costs or favored by leaders who wanted high-visibility, prestigious investments. Misdirection of investment and failure to keep up with dynamic change eventually led to the demise of socialism in most of the Soviet countries. Several examples illustrate this misallocation. In 1931 Stalin insisted on building the White Sea-Baltic Canal, but to meet his unreasonable schedule the canal was too shallow to be useful. Khrushchev's campaign to make Kazakhstan produce wheat at the level of American and Canadian prairies and Uzbekistan cotton as profitably as the American south resulted in vast irrigation schemes, which eventually destroyed the Aral Sea.<sup>(51)</sup> The Siberian River Reversal Project stands out as another notable failure. Conceived by Soviet engineers, this ambitious plan aimed to redirect water from Siberia's vast rivers, like the Ob and Irtysh, to the dry areas of Central Asia and Kazakhstan. However, by the early 1980s, concerns over the potential environmental impact and questions about the project's economic feasibility, considering the massive construction and operational costs, led to its abandonment.

Of course, there is no clean distinction between planned and market economies. Even in the Soviet Union and Communist China there were small, residual, examples of private enterprise. Other countries such as Venezuela, Iran and Lybia are highly planned (and suffering because of it). In the years immediately following World War 2 even France and the United Kingdom adopted a heavily state-controlled economic model under the doctrine of **dirigisme**<sup>(?)</sup>. Eventually, these were abandoned by voters as failures.

## The Aral Sea Over Time



### **Video:**

### **The Global Village**

The U.S. experience with political allocation of capital is similar. The housing market illustrates this point. The Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac) were chartered by Congress as government-sponsored corporations in 1938 and 1970, respectively. Because of their government backing, Fannie Mae and Freddie Mac could borrow funds at about half of a percentage point less than private firms. This gave them a huge advantage. By the mid-1990s, Fannie Mae and Freddie Mac held approximately 40 percent of all home mortgages. Moreover, during 1998–2008, these government-sponsored enterprises purchased more than 80 percent of the mortgages sold

by banks and other mortgage originators.

As long as these institutions stuck to their original missions, things were fine. Government planners, however, could not let well enough alone. Beginning in the 1990s, Congress forced Fannie Mae and Freddie Mac to engage in social policies, extending a larger and larger share of their loans to low- and middle-income borrowers who did not have adequate incomes or collateral to support a traditional mortgage. How did this political allocation of capital work out? To meet the congressional mandates, Fannie Mae and Freddie Mac loosened lending standards. They began extending loans with little or no down payment, lending funds to borrowers with poor credit records, and permitting people to borrow larger amounts relative to their income and the price of the house purchased.

As the mortgage lending standards eroded and loose credit became more readily available, the initial effects seemed positive. The demand for housing increased, housing prices soared during 2001–2005, and the construction industry boomed. By mid-2006, however, housing prices leveled off and soon many who borrowed beyond their means stopped making payments. **Mortgage defaults**<sup>(?)</sup> soared, foreclosures expanded, and the financial turmoil led to a severe **recession**<sup>(?)</sup> in 2008–2009. By the summer of 2008, Fannie Mae and Freddie Mac were insolvent, and the American taxpayer was left with approximately \$400 billion of bad debt.

Although the specifics were different, the United States was not the only country where misguided government policies created a crisis in the housing market in the years just before 2010. Between 2007 and 2010 average house prices fell by approximately 35 percent in Ireland and by half or more in Dublin. Following the crash of the “Irish housing bubble,” evaluation by outside experts, including senior finance ministry officials from Canada and Finland, attributed the overheated market to a combination of excessively low interest rates set by the European Central Bank (ECB), massive increases in Irish government spending encouraged by higher than expected property tax revenue, and, especially, a government policy that attempted to encourage home ownership by allowing mortgages for 100 percent of a home’s purchase price, just like in the United States. Corruption also played a role.<sup>(52)</sup> Similar policies in Spain created precisely the same result during the same time frame. Another example is Greek Debt Crisis which erupted in 2009, plunging Greece into the deepest

economic crisis in its modern history. It was part of the wider European sovereign debt crisis. For years, Greek government policies were characterized by high levels of public spending, generous pension schemes, and extensive public sector employment, which were not sustainable without significant reforms or sources of revenue. The Greek Debt Crisis serves as a cautionary tale about the dangers of fiscal mismanagement.

One issue that has always been important but is becoming increasingly so in the modern world is that capital is highly mobile across national boundaries. Government intervention or poor supervision in one country will have spillover effects worldwide. Not only will economic crises reverberate, but, more critically, investors and entrepreneurs in countries where planners limit their opportunities will flee to those who are more welcoming.

When governments are heavily involved, allocation of investment is inevitably characterized by favoritism, conflict of interest, inappropriate financial relations, and various forms of corruption. When actions of this type occur in other countries, they are often referred to as **crony capitalism**<sup>(?)</sup>. Historically, the government has played a larger role in the allocation of investment in other countries than in the United States, but the American experience with government allocation of investment funds for housing illustrates that crony capitalism occurs in the United States as well. Regardless of the label, political allocation of capital imposes a heavy cost on citizens.

## ELEMENT 2.5

# 5. Monetary Stability

*“The way to crush the bourgeoisie is to grind them between the millstones of taxation and inflation.”*

— Vladimir Lenin

**Money**<sup>(?)</sup> emerged as a human invention to facilitate trades and reduce transaction costs. Modern money is merely paper or electronic digits indicating funds in a financial account. While neither paper nor digital money has any intrinsic value, almost everyone wants more of it. Have you ever wondered why?

**Video:**

**Money**

**Video:**

**The History of Money: Barter, Fiat and Bitcoin**

Money performs three important functions that make it valuable. First, money is a medium of exchange. It provides a common denominator that makes it easier for people to exchange goods, services, and resources. Second, money serves as a store of value. It makes it possible for people to shift purchasing power to the future and conduct exchanges across time periods. Third, it provides a unit of account that makes it possible for people to keep track of benefits and costs. By performing these three functions, money increases the gains from trade

and facilitates investments that make larger outputs possible.

Money's contribution to the economy is directly related to the stability of its value. In this respect, money is to an economy what language is to communication. Without words understood clearly by both speaker and listener, communication is difficult. So it is with money. If money does not have a stable and predictable value through time, borrowers and lenders find it difficult to arrive at mutually agreeable terms for loans because saving and investing involve additional risks, and uncertainty escalates. All of this makes transactions that extend over time less likely. When the value of money is unstable, many potentially beneficial exchanges do not occur, reducing output, income, and investment.

When the money supply is constant or increases at a slow, steady rate (similar to the growth of output), the purchasing power of money will be relatively stable. In contrast, when the supply of money expands rapidly compared to the output of goods and services, the general level of prices will rise and the purchasing power of each unit of money will decline.

An increase in the general level of prices is known as **inflation**<sup>(?)</sup>. It is important to note that inflation is not merely an increase in the price of a few items such as gasoline, meat, and air travel. It is a general increase in prices across a large bundle of goods and services.

How is inflation measured? The **consumer price index**<sup>(?)</sup> (CPI) is the most widely used measure of inflation. The CPI reflects the cost of purchasing the bundle of goods and services consumed by the typical household. When, on average, prices rise, the cost of purchasing this bundle increases, pushing the CPI upward by a proportional amount.

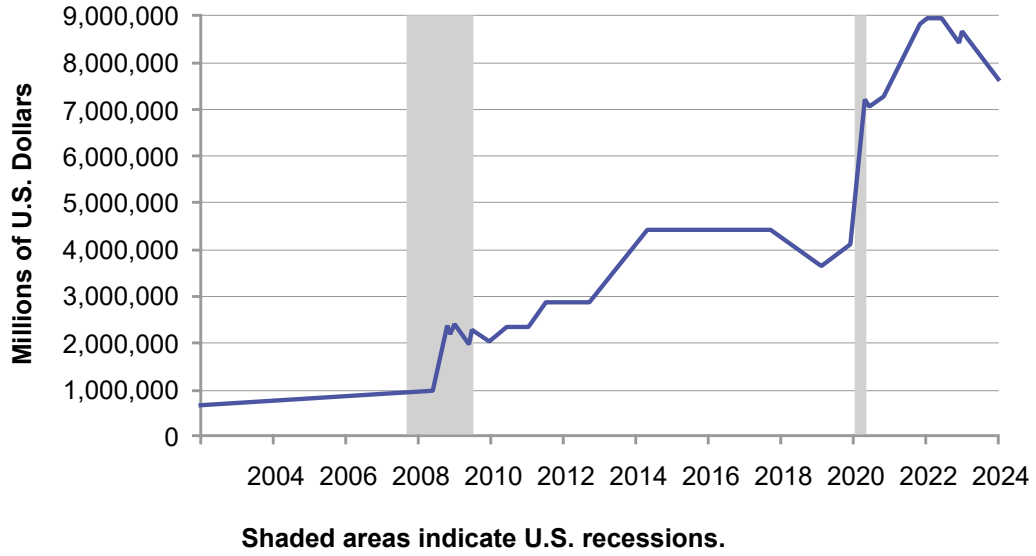
The CPI is reported monthly, and the annual inflation rate is merely the percent increase in the index during the past twelve months. Of course, as prices rise, the purchasing power of money declines, reducing the quantity of goods and services households can buy with their income. Thus, inflation can also be thought of as a decline in the purchasing power of money.

The primary cause of inflation is rapid growth in the supply of money. The **money supply**<sup>(?)</sup>, narrowly defined, is the total of the nation's currency plus bank deposits immediately available (via a bank transfer or a debit card) held by individuals and businesses. A broader definition of money would also include savings deposits held at financial institutions.<sup>(53)</sup>

Central banks, such as the Federal Reserve Bank (the “Fed”) in the United States or the European Central Bank in the Eurozone, are responsible for the control of the money supply. When working well, these central banks pursue key objectives to promote economic stability and growth. These goals include maintaining price stability and achieving full employment. In order to be successful, central banks need to be able to operate independently from governments. Otherwise, their primary responsibilities may be subverted by politicians who, often with short-run time horizons are tempted to force the bank to create too much money in order to finance government expenditures (which voters like) without raising taxes (which voters hate).

How can the central bank change the supply of money? If you look at the currency of almost any country the bill will say that it is printed by that country’s central bank (or the ECB for countries in the Euro zone). Obviously, one way to increase the money supply is simply to run the printing presses faster. This is typically what happens in the worst periods of **hyperinflation**<sup>(?)</sup> discussed below. In the modern world, however, central banks have a much more powerful tool to affect the money supply and the rate of inflation. When an ordinary citizen or firm wants to purchase an asset they have to pay for it by transferring funds to the seller. Central banks, however, because they have the power to create money can simply “pay” for their purchases by adding a credit to the bank account of the seller. When the central bank wants to increase the supply of money and lower interest rates it simply buys assets (usually government debt) from the public and, thereby increase the supply of money in circulation. They are called **open market operations**<sup>(?)</sup>. Exhibit 6 below shows the increase in assets of the Fed between 2003 and 2024.

### Exhibit 6: Total Assets of US Federal Reserves, 2003-2024



Source: Board of Governors of the Federal Reserve System (US) - fred.stlouisfed.org

Countries that persistently expand the supply of money more rapidly than the growth of output experience inflation. Historically, this linkage between rapid growth of the money supply and inflation has been one of the most consistent relationships in all of economics.<sup>(54)</sup>

### Exhibit 7: Monetary Growth and Inflation, 1996-2021

	Average Annual Growth Rate of Money Supply (%)	Average Annual Rate of Inflation (%)
<b>Rapid Growth of the Money Supply</b>		
Belarus	58	41.1
Turkiye	37.3	25.9
Romania	25.8	19.1
Kazakhstan	25.8	9.7
Ukraine	25.6	15.3
Azerbaijan	23	5.7
Georgia	22.7	6.9
Kyrgyz Republic	20.8	10.1
Armenia	19.6	4.6
<b>Slow Growth of the Money Supply</b>		
United Kingdom	8.2	2
Sweden	7.6	1.2
United States	7.1	2.2

Source: World Bank Open Data. [worldbank.org](http://worldbank.org)

Note: Analyzed variables are "Inflation, consumer prices (annual %)" and "Broad money growth (annual %)".

Exhibit 7 illustrates the linkage between the growth of the money supply and inflation. Note how countries that increased their money supply at a slow annual rate experienced low rates of inflation during 1996–2021. This was true for large high-income countries like the United States, as well as for smaller ones like Sweden and the United Kingdom. During 1996–2021, the money supply grew at an annual rate between 19 and 26 percent in Armenia, the Kyrgyz Republic, Georgia, Azerbaijan, Ukraine, Kazakhstan, and Romania. Note that all these countries experienced higher annual inflation rates compared to countries with slow growth of the money supply. More rapid rates of monetary growth, in the case of Turkiye and Belarus, led to even higher average annual rates of inflation, 25.9 and 41.1 percent, respectively. As

Exhibit 7 illustrates, there is a close relationship between rapid monetary expansion and high rates of inflation when measured over lengthy time periods.

**Video:**

**Milton Friedman on Inflation**

Inflation adversely affects income levels and living standards. As noted above, money is to an economy what language is to communication. Prices convey important information. They help a consumer decide whether to purchase a product, and they tell producers whether consumers' purchases are worth what they cost to make. In this way, prices direct decision-makers to produce goods and services people value highly relative to cost. During inflationary periods the prices of some goods will change more rapidly than others. Thus, inflation distorts the information provided by prices.

Moreover, high rates of inflation are nearly always accompanied by large and erratic fluctuations in the inflation rate. When prices increase 10 percent one year, 5 percent the next year, 15 percent the year after that, and so on, activities that depend on accurate identification of the value of money over time, such as investing, involve greater risk. Unexpected changes in the inflation rate can generate misleading information and quickly turn apparently productive projects into counterproductive investments and personal economic disasters. Rather than dealing with these additional risks, many entrepreneurs and investors will simply forgo capital investments and other transactions involving long-term commitments. As a result, gains from investment and other business activities will be undermined and output will fall short of its potential.

When central bank policies achieve price stability, they reduce uncertainty and provide the foundation for full employment. How can central bank policy best achieve price stability? The central banks of Armenia, Azerbaijan, Georgia, Belarus, Kazakhstan, Moldova, Russia, Ukraine, and Uzbekistan set their inflation targets ranging from 3% to 6% for the years 2021-2022. In contrast, high-income countries such as the United States, United Kingdom, South Korea, Sweden, and Norway have established a uniform inflation target of 2% for the same

period.<sup>(55)</sup> The inflation target provides the central banks with clear signals for the conduct of **monetary policy**<sup>(?)</sup>. If the rate of inflation rises above the target, this is a signal for the central bank to shift to a more restrictive monetary policy, raising interest rates. Correspondingly, if the inflation rate falls below the target, this signals the need to shift to a more expansionary policy.

However, inflation targeting is tricky. It requires knowledge of inflation, actual output, and potential output. Some economists believe that rather than targeting the inflation rate, it would be better for the central bank to target **nominal GDP growth**<sup>(?)</sup>—the sum of **real GDP**<sup>(?)</sup> growth and inflation. For example, suppose the Fed adopted a 5 percent target for nominal GDP growth. If nominal GDP growth was greater than 5 percent, the Fed would shift toward a more restrictive policy. In contrast, if nominal GDP growth fell below the 5 percent target, the Fed would be more expansionary.

Exhibit 8 shows the relationship between the growth rate of the money supply (using the broad definition, called M2<sup>(56)</sup>) and the inflation rate in the US between 2000 and 2022. Both are measured as a twelve-month moving average, which is merely the percent change during the past twelve months. Because a few quarters generally elapse before a shift in monetary policy affects prices, the inflation rate data are lagged by twelve months. During the period 2000–2019, the growth rate of the money supply grew at an average of 6 percent and remained between 3 percent and 10 percent throughout this period. This growth rate of the money supply was accompanied by an average inflation rate of 2 percent.

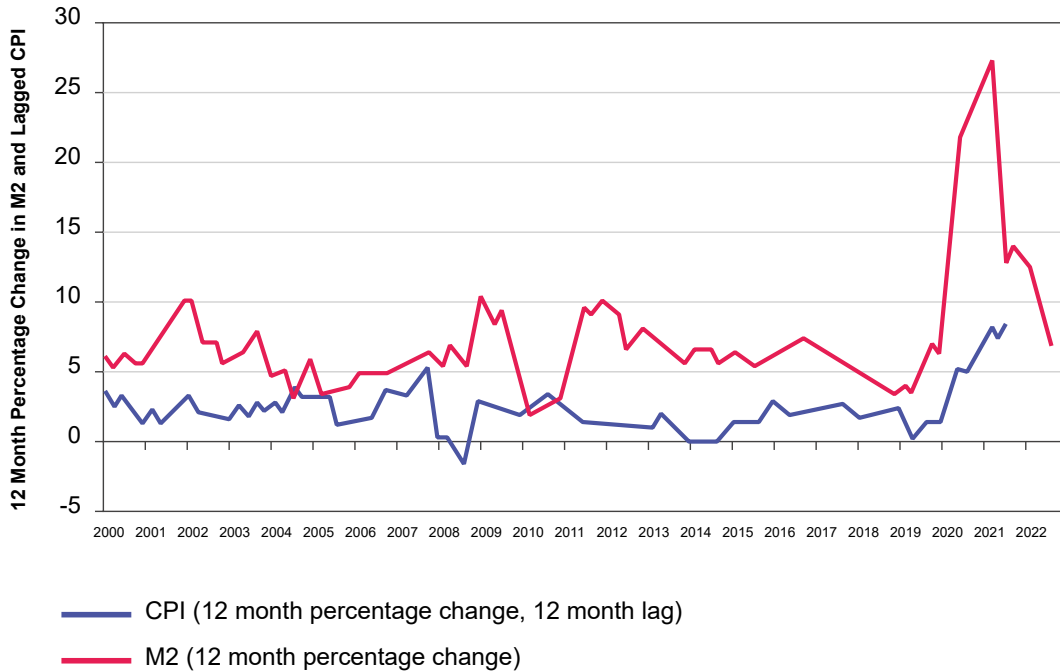
With interest rates exceedingly low, monetary authorities world-wide were able to expand the money supply a little more rapidly than the growth of output without causing inflation. Low interest rates reduce the opportunity cost of holding money, and therefore people are willing to hold larger money balances and the turnover rate of money is lower. The turnover rate (economists call this velocity) is the number of times a unit of money is used to purchase goods and services.

**Video:**

**Too much money**

During this period, demographic factors pushed interest rates downward. In high-income countries, the share of population in the younger age categories (for example, less than age forty) in which people are generally net borrowers, has declined, while the share in older age categories, where people are generally net lenders (for example, ages fifty to seventy-five), has increased. This change has reduced the demand and increased the supply of money, pushing interest rates downward throughout the world. In turn, the lower interest rates have caused the turnover rate of money to decline, making it possible for the monetary authorities to expand the money supply a little more rapidly without causing inflation.

### Exhibit 8: Money Growth and the Inflation rate, 2000-2022



Sources (both retrieved July 5, 2022):

- Federal Reserve Bank of St. Louis, *M2 [M2SL]*, retrieved from FRED, Federal Reserve Bank of St. Louis; [fred.stlouisfed.org/M2SL](https://fred.stlouisfed.org/M2SL);
- Federal Reserve Bank of St. Louis, *Consumer Price Index for All Urban Consumers: All Items in U.S. City Average [CPIAUCSL]*, retrieved from FRED, Federal Reserve Bank of St. Louis, [fred.stlouisfed.org/CPIAUCSL](https://fred.stlouisfed.org/CPIAUCSL);

All of this changed when COVID hit. During 2020–2022 the money supply growth rate soared to a rate far greater than the growth of real output (nominal GDP adjusted for inflation). Just as theory predicted, soon after the surge in money growth, the inflation rate soared, in the US, reaching 9% during the first half of 2022.

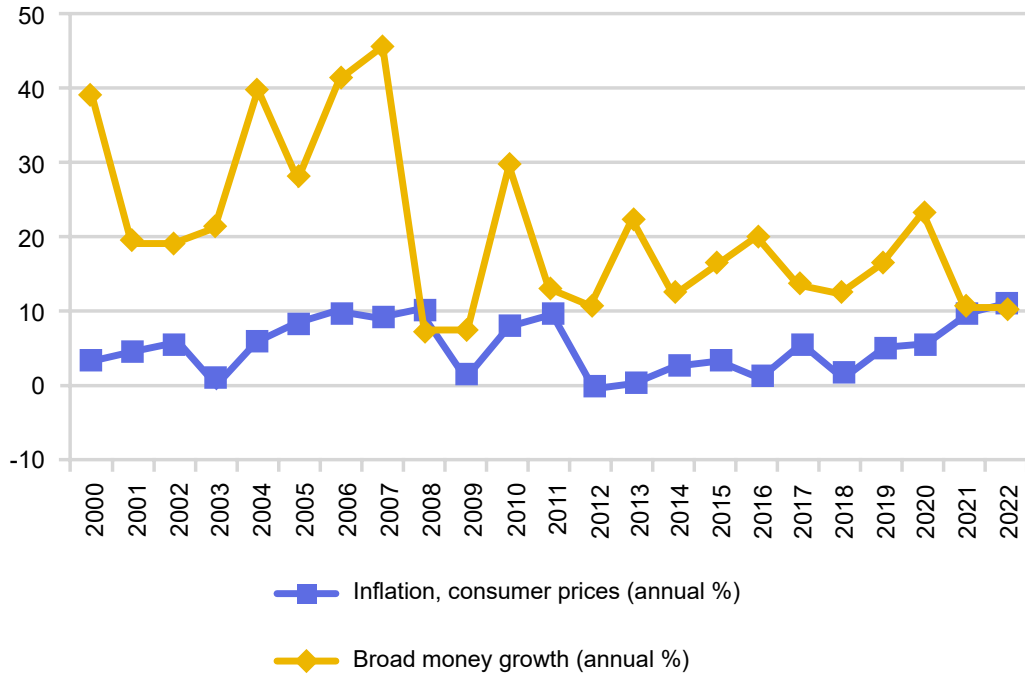
While 9% inflation may seem high for those who are used to stable prices, at various

times monetary authorities have created far greater problems. In Yugoslavia in 1994 prices doubled every 36 hours. A loaf of bread that cost 10 dinars on Monday morning would sell for over 300 dinars a week later. This led the country to abandon its currency and adopt the German mark. The situation in Hungary in 1946 was even worse. For a time, prices doubled every 15 hours. In Ukraine in 1993 prices increased well over 400-fold.

While excessive monetary expansion is the primary cause of inflation, monetary contraction often leads to economic instability in the form of deflation and recessions. For example, the Fed permitted the money supply to fall by 30 percent during 1929–1933. This led to the American economy shrinking by 29% in real terms and unemployment rising to 25% of the workforce. Many economists believe that the huge 1929–1933 contraction in the money supply was the primary cause of the Great Depression. There were other contributing factors, including the large tariff increases of 1930 and the huge 1932 increase in income tax rates. However, even if perverse monetary policy was not the primary cause, it was certainly a major contributor to the severity and length of the Great Depression.

The link between money supply and inflation is also clear in a small, developing, upper-middle-income country like Georgia. Exhibit 9 illustrates this relationship by comparing the growth rate of the money supply (using the broad M2 definition) to the inflation rate from 2000 to 2022 in Georgia. Between 2000 and 2007, the money supply expanded by an average of 32 percent, which was followed by an average inflation rate of 6.7 percent from 2001 to 2008. This comparison is more relevant when using lagged data, as changes in monetary policy take time to impact prices. From 2008 to 2021, the money supply grew at a slower average rate of 16.4 percent, leading to a lower average inflation rate of 4.7 percent from 2009 to 2022.

**Exhibit 9: Money Supply and Inflation in Georgia, 2000-2022**



Source: World Bank Open Data. [data.worldbank.org](https://data.worldbank.org).

Historically, monetary instability has been a major cause of economic disturbances. Why has this been the case? At various times, several different factors have played a role, but two deserve special mention. First, monetary policymakers often confront strong political pressures to finance government spending with money creation. Politicians do not like to levy taxes, because this imposes a visible cost on voters. Thus, politicians will often pressure monetary policymakers to finance spending increases by expanding the money supply so they will not have to raise taxes. Second, as previously mentioned, there is a time lag of six to eighteen months between a shift in monetary policy and the time when the change exerts an impact on output and employment. Sometimes the time lag will be even longer. Therefore, when policymakers constantly shift policies in an effort to minimize economic instability, the

lengthy and unpredictable time lags will result in monetary policy errors that increase rather than reduce economic instability.

It is difficult to overstate the importance of monetary and price stability. While monetary stability does not guarantee growth and prosperity, without it, strong growth and economic stability will be impossible. If investors and other business decision-makers can count on monetary policymakers to maintain price stability, a potential source of uncertainty is eliminated. When monetary policymakers follow policies that keep the inflation rate low and relatively steady, they have done their part to establish the monetary framework for economic growth and prosperity.

**Video:**

**[The Effects of Printing Money](#)**

## ELEMENT 2.6

# 6. Prudent Fiscal Policy

*“Taxes are paid in the sweat of every man who labors. . . . If those taxes are excessive, they are reflected in idle factories, in tax-sold farms, and in hordes of hungry people tramping the streets and seeking jobs in vain.”<sup>(57)</sup>*

— Franklin D. Roosevelt

When high tax rates take a large share of income, the incentive to work and use resources productively declines. The **marginal tax rate**<sup>(?)</sup> is particularly important. The marginal tax rate is the share of additional income that is taxed away at any given income level. For example, if your marginal tax rate is 25 percent, taxes take 25 percent of any additional funds you earn. You can keep only \$75 if you earn an additional \$100. If the marginal tax rate rises to 40 percent, you can keep only \$60 out of a \$100 increase in earnings. As marginal tax rates increase, the share of additional earnings that people take home declines.

There are three reasons why high marginal tax rates reduce output and income. First, they discourage work effort. When marginal tax rates soar to 55 or 60 percent and individuals take home less than half of their additional earnings, some people will respond by working fewer hours, retiring earlier, or taking jobs in places with lower tax rates or taking longer



vacations. Some people, perhaps those with working spouses, will respond by leaving the labor force entirely. Still others will be more particular about accepting jobs when unemployed, refuse to move to take a job or to gain a pay raise, or forget about pursuing that promising but risky business venture. Given the high tax rate, these just may not be worth the trouble.

Higher marginal tax rates will even reduce the returns to education, leading to less investment in human capital. High tax rates can even drive a nation's most productive citizens to move to countries with lower tax rates. Such responses reduce the size and productivity of the workforce, causing output to decline. The marginal tax rates vary across countries. The marginal tax rate in Romania is 10%, in Armenia and Georgia it is 20%, in Poland it is 32% if a taxpayer earns more than 120,000 zloty per year, while in France it is up to 45% for incomes over €177,107 as of 2023.

Of course, most people will not immediately quit work or even work less diligently if their marginal tax rate rises. A person with years of training for a particular occupation will probably continue working—and working hard—especially if that person is in the peak earning years of life. But many younger people who have not already made costly investments in specialized training will be discouraged from doing so because they will get less and less advantage from more income. Thus, some of the negative effects of high tax rates on work effort will be felt in the future, because as young people get older, they will not be as productive as they otherwise would be.

High tax rates will also cause some people to shift to activities in which they are less productive. Suppose, for example, high taxes drive up the prices charged by skilled painters, because they want to make up for the diminishing value of extra pay. Some potential customers will respond by painting their own houses even though they lack the skill to do so efficiently. Without high tax rates, the professional painter would do the job at an affordable cost, allowing homeowner painters to focus their time on work for which they are better suited. Waste and economic inefficiency result from these tax-distorted incentives.

Second, high marginal tax rates reduce both the level and efficiency of capital formation. High tax rates repel foreign investment and cause domestic investors to search for investment projects abroad in countries where both taxes and production costs are lower. This reduces that country's investment and the availability of productive equipment, which provide

the fuel for economic growth. As a result, the growth of workers' productivity and earnings in the future will be lower.

Third, high marginal tax rates encourage individuals to consume tax-deductible goods in place of nondeductible goods, even though the nondeductible goods may be more desirable. Often they do this by purchasing items for their business, because business expenses are generally tax-deductible. Individuals who purchase them do not bear their full cost, because the expenditure reduces the taxes they would otherwise pay. Taxpayers confronting high marginal tax rates will spend more money on such tax-deductible items as plush offices, extravagant conferences, business entertainment, and company-provided automobiles. Because such tax-deductible expenditures reduce their taxes, people will often buy goods they would not buy if they were paying the full cost. Waste and inefficiency are by-products of high marginal tax rates and the perverse incentives they generate.

The sales of the British-made luxury car Rolls-Royce in the 1970s provide a vivid illustration of this point. During this era, the marginal income tax rates imposed on those with the highest incomes in the United Kingdom soared to 98 percent. A business owner paying that tax rate could, however, buy a car as a tax-deductible business expense, so why not buy an exotic, more expensive car? The purchase would reduce the owner's profit by the car's price—say £100,000. However, given the 98 percent marginal tax rate, the £100,000 tax deduction would reduce the owner's tax liability by £98,000. Thus, the owner's net cost of the luxury automobile was only £2,000. In effect, the government was paying 98 percent of the car's costs (through lost tax revenue). When the UK cut the top marginal tax rate to 70 percent, the sales of Rolls-Royces plummeted. After this rate reduction, the £100,000 car now cost the business owner not £2,000 but £30,000. The lower marginal rates made it much more expensive for wealthy Brits to purchase Rolls-Royces, and they responded by purchasing fewer of them.

Reductions in tax rates, particularly high rates, can increase the incentive to earn and improve the efficiency of resource use. The United States has had three major reductions in tax rates: the rate reductions during the 1920s in the aftermath of World War I, the Kennedy tax cuts of the 1960s, and the Reagan tax cuts of the 1980s. All were followed by strong and lengthy expansions in real GDP (output adjusted for inflation).

Another prominent example of a country experiencing significant economic growth

following tax reductions is Ireland. During the late 20th and early 21st centuries, Ireland underwent a series of tax reforms that played a crucial role in transforming its economy into one of the fastest-growing in the world, a period often referred to as the "Celtic Tiger" era. Estonia presents another compelling example of a country experiencing significant economic growth following tax reforms, notably its introduction of a flat income tax system and other tax-related innovations in the early 2000s.

Tax rate reductions have also been implemented to spur economic growth in post-communist countries like Georgia and Armenia. Between 2005 and 2008, the Georgian government enacted sweeping reforms to its tax legislation. The 21 different taxes in place in 2004 were streamlined to just 6 by 2005. Starting in 2009, the government simplified taxes further by eliminating the social tax and introducing a single **personal income tax**<sup>(?)</sup>, cutting the marginal income tax from 32 percent down to 20 percent. The Armenian government also implemented significant tax reforms in 2020. The personal income tax was reduced to a flat rate of 20% in 2023, down from a progressive system with rates up to 36%. Indeed, transition economies dominate the countries with the lowest top personal income rates in the world. These include Bosnia and Herzegovina, Kazakhstan, Kosovo, Kyrgyzstan, Romania, and Turkmenistan, all of whom have a maximum income tax rate of 10% as of 2024.<sup>(58)</sup>

In contrast, large tax increases can exert a disastrous impact on the economy. For example, in the late 1970s, the UK faced severe economic challenges. The government, in an attempt to tackle inflation and **budget deficit**<sup>(?)</sup>, implemented a series of tax increases. These measures included raising income tax rates to very high levels, with the top rate of income tax reaching 83% on earned income and an astonishing 98% on unearned income (such as **dividends**<sup>(?)</sup> and interest).

These high tax rates disincentivized work, investment, and innovation. Many high earners and skilled professionals were discouraged from working harder or investing due to the significant portion of their income taken by the government. The UK experienced capital flight, with businesses and individuals moving their investments abroad to more tax-friendly environments. The economy stagnated, with low growth and high inflation persisting. The tax burden contributed to a lack of economic dynamism and reduced the overall competitiveness of the British economy. The economic frustration culminated in the Winter of Discontent of

1978-1979,<sup>(59)</sup> marked by widespread strikes and public sector unrest due to dissatisfaction with pay caps, high taxation, and deteriorating public services. The situation ultimately led to significant political and economic reforms in the 1980s under Prime Minister Margaret Thatcher, who implemented policies to reduce tax rates, deregulate the economy, and encourage private enterprise.

As a second example, the tax policy in the United States during the Great Depression underscores the detrimental impact tax increases can have on the economy. Seeking to reduce the federal budget deficit in 1932, the Republican Hoover administration and the Democratic Congress passed the largest peacetime tax rate increase in the history of the United States. The lowest marginal tax rate on **personal income**<sup>(?)</sup> was raised from 1.5 percent to 4 percent. At the top of the income scale, the highest marginal tax rate was raised from 25 percent to 63 percent. Essentially, personal income tax rates were more than doubled in one year! This huge tax increase reduced the after-tax income of households and the incentive to earn, consume, save, and invest. The results were catastrophic. In 1932, real output fell by 13 percent, the largest single-year decline during the Great Depression era. Unemployment rose from 15.9 percent in 1931 to 23.6 percent in 1932. Just four years later, the Roosevelt administration increased taxes again, pushing the top marginal rate to 79 percent in 1936. Thus, during the latter half of the 1930s, high earners were permitted to keep only 21 cents of each additional dollar earned. (It is interesting to contrast the words of candidate Roosevelt presented at the top of this element with the tax policy followed during his presidency.) Several other factors, including a huge contraction in the money supply and a large increase in tariff rates, contributed to both the severity and length of the Great Depression. But it is also clear that the tax increases of both the Hoover and Roosevelt administrations played a major role in this tragic chapter of American history.<sup>(60)</sup>

Income taxes (both personal and corporate) are not the only taxes that can distort incentives and affect how well an economy operates. The World Bank's Doing Business Index assesses the regulatory environment and its impact on business operations across 190 countries. A critical component of this index focuses on measuring the tax burden faced by companies, evaluating both the direct financial impact of tax rates and the administrative complexity of tax compliance. This aspect of the index examines the total number of taxes

paid, the methods of payment, the time spent on tax compliance, and the overall rate at which profits are taxed.<sup>(61)</sup>

For 2019, the most tax-friendly countries include some we would expect to find, such as Hong Kong, Singapore, New Zealand, Ireland, and Finland (plus some small Persian Gulf states where oil revenues mean almost no taxes on firms). The worst performers also seem about right and include Venezuela, Somalia, Bolivia, Chad, and the Central African Republic. Among post-communist countries, the least-burdensome tax systems are found in Estonia (ranked 12<sup>th</sup>), Georgia (14<sup>th</sup>), Latvia (16<sup>th</sup>), and Lithuania (18<sup>th</sup>).<sup>(62)</sup> The average transition economy ranked 67<sup>th</sup>, about the same as Greece, surely not a model to be emulated. These numbers can be reconciled with the low personal income tax rates discussed above because income taxes are not the only taxes governments impose. Others include value added (sales) taxes, social insurance taxes, estate (death) and corporate income taxes.

The disincentive effects of high marginal tax rates are not just an issue for those with high earnings. Many people with relatively low incomes also face high implicit marginal tax rates. We call them “implicit” because they include both additional taxes and the loss of transfer benefits as income increases. For example, suppose that an individual’s income increases from \$20,000 to \$30,000 and, as a result, income and payroll taxes take 30 percent of the additional earnings. Further, because of this increase in income, the individual loses \$5,000 in benefits from food subsidies, free or low-cost medical care, child care benefits and other transfer programs. As a result, the individual confronts an implicit marginal tax rate of 80 percent! Thirty percent comes in the form of a higher tax bill, and an additional 50 percent comes from lost transfer benefits. People in this position who earn an additional \$10,000 get to keep only 20 percent of it. Obviously, this will substantially reduce their incentive to earn and make it more difficult to move up the income ladder. We will return to this issue in Part 3, Element 3.8, when examining the impact of transfer programs on the poverty rate.

In summary, economic analysis indicates that high tax rates, including implicit rates reflecting the loss of transfer benefits, are detrimental. They reduce productive activity, impede both employment and investment, and promote wasteful use of resources. They are an obstacle to prosperity and the growth of income. Moreover, large increases in tax rates during a period of negative or anemic growth can exert a disastrous impact. Thus, if we are going to get the

most from our resources, tax rates, particularly marginal tax rates, need to be kept low.

## ELEMENT 2.7

# 7. Free Trade

*“Free trade consists simply in letting people buy and sell as they want to buy and sell. Protective tariffs are as much applications of force as are blockading squadrons, and their objective is the same—to prevent trade. The difference between the two is that blockading squadrons are a means whereby nations seek to prevent their enemies from trading; protective tariffs are a means whereby nations attempt to prevent their own people from trading.”<sup>(63)</sup>*

— Henry George, Nineteenth-Century Political Economist

The principles involved in international trade are basically the same as those underlying any voluntary exchange. As is the case with domestic trade, international trade makes it possible for each of the trading partners to produce and consume more goods and services than otherwise possible. There are three reasons why this is so.

**Video:**

**Does Free Trade Exploit the Poor?**

First, the people of each nation benefit if they can acquire a product or service through trade more cheaply than they can produce it domestically. Resources differ substantially across countries. Goods costly to produce in one country may be more inexpensively produced in another. For example, countries with warm, moist climates, such as Brazil and Colombia, find it advantageous to specialize in coffee production. People in Canada and Australia, where land is abundant and population sparse, tend to specialize in land-intensive products such as feed

grains, beef, and sheep. The citizens of Japan, where land is scarce and the labor force highly skilled, specialize in manufacturing such items as cameras, automobiles, and electronic products. Trade permits each of the trading partners to use more of their resources to produce and sell things they generate at a low cost rather than have them tied up producing those things involving a high cost. As a result of this specialization and trade, total output increases, investment expands, and people in each country achieve a higher standard of living than would otherwise be attainable.

Second, international trade allows producers and consumers to benefit from the economies of scale typical of many large operations. This point is particularly important for small countries. For example, trade helps textile manufacturers in countries like Bangladesh, Costa Rica, , Thailand, and Vietnam enjoy the benefits of large-scale production. If they were unable to sell abroad, their costs per unit would be much higher because their domestic textile markets are too small to support large, low-cost firms in this industry. International trade enables textile firms in these countries to produce and sell large quantities and compete effectively in the world market.

Consumers, too, benefit by purchasing from large-scale producers abroad. Given the huge design and engineering costs of large jet engine airplanes today, for example, no country has a domestic market large enough to permit even a single airplane manufacturer to realize fully the economies of large-scale production. With international trade, however, Boeing and Airbus can sell many more planes, each at a lower cost. As a result, consumers in every nation can fly in planes purchased economically from such large-scale producers.

Third, international trade allows consumers to purchase a wider variety of products at lower prices. Competition from abroad keeps domestic producers on their toes. It forces them to improve the quality of their products and keep costs down. At the same time, the variety of goods available from abroad provides consumers with a much greater array of choices than would be available without international trade.

**Video:**

**Is Free Trade Worth The Cost?**

While economists almost universally agree that free trade benefits every country that adopts this policy, politicians and voters seem to have difficulty grasping this simple argument. Governments often impose regulations that restrain international trade. These can be tariffs (taxes on imported goods), quotas (limits on the amount imported), **exchange rate**<sup>(?)</sup> controls (artificially holding down the **foreign exchange**<sup>(?)</sup> value of the domestic currency to discourage **imports**<sup>(?)</sup> and encourage **exports**<sup>(?)</sup>), or bureaucratic regulations on importers or exporters. All such trade restrictions increase transaction costs and reduce the gains from exchange. As Henry George noted in the quotation at the beginning of this section, trade restraints act like a military blockade that a nation imposes on its own people.

Determining whether a country supports free trade isn't as straightforward as observing the variety of products in local malls and supermarkets. While a diverse selection might suggest openness to international trade, actual trade policies can tell a different story. For instance, in Ukraine, the average tariff on industrial products is over 10 percent, and it rises to 20 percent for agricultural goods. Specific imports face even steeper tariffs, such as 50 percent on sugar and 30 percent on sunflower seed oil. Similarly, Bulgaria applies tariffs ranging from 5 to 45 percent on imports from non-EU countries. In the United States, certain products like dairy, sugar, ethanol, and beef are subject to quotas, with extremely high tariffs on amounts exceeding these quotas.

Georgia presents an interesting case in the context of trade policies and its stance on free trade. Despite being a relatively small country, Georgia has made significant efforts to liberalize its trade regime and promote free trade. It has entered into free trade agreements (FTAs) with countries and regions, including the European Union (EU). Unfortunately, like other countries, even Georgia also has specific trade policies that can be protective of certain sectors. Since 2006 there are only 3 tariff rates in Georgia: 0, 5 and 12 percent. Nearly 90 percent of goods benefit from a zero tariff rate. The highest rate applies to agricultural goods and other products produced in volume in Georgia that are taxed at the highest rates in order to protect local farmers and producers.<sup>(64)</sup>

In addition to tariffs, countries may impose quotas (numerical limits on amounts imported) or even total bans on products from other countries, or from some countries in particular. Tariffs, quotas, and permanent or temporary bans, **embargos**<sup>(?)</sup> can be used for

purposes other than trade policies. Russia, for example, is both implementing and facing several types of trade restrictions. Several countries banned the import of goods from Russia in response to its invasion of Ukraine, particularly focusing on key commodities such as oil and gas, to reduce dependency on Russian energy resources and cut off a significant source of revenue for the Russian government. Russia itself banned almost all agricultural imports from the European Union, the United States, Canada, Australia, and Norway. These embargoes in 2022 and later augmented restrictions were taken by the European Union and the United States against Russia following its annexation of Crimea. In 2018 and 2019, US President Trump used tariff policy in disputes with China. Another well-documented example of trade restrictions is the series of measures the United States has imposed on Iran over the years.

While many restrictions have been imposed to harm citizens of “misbehaving” nations, it must be acknowledged that these restrictions also harm citizens of the imposing nations and must, therefore be justified by larger political considerations such as discouraging aggression or mistreatment of minorities. Noneconomists often argue that import restrictions can create jobs. As we discussed in Part 1, Element 1.11, it is production of value that really matters, not jobs. If jobs were the key to high incomes, we could easily create as many as we wanted. All of us could work one day digging holes and the next day filling them up. We would all be employed, but we would also be exceedingly poor because such jobs would not generate goods and services that people value.

Import restrictions may appear to expand employment because the industries protected from foreign competition may increase in size or at least remain steady. This does not mean, however, that the restrictions expand *total* employment. Remember the secondary effects discussed in Part 1, Element 1.9. When a country erects tariffs, quotas, and other barriers limiting the ability of foreigners to sell in that country, they are simultaneously reducing foreigners’ ability to buy from them. What we buy from people in other countries gives them the purchasing power they need to buy our exports. If foreigners sell less to Uzbeks, for example, they will have less ability to buy from Uzbeks. Thus, import restrictions will reduce exports, not just imports. Output and employment in export industries will decline, offsetting any jobs “saved” in the protected industries.<sup>(65)</sup>

Trade restrictions thus neither create nor destroy jobs; they reshuffle them. The

restrictions artificially direct a country's workers and other resources toward the production of things that are produced at a higher cost than they could be produced in other countries. They are designed to protect inefficient industries. Output and employment shrink in areas where the imposing country's resources are more productive—areas where its firms could compete successfully in the world market if not for the impact of the restrictions. Labor and other resources are, therefore, shifted away from areas of relatively high productivity and moved into areas of low productivity. Such policies reduce both the output and income levels of citizens.

**Read:**

**Markets and Freedom by Dwight Lee**

Some people in more developed countries might argue that their country's workers cannot compete with foreigners who sometimes earn as little as \$2 or \$3 per day. This view is simply wrong and stems from a misunderstanding of both the source of high wages and the law of comparative advantage. Workers in Germany, for example, possess high skill levels, and work with large amounts of capital equipment. These factors contribute to their high productivity, which is why their wages are high. In low-wage countries like Moldova and Kyrgyzstan, wages are low precisely because low human and physical capital means that productivity is low.

Each country will always have some things that it does relatively better than others. Both high- and low-wage countries can benefit from using more of their resources to produce what they do comparatively well—and trade for the rest. If a high-wage country can import a product from foreign producers at a lower cost than it can be produced domestically, importing makes sense. Importing products that could be supplied domestically only at high costs frees resources to produce those things that can be done well locally and can be supplied both at home and abroad at a low cost.<sup>(66)</sup> Trade across nations allows workers in both high- and low-wage countries to produce a larger output than would otherwise be possible. In turn, the higher level of productivity boosts wages across countries.

What if foreign producers were able to provide consumers with a good so cheaply that domestic producers were unable to compete? The sensible thing would be to accept the good and use domestic resources to produce other things. Remember, it is availability of goods and services, not jobs, that determines our living standards. Adam Smith, in "The Wealth of Nations" (1776) noted, "By means of glasses, hotbeds, and hot walls, very good grapes can be raised in Scotland, and very good wine too can be made of them at about thirty times the expense for which at least equally good can be brought from foreign countries." Through this analogy, Adam Smith was advocating for the principle of free trade. Smith's point was that even though it is technically possible to grow grapes and produce wine in Scotland, a country not naturally suited for this type of agriculture due to its colder climate, the cost of doing so would be very high, about thirty times higher, compared to importing wine from countries where grapes grow naturally and more efficiently, like France or Spain. The French economist Frédéric Bastiat dramatically highlighted this point in his 1845 satire "A Petition on Behalf of the Candlestick Makers." The petition was supposedly written to the French Chamber of Deputies by French producers of candles, lanterns, and other products providing indoor lighting. The petition complained that domestic suppliers of lighting were "suffering from the ruinous competition of a foreign rival who apparently works under conditions so superior to our own for production of light that he is flooding the domestic market with it at an incredibly low price; for the moment he appears, our sales cease, all the consumers turn to him, and a branch of the French industry whose ramifications are innumerable is all at once reduced to complete stagnation."

Of course, this rival is the sun, and the petitioners are requesting that the deputies pass a law requiring the closing of windows, blinds, and other openings so that sunlight cannot enter buildings. The petition goes on to list the occupations in the lighting industry that would experience a large increase in employment if using the sun for indoor lighting was outlawed. Bastiat's point in this satire is clear: As silly as the proposed legislation in the petition is, it is no sillier than legislation that reduces the availability of low-cost goods and services to "save" domestic producers and promote employment.<sup>(67)</sup>

If trade restrictions reduce output and shift employment toward less-productive activities, why are they often adopted? Economic illiteracy provides part of the answer. People

often fail to recognize that the trade restrictions cause adverse secondary effects, including higher prices for goods with tariffs and reductions in output and employment in export industries. Two additional factors, however, contribute to the popularity of trade restrictions.

First, trade restrictions are a special interest issue. They provide benefits to specific businesses and employees in the protected industry at the expense of consumers and suppliers in other industries. Typically, the businesses and unions helped by the trade restrictions are well organized and their gains are concentrated and highly visible. On the other hand, consumers, other workers, and other resource suppliers are generally poorly organized and their gains from international trade widely dispersed. Predictably, the organized interests will have more political clout. They will be able to lobby politicians and provide them with campaign contributions and other resources to obtain the trade restrictions.

**Video:**

**Freedom's Sound International Trade**

Furthermore, when products such as steel or lumber are available at lower prices from foreign producers, the adverse impacts on workers who lose their jobs are easy to see. In contrast, the gains to consumers and others helped by the lower prices and freer trade are much less visible. As a result, politicians will often be able to gain politically by supporting the businesses and labor interests benefiting from the restrictions even though they adversely impact the economy as a whole.

Second, politicians may also use trade restrictions in an effort to get a trading partner to behave in a desired manner, particularly in foreign policy. Of course, trade is mutually advantageous, and therefore trade restrictions will impose harm on both trading partners. If the harm is substantial, the restrictions might be used as a tool with which to alter their behavior. For example, the Trump administration imposed tariffs on China to persuade Chinese leaders to be less aggressive militarily. To a large degree, the Biden administration continued with the same policy. Similarly, following the invasion of Ukraine NATO members and other countries imposed various trade restrictions on Russia to punish it for this aggression.

Imposition of trade restrictions against a foreign threat is often popular, but its effectiveness is questionable. Historically, it is difficult to find even a single case where trade restrictions have reduced the threat of conflict and war. Moreover, there is reason to exercise caution in this area. Commerce and the accompanying social interaction can help to promote understanding and break down barriers among trading partners. In contrast, trade barriers often lead to conflict and increased hostility. Frédéric Bastiat is purported to have stated, “When goods don’t cross borders, soldiers will.”<sup>(68)</sup> Similarly, John Maynard Keynes, in his work “The Economic Consequences of the Peace” (1919), criticized the Treaty of Versailles, particularly its reparations and economic sanctions on Germany after World War I. He argued that these punitive measures would not lead to peace but, rather, would sow the seeds of resentment and economic hardship, potentially leading to future conflict. Keynes famously stated, “The Carthaginian peace is not practically right or possible.”<sup>(69)</sup>

In recent years, hostility toward international trade appears to be growing in many high-income countries. History indicates that this is a dangerous trend. As the economy slowed in the late 1920s, hostility toward trade developed in the U.S. This led to the passage of the **Smoot-Hawley trade bill**<sup>(?)</sup> in mid-year 1930. This legislation increased tariffs by more than 50 percent on approximately thirty-two hundred imported products. President Herbert Hoover, Senator Reed Smoot, Congressman Willis Hawley, and other proponents of the bill thought higher tariffs would stimulate the economy and save jobs. As Hawley put it, “I want to see American workers employed producing American goods for American consumption.”<sup>(70)</sup>

Today, supporters of trade restrictions in the United States and many other countries use virtually these same words. The rhetoric sounds great, but the experience of the 1930s indicates that the results are dramatically different. Foreigners responded to the higher tariffs by imposing trade restrictions on American products. International trade plunged and so did output. By 1932 the volume of U.S. trade had fallen to less than half the level prior to the Smoot-Hawley bill. Gains from trade were lost, the tariff revenues of the federal government actually fell, output and employment plummeted, and the unemployment rate soared. Unemployment stood at 7.8 percent when the bill was passed, but it ballooned to 23.6 percent just two years later. The stock market, which had regained almost all of the October 1929 losses prior to passage of Smoot-Hawley, plunged following its adoption.

More than a thousand economists signed an open letter to President Hoover warning of the harmful effects of Smoot-Hawley, pleading with him not to sign the legislation. He rejected their pleas, but history confirmed the validity of their warnings. Other factors, such as the sharp contraction in the money supply and the huge tax increases of both 1932 and 1936, contributed to the Great Depression. The Smoot-Hawley trade bill, however, remains one of the major causes of the tragic events of that era.

Countries will be able to achieve more rapid growth and higher income levels when they trade freely with other countries. Restrictions on trade may be good politics, but they are bad economics. Moreover, as the experience of the United States in the 1930s illustrates, uninformed political rhetoric and hostility toward trade can lead to catastrophic results.

**Read:**

**Unfair Competition with the Sun by Frédéric Bastiat**

Looking at international trade impacts in postwar periods, it is clear that the openness level of Western Europe affected the recovery speed and volume of the economies after both World Wars. The contrast between the decade of economic instability in Western Europe after World War I and the economic recovery established in the decade following World War II is striking and closely related to differences in trade policies.<sup>(71)</sup> Economic restructuring following World War I lacked any institutional mechanism to facilitate the reduction of trade barriers that had arisen during the war and had become entrenched afterwards. Yet, just two years after Germany's surrender in 1945, twenty-three countries established a General Agreement on Tariffs and Trade (GATT) that set binding agreements to reduce tariffs. Just five years after the end of the war, all major Western European countries had participated in three separate negotiating rounds that had expanded GATT membership and further reduced import tariffs. The major achievement of the GATT was the extensive tariff reductions in the first negotiating round in Geneva in 1947. The rapid decrease in tariffs is represented in Exhibit 10.

### Exhibit 10: Average Tariff Levels in Select Countries

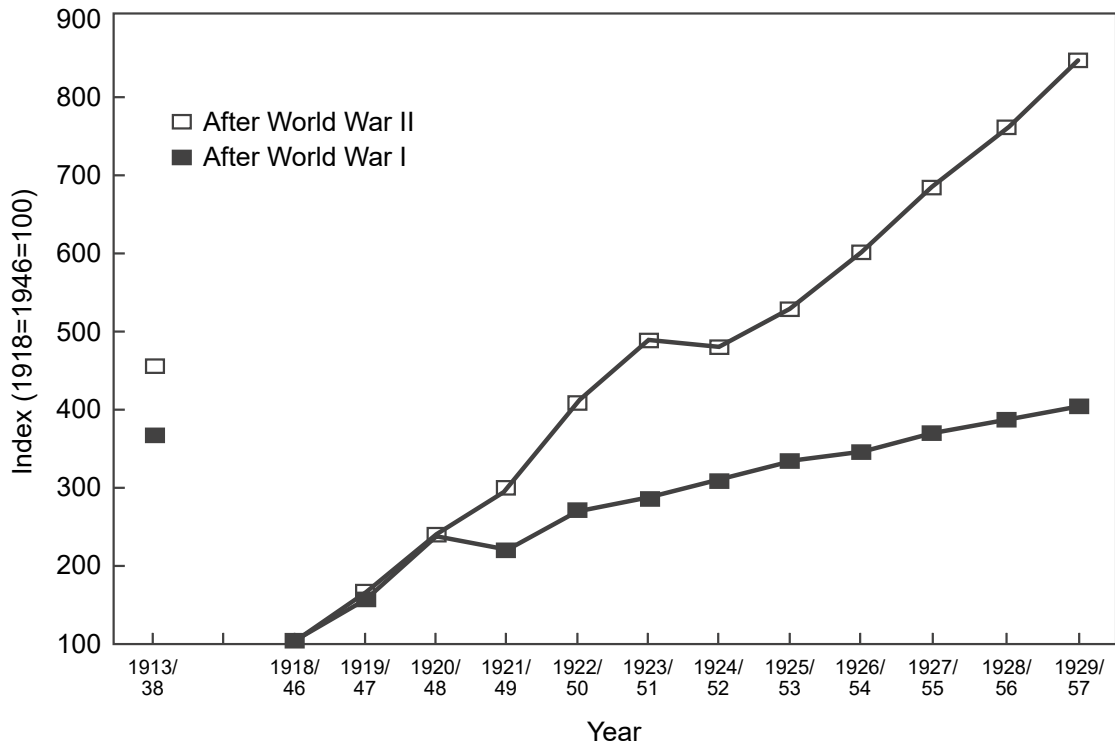
	1913	1925	1927	1931	1952
Belgium	9	7	11	17	N/A
France	14	9	23	38	19
Germany	12	15	24	40	16
Italy	17	16	27	48	24
Netherlands	2	4	N/A	N/A	N/A
United Kingdom	N/A	4	N/A	17	17
United States	32	26	N/A	N/A	16

Note: Not all years are comparable.

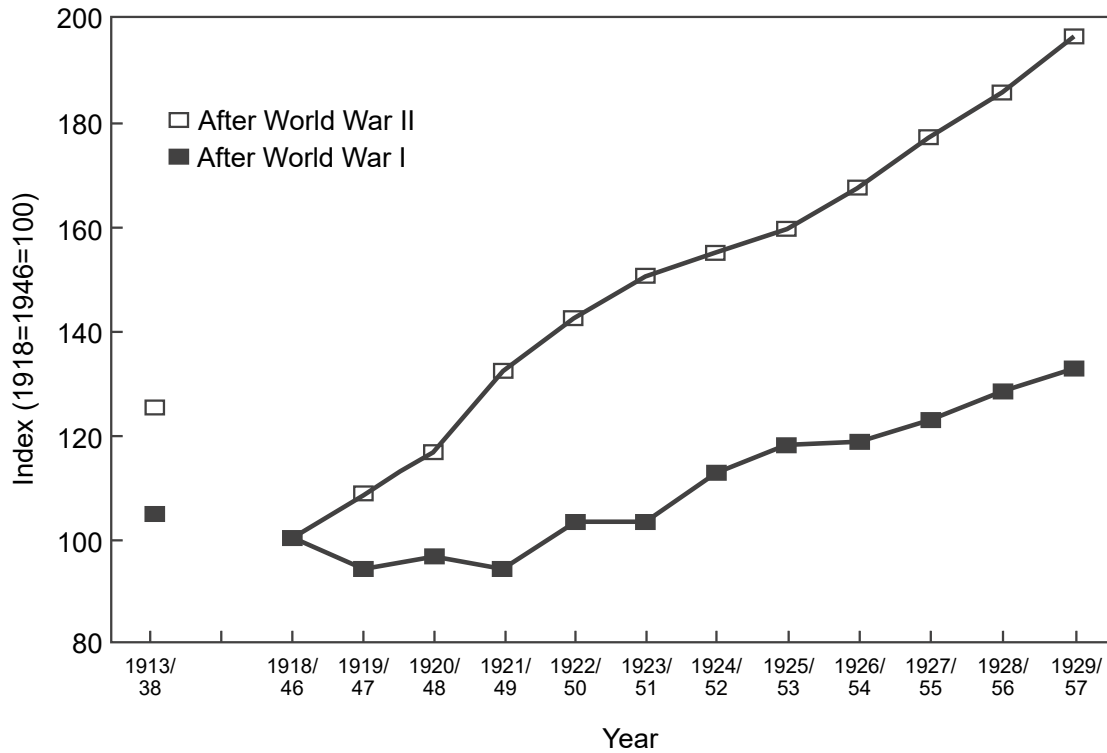
Sources: Calculations for 1913 and 1925 are from the League of Nations as reported in GATT (1953), p. 62, and also the source for the 1952 GATT calculation. For 1927 and 1931 tariff data, see Liepmann (1938), p. 415, and Kitson and Solomou (1990), p. 65–6, for the United Kingdom in 1932.

Exhibits 11 and 12 show the path of export volume and real income for five major West European countries—France, Germany, Italy, the Netherlands, and the United Kingdom—after the two wars.

**Exhibit 11: Export Volume After World Wars I and II (in Five West European Economies)**



**Exhibit 12: Real Output After World Wars I and II (in Five West European Economies)**



Freeing Europe’s regional and international trade from government restrictions permitted economies to take advantage of specialization according to their comparative advantage, and thereby expand more rapidly.

The policy implications are clear. Lowering trade restrictions is a “win-win” situation, especially when these are lowered between countries with different comparative advantages. The critical issue is that opening up trade will make a country’s citizens better off in the aggregate, but within each country there will always be some losers (such as Kazakh winemakers, for example). The key insight is that the winners always gain more than the losers so the issue is how to build a consensus that will make everyone better off.

# Part 2 Final Thoughts on Institutions and Policy

**Video:**

**Development Economics**

Economic theory has clearly established that the seven elements outlined in this part of the book will exert a positive impact on the performance of economies. How big an impact? To answer this question, a measure of institutional quality is needed. In the mid-1980s, the Fraser Institute of Vancouver, Canada, began work on a project designed to develop a cross-country measure of economic freedom. Several leading scholars, including Nobel laureates Milton Friedman, Gary Becker, and Douglass North, participated in the endeavor. The result was the Economic Freedom of the World (EFW) index. Now published by a worldwide network of institutes in more than 90 countries, this index measures the extent to which a country's institutions and policies are consistent with economic freedom—that is, with personal choice, private ownership, voluntary exchange, and competitive markets.

**Video:**

**Economic Freedom Index**

**Video:**

**The Importance of Institutions**

**Video:**

**What Does Economic Freedom Really Mean?**

The EFW measure uses forty-two separate components to derive ratings in five major areas: size of government, protection of property rights and enforcement of contracts, access to sound money, international exchange, and regulation of credit, labor, and business. Summary ratings on a 0–10 ten scale are available for 123 countries. The index is updated annually.

To a large degree, the EFW index reflects the seven key elements outlined earlier in this book. To achieve a high EFW rating, a country must provide secure protection of privately owned property, evenhanded enforcement of contracts, and a stable monetary environment. It also must keep taxes low, refrain from creating barriers that deter either domestic or international trade, and rely more fully on markets than government expenditures and regulations to allocate products and resources.

Some might think that the EFW index is a measure of “capitalism” at one end of the spectrum and “socialism” at the other. Because these terms are ambiguous, meaning different things to different people, we seldom use them. Strictly speaking, socialism implies government ownership of the primary means of production. ”Socialism” is sometimes used to refer to systems in countries like Denmark, Finland, and Sweden that have a high level of government expenditures. A close investigation of these Scandinavian countries reveals that although each may have a larger than average public sector and higher taxes than desirable, they are still characterized by private ownership, free trade, minimal regulation of business, and widespread use of markets. These attributes are virtually the opposite of socialism. The economic organization of Scandinavian countries is vastly different from that of Venezuela, Cuba, North Korea, and China, socialist countries with government ownership in many sectors of the economy.

Similarly, capitalism is often used to refer to economies that differ substantially in the degree of regulation, price controls, trade restrictions, and security of property rights. In place of such ambiguous terms as “capitalism” and “socialism,” the EFW index provides a more accurate measure of the degree to which countries rely on personal choice, voluntary

exchange, and market-determined prices, rather than on political decision-making and central planning to allocate available resources and guide investments.

If the institutional and policy factors outlined here are important, countries with persistently high EFW ratings should achieve better economic outcomes than those countries with persistently low EFW ratings. Let's see if this is the case.

Exhibit 13 presents data on the 2019 per capita income and its growth for the ten countries with the highest and lowest EFW ratings during 2000–2019. Among the 123 countries and jurisdictions for which the EFW data are available over these two decades, the following countries rise to the top of the list of persistently free economies: Hong Kong, Singapore, Switzerland, New Zealand, and the United States. At the other end of the spectrum, Algeria, both Congos, Myanmar, and Venezuela are among the least-free economies.

How do incomes and growth rates compare? The average per capita income of the ten most-free economies was \$62,476, nearly 14 times the figure (\$4,520) for the ten least-free economies. Not only did the ten most-free economies have a substantially higher income level, they also grew more rapidly. The growth rate of per capita GDP of the ten most-free economies averaged 1.7 percent annually during 2000–2019, compared to 1.41 percent for the ten least-free economies. Alert readers may notice that Exhibit 13 and Exhibit 14 that follows report incomes using a strange currency called “**international dollars**<sup>(?)</sup>”, evaluated at **purchasing power parity**<sup>(?)</sup>. PPP is simply a statistical way of enabling comparisons when prices for the same product (usually one that is hard to trade like a haircut) differ across countries. If barbers charge \$3 for a haircut in Tashkent and \$40 in New York, comparing actual incomes would understate the well-being of Uzbeks. By convention non-US currencies are revaluated to be able to buy the same physical set of goods as could be bought for that amount in the US.<sup>(72)</sup>

### Exhibit 13: Economic Freedom, Income and Economic Growth

Country	EFW Rating, 2000–2019	GDP Per Capita 2019, PPP (Purchasing Power Parity) (Constant 2017 International \$)	Growth Rate of GDP Per Capita 2000–2019, PPP (Percent, Constant 2017 International \$)
<b>10 Highest Rated Countries</b>			
Hong Kong	8.94	\$59,586	2.64%
Singapore	8.73	\$98,412	3%
Switzerland	8.54	\$70,920	0.94%
New Zealand	8.45	\$42,878	1.41%
United States	8.36	\$62,631	1.18%
United Kingdom	8.29	\$46,406	1.02%
Canada	8.21	\$49,007	1.46%
Ireland	8.15	\$87,786	3.16%
Australia	8.15	\$49,456	1.35%
Denmark	8.08	\$57,678	0.87%
<b>Average</b>		<b>\$62,476</b>	<b>1.7%</b>
<b>10 Lowest Rated Countries</b>			
Gabon	5.52	\$14,950	-0.54%
Niger	5.47	\$1,225	1.44%
Central African Republic	5.26	\$945	-0.5%
Chad	5.24	\$1,580	3.02%
Guinea-Bissau	5.22	\$1,939	0.63%
Congo, Democratic Republic	5.07	\$1,098	2.02%
Algeria	5.03	\$11,511	1.48%
Myanmar	4.79	\$5,083	8.42%
Congo, Republic	4.72	\$3,843	-0.71%
Zimbabwe	4.47	\$3,028	-1.13%
<b>Average</b>		<b>\$4,520</b>	<b>1.41%</b>

Sources:

- J. Bolt and J. van Zanden, “Maddison Style Estimates of the Evolution of the World Economy: A New 2020 Update,” Groningen Growth and Development Center, October 2020, [www.rug.nl](http://www.rug.nl);
- Gwartney et al., *Economic Freedom of the World: 2021 Annual Report* (Vancouver: Fraser Institute, 2021),

[www.fraserinstitute.org](http://www.fraserinstitute.org);

- World Bank, *World Development Indicators* (2022), [databank.worldbank.org](http://databank.worldbank.org).

**Video:**

**Economic Freedom Impacts**

Exhibit 14 provides data from 2005 to 2021 for the EFW score, 2021 GDP per capita, and the growth rate of GDP per capita for several transition countries. Both Georgia and Armenia have high EFW ratings and are included in the economically most free country group, indicating a favorable environment for economic freedom. The growth rates of GDP per capita for both countries are also relatively high. In contrast, Azerbaijan and Ukraine fall in the least free country group. It is essential, however, to acknowledge that the economic performance of these developing nations is shaped by a myriad of factors extending beyond their EFW ratings. Influences such as geopolitical complexities, ongoing military conflicts, vulnerability to external shocks, diverse resource availabilities, and the inherent instability of GDP growth can collectively contribute to the observed differences in GDP per capita and growth rates.

### Exhibit 14: Economic Freedom, Income and Economic Growth

Country	EFW Rating, 2005–2021	GDP Per Capita 2021, PPP (Purchasing Power Parity) (Constant 2017 International \$)	Growth Rate of GDP Per Capita 2005–2021, PPP (Percent, Constant 2017 International \$)
Georgia	7.69	\$17,089	5.23%
Armenia	7.52	\$15,676	5.1%
Montenegro	7.12	\$23,318	2.74%
North Macedonia	7.07	\$18,934	2.68%
Croatia	6.99	\$35,156	2.17%
Kazakhstan	6.86	\$28,812	3.29%
Kyrgyzstan	6.82	\$5,418	1.98%
Serbia	6.66	\$21,477	3.26%
Azerbaijan	5.89	\$15,927	6.21%
Ukraine	5.76	\$14,289	1.2%
<b>Average</b>		<b>\$19,609.57</b>	<b>3.39%</b>

Sources:

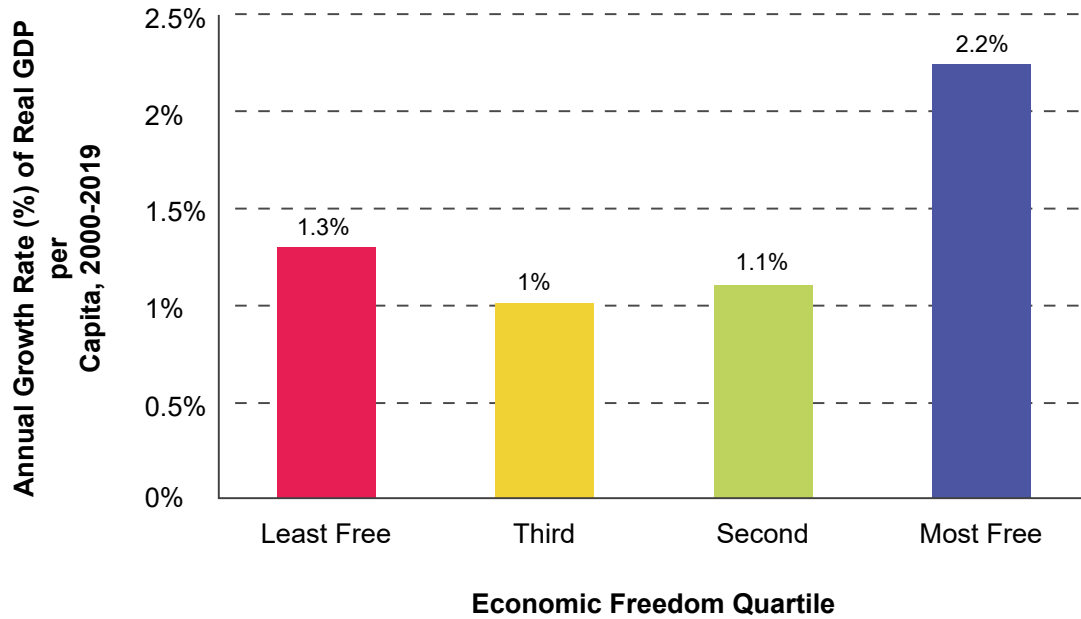
- Fraser Institute, Economic Freedom Dataset, [www.fraserinstitute.org](http://www.fraserinstitute.org);
- The World Bank Data, [data.worldbank.org](http://data.worldbank.org).

Exhibit 15 breaks the 123 countries into **quartiles**<sup>(?)</sup> or four equal groups, arrayed from low to high by their EFW ratings. The 31 countries with the highest average economic freedom rating comprise the top quartile. The 31 with the next highest average ratings make up the next quartile, and so on. The average income level and growth rates for each of the four groups are expressed in terms of a common currency, the 2017 U.S. dollar.

The same pattern emerges in Exhibit 15 as that presented in Exhibit 13. The freer economies among the 123 countries achieve both higher per capita income levels and grow more rapidly. The most-free countries had an average 2019 per capita income of \$50,619, more than eight times the \$5,911 average for the least-free countries. Note the strong positive relationship between economic freedom and per capita GDP across quartiles. Although the

figures of Exhibit 15 are not adjusted for other factors that might influence per capita income, more detailed statistical analysis indicates that the strong positive relation between persistently high levels of economic freedom and income remain after adjustment for other major factors that might influence income levels. Similarly, as Exhibit 15 shows, the average annual growth rate of the top group was 2.2 percent, compared to 1.3 percent for the bottom group. Note the average growth rates of the three least-free quartiles were similar, but all were substantially less than the average for the top quartile.

### Exhibit 15: Economic Freedom and Economic Growth



Sources:

- World Bank, *World Development Indicators* (2022);
- Gwartney et al., *Economic Freedom of the World: 2021 Annual Report* (Vancouver: Fraser Institute, 2021).

Note: The growth data were adjusted to control the change in economic freedom during the period and the initial level of income.

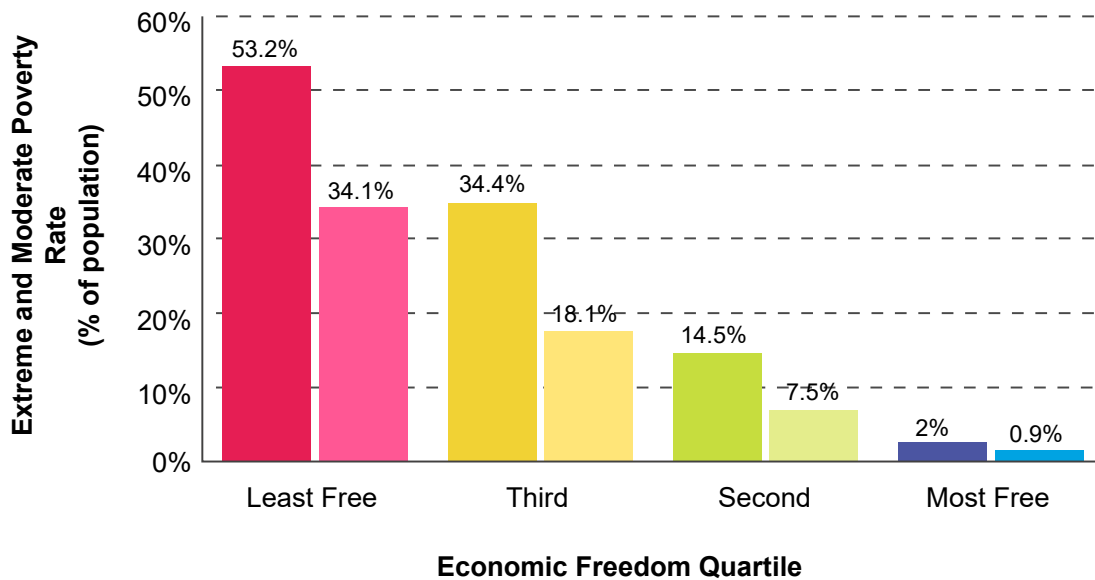
Some argue that market economies leave the poor behind. So how did the poverty rates in the more-free economies compare with the rate in countries with less economic freedom? The World Bank provides data on extreme and moderate poverty rates. The **extreme poverty rate**<sup>(?)</sup> is the percentage of the population with an income of less than \$2.15 per day, whereas the **moderate poverty rate**<sup>(?)</sup> is the share of the population with an income of less than \$3.65 per day (measured in 2011 international dollars).

**Video:**

**Why Do Some Countries Get Rich While Others Don't?**

Exhibit 16 provides data for both the extreme and moderate poverty rates in 2019, according to economic freedom quartiles arranged from lowest to highest. Clearly, the poverty rates were much lower in the freer economies. The extreme poverty rate in 2019 was 34.1 percent for the least-free economies, but only 0.9 percent in those that were most free. Correspondingly, the moderate poverty rate was 53.2 for the least-free quartile, compared to only 2.0 percent in the most-free quartile. The two middle quartiles had both extreme and moderate poverty rates between those of the least and most-free economies.

**Exhibit 16: Economic Freedom and Extreme and Moderate Poverty Rates**



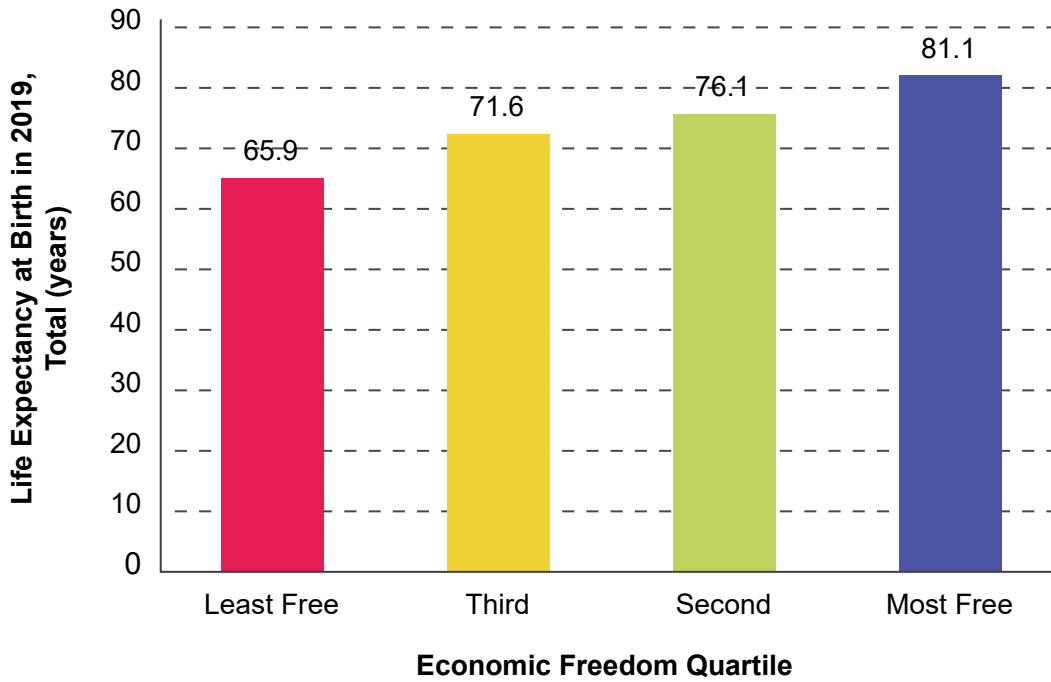
Source: Gwartney et al., *Economic Freedom of the World: 2021 Annual Report* (Vancouver: Fraser Institute, 2021).

Moreover, more detailed analysis indicates that countries that move toward more economic freedom achieve larger poverty rate reductions than did those that were less free. These relationships held even after adjustments for geographic and locational factors, receipt of foreign aid, and political institutions.

It is evident from these data that economic performance is much better in countries with greater economic freedom. What about the impact of economic freedom on some broader indicators of quality of life, such as life expectancy and environmental quality?

Exhibit 17 presents the World Bank's life expectancy figures for the countries in the quartile groups. People living in countries with more economic freedom live longer. On average, the life expectancy of persons living in the most economically free quartile of countries was 81.1 years, compared to only 65.9 years for persons living in the least-free quartile of countries. Thus, people living in the freest economies enjoy more than 15 additional years of life relative to those in the least-free quartile.

**Exhibit 17: Economic freedom and 2019 life expectancy**

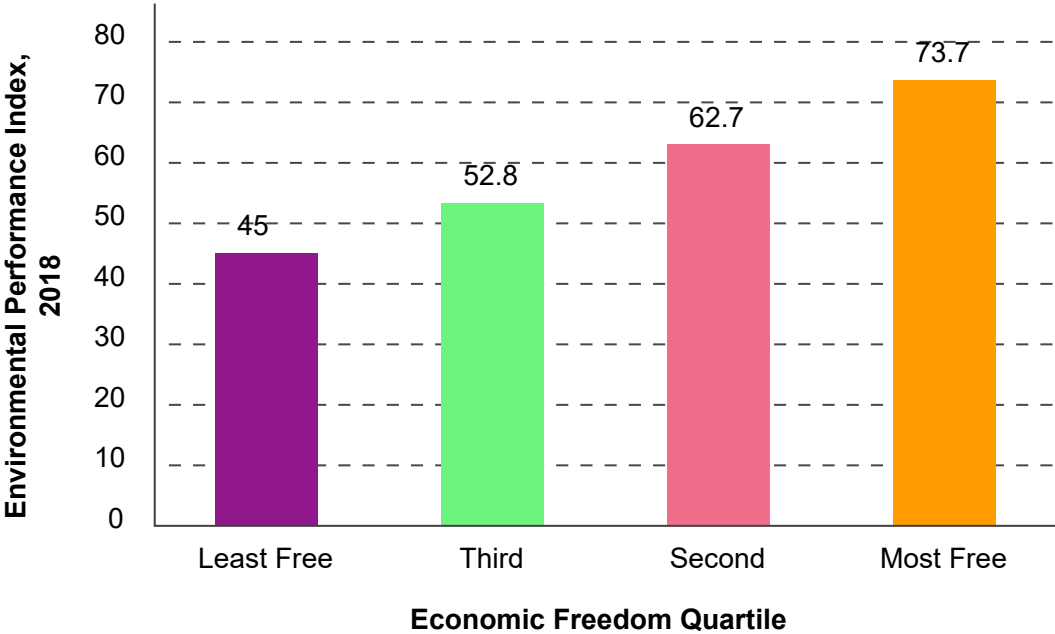


Source: Gwartney et al., *Economic Freedom of the World: 2021 Annual Report* (Vancouver: Fraser Institute, 2021).

Environmental issues have become increasingly important in public discussions in recent years. What impact does economic freedom have on the environment? The Yale Center for Environmental Law & Policy publishes a comprehensive Environmental Performance Index (EPI) for 180 countries. This index rates the quality and performance of countries in a broad set of environmental areas. The scale of this index ranges from 0 to 100, with higher figures indicating greater environmental quality. Exhibit 18 shows the average EPI score of countries for the economic freedom quartile groups. The average EPI for the most economically free quartile was 73.7, compared to 62.7 for the second-freest quartile, and 52.8 and 45.0 for the two least-free groups. These figures show that there is a strong positive relationship between economic freedom and the quality of the environment. To a large degree,

the demand for a cleaner environment increases with income. Therefore, as economic freedom increases per capita income, it also increases the demand for environmental quality. Thus, the positive relationship between economic freedom and the quality of the environment is an expected result.

**Exhibit 18: Economic Freedom and Environmental Performance**



Sources:

- Gwartney et al., *Economic Freedom of the World: 2021 Annual Report* (Vancouver: Fraser Institute, 2021);
- Z. Wendling et al., *The 2018 Environmental Performance Index Report* (New Haven, CT: Yale Center for Environmental Law and Policy, 2018), [epi.envirocenter.yale.edu](http://epi.envirocenter.yale.edu).

Note: EPI data are missing for Hong Kong and Syria.

Does economic freedom guarantee that a country will be able to achieve high income levels? Can a country with little economic freedom nonetheless achieve a high per capita GDP? Examination of the economic freedom and per capita GDP of the 123 countries with EFW data during 2000–2019 sheds light on both questions. These data indicate that, essentially without exception, countries with persistently high economic freedom ratings grow more rapidly and achieve high levels of income. Conversely, except for a few of the world’s leading oil exporters, no country has been able to achieve a high level of per capita income without having a high degree of economic freedom. This close linkage between economic freedom and high per capita income highlights the importance of economic institutions.

The test of a theory is its ability to predict actual outcomes. Both economic theory and the empirical evidence indicate that countries grow more rapidly, achieve higher income levels, and make more progress against poverty when they adopt and maintain policies along the lines outlined in this section. It is clear that adoption of institutions and policies supportive of economic freedom is a key ingredient for economic growth and development.

## **Technology, Trade, Entrepreneurship, and the Remarkable Growth of the Past Half Century.**

Let us return to the historical pattern we described at the beginning of this part of the book. Look back at Exhibit 5. We saw that there was little change in the per capita income of the world prior to 1800. Most people spent their entire lives in villages and farms only a few miles from their places of birth. They had little knowledge or contact with those living outside of these small areas. The size of markets was small, gains from trade and capital formation minimal, and per capita income hovered near the subsistence level.

But after around 1800, technological improvements and capital formation propelled incomes upward. As Exhibit 5 shows, per capita income in the West (the high-income countries of Western Europe, North America, Oceania, and Japan) grew substantially during the 150 years following the start of the Industrial Revolution. But the situation did not change that much outside the West. Income levels in the rest of the world remained at or near

subsistence levels. As recently as 1950, the per person income of developing countries was approximately \$4 per day.

During the past half century, however, there has been a remarkable change. Many developing countries have grown rapidly. During the past 50 years, the per person income of developing countries has increased by an even larger amount than the income of the high-income countries during the 150 years following the Industrial Revolution.

What accounts for the remarkable economic progress of the past half century? During this period, huge reductions in transportation and communication costs and the accompanying growth of international trade have enabled the world to expand production and achieve substantially higher income levels. The change was so dramatic that the period beginning around 1970, may properly be thought of as the Transportation-Communication Revolution. Although there is widespread recognition of the economic progress that accompanied the Industrial Revolution, in many ways, the Transportation-Communication Revolution of the past half century is even more remarkable. It is time for this more recent economic revolution to be acknowledged as well.

This huge reduction in the real cost of transportation and communication provides a large part of the answer. Driven by improvements in technology and entrepreneurship, the cost per ton of ocean shipping declined by more than 50 percent during 1974–2016 (adjusted for inflation). The air freight shipping cost per ton-kilometer declined by an even larger amount during the same period. Standardized steel containers and mechanization reduced the cost of loading and unloading ocean freighter cargo from \$48 per ton in 1956 to 18 cents in 2006, a reduction of over 99 percent. The cost reductions for several forms of communication have been so dramatic they are difficult even to estimate. As recently as 1990, international telephone calls were of uncertain quality and cost several dollars per minute. Today, calls involving both audio and video transmission, including conference calls, can be made over the internet at a cost close to zero.

This sharp reduction in transportation and communication costs contributed to a substantial increase in international trade, increased gains from entrepreneurial activities, and improved economic institutions. These factors enhanced economic performance throughout the world, but the impact in developing countries was particularly dramatic. Widely published

statistics on the importance of trade in the global economy can be very confusing. They are usually reported as a ratio of trade to GDP. Trade, however is defined as the SUM of imports plus exports, in effect double counting trade. During the 1960s, this measure of international trade as a share of GDP averaged 19 percent of world output, implying that the goods sent between countries were slightly less than 10% of global product. This ratio increased steadily in the decades that followed, and by 2023 international trade was approximately two and a half times the figure of the 1960s. The importance of trade in today's economies becomes even more obvious when one realizes that many components of GDP such as haircuts or restaurant meals are not easily traded.

Of course, reduced transportation and communication costs enabled realization of economies of scale and higher incomes within as well as across countries, especially those of greater size. The rapid industrialization of the United States in the 19<sup>th</sup> century was in large part due to the fact that the US Constitution (Article 1, Section 10) prevented states from imposing tariffs on products from other states. This clause became especially important in the second half of the 19<sup>th</sup> century when long-distance railroads massively lowered transport costs bringing the resources of the Middle and Western states to producers in New England and the mid-Atlantic.

Lower transportation and communication costs also resulted in larger gains from entrepreneurship. Businesses and entrepreneurs in developing countries can adopt or access at a low cost the successful technologies and practices present in the more advanced economies. As interaction of people across national boundaries and knowledge of successful practices employed elsewhere expanded, gains from these sources soared.

Even the quality of institutions and policies was affected. Reductions in transportation and communication costs provide potential entrepreneurs and investors with greater flexibility and expand the range of possible country for locating their business activities. In turn, this increases the incentive of political decision-makers to adopt sound institutions and policies in order to attract these globally mobile entrepreneurs. Thus, in addition to their more direct impacts on the volume of trade and entrepreneurship, lower transportation and communication costs have generated positive secondary effects including enhancement of the incentives to remove trade barriers and improve the legal system. As restrictions declined, the quality of the

legal system of **less-developed countries**<sup>(?)</sup> has improved. Citizens can and will demand more from their governments the more they know about what is happening elsewhere. Autocrats and dictators are threatened like never before in a world with YouTube and VPNs.

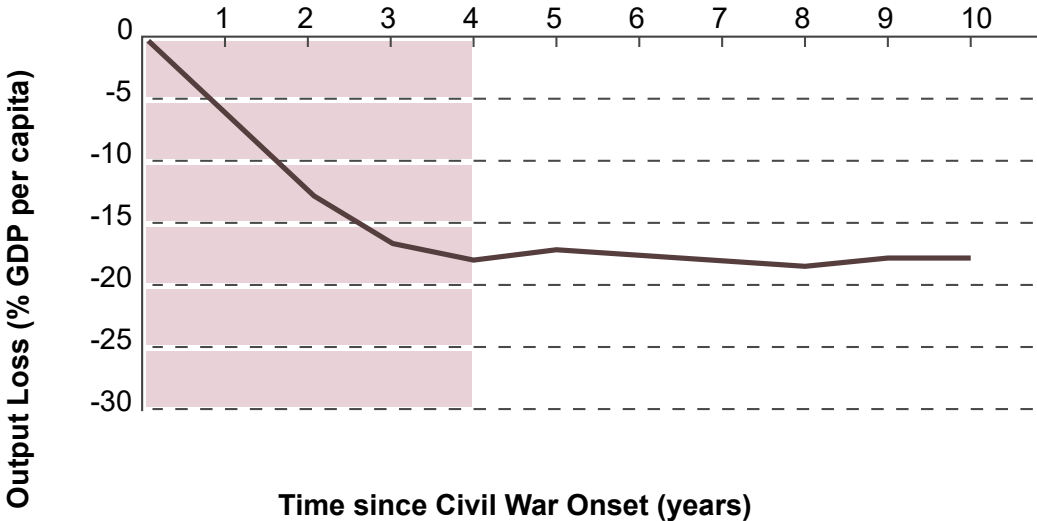
Impacts due to communications can also be observed at very micro levels. Farmer share information about new seed varieties on Twitter. Sending a photo of a diseased vine to the agricultural extension agency for advice can happen in minutes rather than requiring an all-day journey to a nearby town. Mobile phone money enables immigrants to transfer funds to their families without paying exorbitant fees to intermediaries. Identities are easily established and many opportunities for corruption are eliminated by electronic IDs.

Some developing countries have grown far more rapidly while others have lagged well behind. Geographic factors, particularly climate and location, have contributed to this variation in economic growth. Jeffrey Sachs of Columbia University has been at the forefront of those arguing that geographic factors, such as people living in hot, humid climates located far from the major markets of Europe, North America, and Asia and having limited access to an ocean coast-line, face major economic disadvantages. Hot and humid tropical climatic conditions erode the energy level of workers and increase the risk of disabling and life-threatening diseases such as malaria and yellow fever. Locations distant from the world's major markets make trade more costly and reduce the availability of potential trading partners. Limited access to ocean shipping, particularly when a country is land-locked, further reduces the attractiveness of a country for conducting business and the location of productive activities.

Climate, proximity to world markets, and access to ocean shipping matter. Developing countries with favorable climate conditions and locations closer to the world's major markets have benefited substantially from the sharp reductions in transportation and communication costs. Their trade sectors have grown rapidly and per person income levels have increased substantially. In contrast, countries with hot, disease-prone climates located far from major markets have benefited much less. Predictably, those countries with larger geographic disadvantages have both smaller increases in trade and slower economic growth. Sub-Saharan African countries dominate the list of the world's most geographically disadvantaged countries. Thus, it is not surprising that the growth of per person income in this region has lagged behind that of other developing countries.

What matters even more, however, are things that a society can control. The most important barrier encountered by countries where prosperity growth is lagging is conflict—coups, rebellions and civil wars. As seen in Figure 19, the International Growth Centre estimates that a civil war<sup>(73)</sup> lasting four years reduces GDP by 18% while it is going on and that this lower income persists for more than 10 years after the start of the war.

**Exhibit 19: The Economic Costs of Civil War**



Note: Figure shows the simulated response of GDP per capita to a civil war of four years length (shaded area). Civil war is defined as a year with more than 0.08 battle-related deaths per 1,000 population based on PRIO/UCDP data. GDP per capita from the World Bank. See Mueller (2016, *Economica*) for the per capita measure and Mueller (2013) for the methodology. The simulation carries an error that increases over time.

### Conclusion

Compared to the past, we now have better knowledge and stronger evidence about the types of economic institutions and policies that enhance human progress. Having knowledge

about what works, however, does not mean that sound institutions will necessarily be adopted. Institutions and policies are outgrowths of the political process. Thus, if we want to understand the development of economic institutions, we need to examine the operation of the political process. This will be the focal point of Part 3.

**Video:**

**Economic Freedom, Slovakia**

## PART 3

# Ten Key Elements of Economic Thinking About Government



### Elements:

1. Protect Rights and Produce Limited Goods and Services.
2. Regulate Monopolies.
3. Avoid Inefficiencies and Waste.
4. Understand Political Pressures.
5. Adopt Rules to Limit the Influence of Special Interests.

6. Avoid Excessive Spending and Deficits.
7. Avoid Subsidies Not Based on Economic Logic.
8. Limit Welfare-Reducing Transfers.
9. Stay Away from Central Planning.
10. Decentralization, Competition and External Anchors Are Key.

## Introduction

Economists use the standard of economic efficiency to assess the operation of an economy. When resources are used efficiently, only actions that yield more benefits than costs are undertaken. No action will be undertaken that costs more than it is worth. Put simply, **economic efficiency**<sup>(?)</sup> means getting the most value from the available resources.

Courses in economics generally explain why markets will fail to achieve ideal efficiency for certain categories of activity and highlight what the government might do to improve the situation. Here we follow this convention: we analyze why markets may fail and consider the potential of idealized political action, but we also apply the tools of economics to the operation of the political process.

Government expenditures now constitute a large share of **national income**<sup>(?)</sup> in the much of the world. Indeed, this is true even in economies that are typically regarded as “free market” in orientation. In 2022 governments in Belgium and France spent well over half of their nation’s output, while the US, UK, Croatia and Czechia spent around 45%. Among post-Soviet countries, the Uzbek and Kyrgyz governments commanded about 35% of national income while Azeri and Georgian government spending was somewhat less than 30% of the country’s output. Given the size and scope of this political allocation, understanding how it works is vitally important.

Part 3 will use the basic principles of economics to analyze how the political process works, why it will sometimes lead to counterproductive actions, and what might be done to improve its operation. Economists use the term **public choice**<sup>(?)</sup> when referring to this area of study.<sup>(74)</sup> Public choice has become an integral part of economics during the past half century.

Democratic governments often use taxes and borrowing to provide transfers, subsidies, and other forms of favoritism to some individuals and businesses. We will analyze this process and explain why the impact of these programs is different, and often substantially different, than most believe. We hope our approach challenges you to think more seriously about the potential and limitations of the political process.

## ELEMENT 3.1

# 1. Protect Rights and Produce Limited Goods and Services



*“A wise and frugal government, which shall restrain men from injuring one another, which shall leave them otherwise free to regulate their own pursuits of industry and improvements, and shall not take from the mouth of labor the bread it has earned. This is the sum of good government.”*

— Thomas Jefferson<sup>(75)</sup>

Governments play a vitally important economic role. Governments can promote and enhance the welfare of the citizenry through the performance of two major functions: (1) the protective function, which provides people with protection for their lives, liberties, and properties; and (2) the productive function, which supplies some goods and services that have unusual characteristics that make them difficult to provide through markets.

**Video:**

**Limited Government**

The **protective function**<sup>(?)</sup> refers to the government’s maintenance of a framework of security and order, including the enforcement of rules against theft, fraud, and violence including from other countries (national defense). Governments are granted a **monopoly**<sup>(?)</sup> on the legitimate use of force to protect citizens from each other and from outsiders. Thus, the

“protective state” seeks to prevent individuals or other actors from harming one another and maintains an infrastructure of rules that allows people to interact with one another cooperatively and harmoniously. A legal system that protects individuals and their property from aggressors, enforces contracts in an unbiased manner, and provides equal treatment under the law (see Part 2, Element 2.1) forms the core of this protective function of government.

The protective function is crucially important for the smooth operation of markets. When the government clearly defines and enforces property rights, market prices will reflect the opportunity cost of resources (discussed in Part 1, Element 1.2), and producers will be induced to produce the goods and services that are most highly valued by consumers compared to their production cost. Moreover, if contracts are enforced in a way that is efficient and without favoritism, transaction costs will be low and the volume of trade enlarged. When people and their property are protected, citizens can have confidence that they will not be cheated and that the wealth they create will not be taken from them—either by selfish intruders or by the government itself. This protection provides citizens with assurance that if they sow, they will be permitted to reap. When this protection is in place, people will sow and reap abundantly, and economic progress will result.

In contrast, when the protective function is performed poorly, problems abound. Opportunities to get ahead through deception, fraud, theft, and political favoritism rather than through production and trade will emerge. Earnings and wealth will not be secure, and market prices will fail to register the true cost of supplying goods and services. Incentives to develop resources will be weak, and economic growth will stagnate. Unfortunately, this is precisely the situation in many poor, less-developed countries.

**Video:**

**[Recalculating Government Property](#)**

The second primary function of government, the **productive function**<sup>(?)</sup>, involves the provision of activities difficult to provide through markets. There is both an indirect and direct component of this productive function. The indirect component involves the creation of an

environment for the efficient operation of markets through protection of property rights and stable money. As already noted, a legal structure that protects property rights and enforces contracts enhances gains from trade and market efficiency. Similarly, monetary arrangements that provide residents with access to money that has stable purchasing power across time reduces uncertainty and facilitates gains from exchange. The provision of a stable monetary and price environment is one of the most important productive functions of government. As discussed in Part 2, Element 2.5, when governments perform this function well, people will invest more, cooperate more fully through trade, and achieve higher income levels.

Sometimes the productive function of government is more direct. For some goods markets are imperfect because establishing a one-to-one relationship between payment for and receipt of the good is difficult. Goods of this type are called **public goods**<sup>(?)</sup>. Technically, for a good or service to be a public good it must possess two characteristics: (1) it must be “non-rival,” meaning that one person’s use does not reduce the amount available to another person; and (2) it must be “non-excludable,” meaning that if a person does not pay for the good there is no way they can be prevented from consuming it. Let’s start with a trivial example, a fireworks display. It’s both non-rival—one person watching it does not reduce the amount available to another person, and non-excludable—someone who does not pay for it cannot be prevented from watching it.

On a more serious level, national defense benefits all citizens and is jointly consumed by everyone. It would be virtually impossible to provide some citizens with protection against foreign aggressors without simultaneously providing it to all. If national defense were left to markets, they would likely produce too little defense to fully protect everyone. As a result, government provision of such goods may improve economic conditions. This issue is considered in more detail in Element 3-3, to come.

In other cases, it may be very costly to monitor usage and collect payments directly from users. When this is the case, it may be inefficient to provide such goods through markets. Roads, other than limited-access highways, have been used as an example. The cost of collecting fees and thereby charging users directly for their use would be exceedingly high. Thus, it has been typically more efficient to make most roads available to all and to finance them through taxation. With recent technological advances, however, the ability to

automatically charge tolls for those entering certain areas, as is done by London and New York City mean that making users pay the costs of these roads is increasingly feasible. Some might argue that parks provide an example, but clearly free admission to a park is a matter of choice as Disney World has easily established.

This is an important distinction. Some goods are “**publicly provided goods**<sup>(?)</sup>” because society designates them as such because it is difficult to charge for them, while others are treated as such because of social preferences.

As we have stressed throughout, getting the most value from our resources requires that actions be undertaken only when the benefits exceed the costs. This principle applies to government as well as market activity. Unfortunately, when government action involves projects financed with taxes or through borrowing, both benefits and costs are difficult to measure. In the marketplace, the choices of buyers and sellers reveal information about benefits and costs. Consumers will not purchase goods unless they value them more than their price. Similarly, producers will not continue to supply goods unless they can cover their costs. But the information provided by the choices of consumers and producers is lost when the government undertakes an activity and finances it with taxes. There are no buyers spending their own money and thereby revealing information about their benefits. Moreover, the revenues paid to the suppliers were extracted through compulsory taxation, and therefore they provide no assurance that the project is valued more than its cost.

**Video:**

**Political Versus Market Choices**

Government planners may try to estimate the costs and benefits, but their estimates to a large extent will be guesses, because they lack solid information based on the choices of buyers and sellers. Furthermore, in the real world, such cost-benefit calculations will often be influenced by political considerations.

As the quote from Thomas Jefferson introducing this element indicates, it is vitally important for government to restrain people from imposing harm on others (the government’s

protective function). As John Maynard Keynes said:

*“The important thing for government is not to do things which individuals are doing already, and to do them a little better or a little worse; but to do those things which at present are not done at all.”<sup>(76)</sup>*

Economics also indicates that there is a case for government provision of goods that are difficult to supply through markets (the government’s productive function). As the government moves beyond these activities, however, the case for still more government weakens. In order to better evaluate the economic role of both government and markets, it is important to develop a deeper understanding of the limitations of markets by applying the tools of economics to the political process.

**Read:**

**Not Yours to Give by Edward Ellis**

## ELEMENT 3.2

# 2. Regulate Monopolies

*“Monopoly, besides, is a great enemy to good management, which can never be universally established, but in consequence of that [unless there is] free and universal competition which forces everybody to have recourse to it for the sake of self-defense.”*

— Adam Smith<sup>(77)</sup>

If a society is going to get the most out of its resources, these resources must be used efficiently. Competition is central to this efficient use. As previously discussed, competition provides businesses with strong incentives to cater to the views of consumers and produce goods and services economically. If businesses do not provide consumers with value for the price they pay, customers will spend their money elsewhere.

A monopoly exists when there is only a single producer of a good or service for which there are no good substitutes. When this is the case, the producer has an incentive to restrict output and raise the price. By producing a smaller quantity and charging a higher price, the firm may be able to earn more profit than it would if resources were being used more productively by producing a larger quantity at a lower price. Inefficiency will result because the monopolist is failing to produce some products that customers value more than their cost of production.

There are two major sources of monopoly: economies of scale and grants of political favoritism. Economies of scale occur when large firms have lower per-unit costs than their smaller rivals. If economies of scale persist as a firm obtains a larger and larger share of the market, a single firm will dominate and become a monopoly. The production of electricity provides an example. As power plants for electricity generation become larger, the per-unit

cost of generating electricity generally declines. As a result, there is a tendency for a single, large firm to dominate the market. This is why the government usually regulates the prices charged by electric power companies and, in some cases, owns and operates the power plants.

Even where monopolies do not develop, some industries may have only a few dominant firms, usually because the market is costly to enter. A firm may need to produce a large share of the industry output—for example 20 or 25 percent—to achieve a low per-unit cost and compete effectively. When this is the case, there may be room for only four or five firms, all of which experience low per-unit costs. Such markets tend to be dominated by a small number of firms, which have an incentive to collude, raise prices, and act as a monopolist would. Manufacturing industries, such as those making automobiles, television sets, and computer operating systems, are examples of markets dominated by a relatively small number of firms. Such industries are known by the technical term **oligopoly**<sup>(?)</sup>. Analysis of oligopolies is a fascinating, but complex, field of study because there is no unique outcome. The best action by one player depends on that of the other player(s). The field of mathematics known as **game theory**<sup>(?)</sup> that studies such markets was invented by economists John Nash, Oskar Morgenstern and John von Neuman in the 1950s and is widely used in many fields today.<sup>(78)</sup>

But the government itself is sometimes the source of monopoly. Licensing, taxes that favor one group over another, tariffs, quotas, and other grants of privilege reduce the competitiveness of markets. While some of these policies may be well-intentioned, they protect existing firms at the expense of potential rivals, thereby encouraging monopolies and dominant firms. Government-created monopolies were prevalent in almost every sector in the Soviet Union. For example, the State Committee for Construction (Gosstroy) had exclusive control over the construction sector, effectively creating a monopoly on construction projects and materials. Private construction companies were prohibited, and all construction activities, including building new infrastructure and housing, were overseen and managed by Gosstroy. This monopoly stifled competition, innovation, and efficiency in the construction industry, leading to corruption and subpar quality in many projects.

What can the government do to ensure that markets are competitive? The first guideline might be borrowed from the medical profession, “Do no harm.” The government should refrain

from intervening in markets and making things worse through licensing requirements, discriminatory taxes, and other forms of political favoritism. In the vast majority of competitive markets, sellers find it difficult or impossible to limit the entry of rival firms (including rival producers from other countries). This means that suppliers cannot limit competition unless government imposes policies to restrict entry or creates rules and regulations that favor some firms.

To promote competition, governments can also prohibit anticompetitive actions such as **collusion**<sup>(?)</sup>, the merger of dominant firms in an industry, and interlocking ownership of firms. In this regard, the European Union competition law promotes competition within the European single market by making it illegal for firms to collude or attempt to monopolize a market. For example, in 2019, the European Commission blocked the merger of Siemens, a German multinational conglomerate, and Alstom, a French multinational company specializing in transport. The Commission argued that the merger would have created a dominant player in the European market for railway signaling systems and high-speed trains, leading to reduced competition and potentially higher prices for customers. Despite efforts by the companies to address competition concerns, such as offering to divest certain assets, the Commission ultimately concluded that the merger would harm competition and innovation in the rail sector, and therefore blocked the deal.<sup>(79)</sup>

As always in economics, however, things are not quite so simple. US President Harry S. Truman asked his advisers to please find him a “one-handed economist,” so tired was he of economists always saying, “but on the other hand.” Sometimes governments create monopolies that are in the public interest. Patents are an obvious example. Imagine a new medicine that can cure a deadly disease. Such a drug might cost hundreds of millions of Euros to develop and test before it can be used but only pennies a pill to produce. Without protection of the intellectual property of the inventor, competitors who had not invested anything in the development cost would gladly sell the pill for only what it cost to produce. If this occurred, who would ever have the incentive to develop the drug in the first place?

Another complex question is what, exactly, is an industry or a product. As we have seen, goods may be more or less capable of being used as substitutes. The US Supreme Court was once asked to decide whether aluminum foil and plastic wrap were close enough

substitutes that the maker of foil did not have a monopoly because consumers could always use plastic wrap instead. This may seem a rather trivial question, but it was actually an important policy issue.

The record of government has been mixed. On the one hand, government policies have made many innovations possible by reducing the incidence of collusion and various practices that limit competition. On the other hand, occupational licensing, regulatory burdens on small businesses, and other laws have had almost the opposite effect. They restrict entry into markets, protect existing producers from rivals, and limit price competition. Thus, while high entry barriers and the absence of competition provide the potential for government to improve market performance, some policies actually grant monopoly powers. As we proceed, the underlying reasons for this anticompetitive policy behavior by governments become more visible.

## ELEMENT 3.3

# 3. Avoid Inefficiencies and Waste

*“What we want is to establish the rules of a market economy, not to plan its outcome.”*

— Vaclav Klaus

As we discussed in Element 2-1, if markets are going to allocate resources efficiently, property rights must be well established and producers must be able to capture the benefits of their productive actions. But the nature of some goods makes this difficult. In this element, two categories of economic activity that pose serious challenges to the efficient allocation of resources through markets are considered. They are public goods and externalities.

## Public Goods

Let’s revisit in more detail the idea of goods and services where it is difficult for producers to benefit from their production. This is the case with a category of goods that economists call. These have two characteristics: (1) jointness in consumption—that is, as we discussed with national defense, providing the product to one party simultaneously makes it available to others; and (2) it must be nonexcludable—that is, it is difficult to exclude nonpaying customers. For example, like national defense, flood control meets the first criterion. Once flood-control devices, like dams or reservoirs are built, everyone in the region benefits. Flood control also meets the second criterion. The supplier of flood control will have trouble charging people for the service, because if it is provided for one, it is provided to all. Thus, it is difficult to provide public goods through markets, because potential providers are

unable to establish a one-to-one relationship between payment for and receipt of the good.

**Video:**

**Public Goods and Asteroid Defense**

Consumers will have an incentive to become “**free riders**<sup>(?)</sup>”—that is, to consume the good without helping to pay for it. When a large number of people become free riders, the good may not be produced (or too little of it may be produced), even when the value derived from its consumption exceeds the cost. In such cases, markets will often fail to produce a quantity of public goods consistent with economic efficiency. Flood control, national defense, municipal police protection, and mosquito abatement are examples of public goods. Because these goods are difficult to supply through markets and cover costs, they are often provided by governments.

**Video:**

**What Is The Free Rider Problem?**

It is important to note that it is the characteristic of a good, not the sector in which it is produced, that determines whether it qualifies as a public good. There is a tendency to think that if a good is provided by the government, then it is a public good. This is not always the case. Many of the goods provided by governments clearly do not have the characteristics of public goods. Medical services, education, mail delivery, trash collection, and electricity come to mind. Although these goods are often supplied by governments, nonpaying customers could be easily excluded, and providing them to one party does not make them available to others. Thus, even if they are provided by governments, they are not public goods. We have called these publicly-provided goods.

Most goods and services are private rather than public goods. In the case of private goods, the link between payment and receipt of the good or service can be easily established.

Therefore, most products are supplied through markets. Think about this and its importance. Those individuals who pay for an ice cream, an entertainment system, a smart device, a pair of jeans, or a house enjoy these items and literally thousands of others. Those who do not pay in the marketplace do not enjoy or consume them. As we keep saying, producers in the marketplace continue to supply the products because the price voluntarily paid by you and other consumers covers the costs; those unwilling to pay the price are excluded from consumption. In the case of private goods, government provision is highly unlikely to improve on the efficiency of the market.

**Video:**

**[The Economics of Robocop](#)**

## Externalities

Sometimes the actions of an individual or group will “spill over” and exert an impact on others, affecting their well-being without their consent. Such spillover effects are, as you already know, called externalities. For example, if you are trying to study and others in your home or apartment complex are distracting you with loud music, they are imposing an externality on you. You are an external party—not directly involved in the transaction, activity, or exchange—but you have been affected by it, detrimentally in this case.

**Video:**

**[Negative Externalities: The Hidden Social Costs](#)**

The spillover effects may either impose a cost or create a benefit for external parties. When the spillover effects are harmful, they are called external costs. Because costs are imposed on nonconsenting parties, resources are being used to produce goods that are valued

less than their full production costs. Economic inefficiency results.

Consider the production of paper. The firms in the market purchase trees, labor, and other resources to first produce pulp and then paper. The manufacturing process using old technologies emits pollutants into the atmosphere. These pollutants impose costs on residents living near the mills—a sulfuric smell, heavy smog, and breathing issues or other health hazards.

If the residents living near a pulp mill can prove harm and measure it, they could take the mill to court and force the paper producer to cover the cost of their damages. In fact, to prevent that from happening, nineteenth-century paper companies routinely bought up miles of downstream property to let river water dilute the company's effluent.<sup>(80)</sup> Often people found proving harm and holding specific pulp mills responsible has proved difficult and costly. When this is the case, the total costs of the pollution and other external costs will not be reflected through markets. The cost of producing paper will be understated. Inefficiency occurs because units of paper will be produced that are valued less than the costs of their production when external costs are included.

To a large degree, external costs reflect a lack of fully defined and enforced property rights. Because the property right to a resource—clean air, for example—is poorly enforced, the firm does not pay the full cost of using the resource. Thus, the cost of producing goods and services using such resources is understated.

For example, during the last decades of the 20<sup>th</sup> century Europe and North America suffered from a large environmental threat - acid rain crisis. Acid rain resulted from emissions of sulfur dioxide and nitrogen oxides from industrial processes, power plants, and transportation. The pollutants responsible for acid rain were often released into the atmosphere by factories and power plants in one country but because of prevailing winds caused environmental damage, including deforestation and the acidification of lakes and rivers, in neighboring countries. This situation illustrates how the lack of fully defined and enforced property rights concerning air quality allowed industries to avoid accounting for the costs of pollution.<sup>(81)</sup>

On the other hand, sometimes spillover effects generate benefits for others. When the spillover effects enhance others' welfare, they are called external benefits. But external benefits

can pose problems for markets, too. When the persons or firms that generate the external benefits are uncompensated, they may fail to produce some units even when they are valued more than their production costs.

For example, suppose a pharmaceutical company develops a vaccine providing protection against a deadly virus. The vaccine can easily be marketed to consumers who will benefit directly from it. They will also incur costs, even if only the pain and discomfort of the injection. Each individual will compare these private costs and benefits to decide whether or not to get the vaccine. Because of the communal nature of viruses, however, as more and more people get the vaccine, even those who have not will also be less likely to catch the virus. Yet it will be very difficult for the pharmaceutical companies to capture the benefits derived by the nonusers. As a result, they may produce too little of the vaccine to provide full immunity for the community. Thus, when external benefits are present, market forces may supply less than the amount consistent with economic efficiency.

Perhaps government action can improve the situation. In the case of external costs such as pollution, the government could tax or fine the activities that generate the pollution, which might lead the person or firm to abate its harmful activities and achieve an output level more consistent with economic efficiency. Similarly, in the case of external benefits, such as the provided by vaccines, government subsidies might spur production, resulting in a more efficient output level.

The potential consequences of externalities can sometimes be controlled without government, however. Let's consider external benefits. Entrepreneurs have an incentive to figure out ways to capture more fully the gains their actions generate for others. The competitive development of golf courses illustrates this point. Because of the beauty and openness of golf courses, many people find it attractive to live near them. Thus, constructing a golf course typically generates an external benefit—an increase in the value of the nearby property. In response, golf course developers have figured out how to capture this benefit. Now they typically purchase a large tract of land around the planned course before it is built. This lets them resell the land at a higher price after the golf course has been completed and the surrounding land has increased in value. By extending the scope of their activities to include real estate as well as golf course development, they can obtain revenues from what would

otherwise be external benefits.

As for external costs, simple rules can sometimes help to control them. For example, with respect to disturbing noise from nearby residents, apartment owners often have rules about playing loud music late at night, and they enforce the rules by fining or expelling violators. Manners and social conventions can also play a role. If your roommates are aware that having the television on interferes with your studying, they may have the good manners to turn it off. On a larger scale, over time it has become “socially unacceptable” for companies to emit pollution that harms people and their environment. There is increasing pressure for companies to be good citizens—and private watchdogs such as environmental groups will publicize their actions if they behave irresponsibly.

**Video:**

**Externalities Potato Chip**

Another time when no government action is needed to control externalities is when the number of people affected on either side is small and they can negotiate. Suppose your neighbor in the next flat is playing her brass band music so loudly that you cannot study for your economics test. Government could pass a law giving her the right to play music (a property right) or it could pass one giving you the right to peace and quiet, but how would it decide? Free markets will, if not interfered with by government, on the other hand always come up with the seemingly best solution. Suppose you value quiet more than she values music. The answer is simple: you just pay her a bit more than she values playing to shut up. The reverse is also true, if she values music more than you value quiet, she will pay you to wear your ear plugs and suffer. This analysis that externalities can be dealt with by the market if the number of people involved is small by agreement among the parties is the famous “Coase Theorem”.<sup>(82)</sup> Property rights again come to the rescue.

So our analysis indicates that public goods and externalities may undermine the efficient operation of markets. Economists use the term **market failure**<sup>(?)</sup> to describe such situations wherein the existing structure of incentives creates a conflict between personal self-

interest and economic efficiency—getting the most out of the available resources. Such market failure encourages self-interested decision-makers to engage in counterproductive rather than productive activities.

This market failure creates the potential for government action to improve economic efficiency. But the political process is merely an alternative form of economic organization. Like markets, it has strengths and weaknesses. We need to know more about how that form of organization works so that it can be compared realistically with markets.<sup>(83)</sup> We now turn to that topic.

## ELEMENT 3.4

# 4. Understand Political Pressures

*“The first lesson of economics is scarcity: there is never enough of anything to fully satisfy all those who want it. The first lesson of politics is to disregard the first lesson of economics.”<sup>(84)</sup>*

— Thomas Sowell, Rose and Milton Friedman Senior Fellow on Public Policy at Stanford’s Hoover  
Institution

**Video:**

**Public Choice**

The political process is an alternative form of economic organization. It is not a corrective device that can be counted on to provide a sound remedy when problems arise. Even when it is controlled by elected political officials (as opposed to, for instance, an autocratic regime), there is no assurance that government actions will be productive, or at least as productive as they could be. This is particularly true when governments become heavily involved in allocating scarce resources toward favored sectors, businesses, and interest groups. As mentioned in the introduction to Part 3, public-choice analysis provides considerable insight into the operation of democratic political decision-making.

Policies favored by the majority do not always make a society better off. Here’s a thought experiment: Consider a simple economy with five voters. Suppose three of the voters favor a project that gives each a net benefit of \$2 but imposes a net cost of \$5 on each of the other two voters. In aggregate, the project generates net costs of \$10 against net benefits of only \$6. It is counterproductive and will make the five-person society worse off. Nonetheless,

if decided by majority vote, it would pass by three votes to two. Now, let's scale up. Increasing the number of voters from five to five million or two hundred million will not alter the general outcome. As this simple example illustrates, majority voting can clearly lead to counterproductive projects, actions that are, on balance, harmful to society.

It is useful to compare markets with democratic political allocation as an alternative form of economic organization. While making the comparison, keep the following four points in mind.

First, in a democracy, the basis for government action is majority rule. In contrast, market activity is based on mutual agreement and voluntary exchange. In a democratic setting, when a majority—either directly or through their elected representatives—adopts a policy, the minority of voters are still forced to pay for its support even if they strongly disagree. For example, if the majority votes for a new football stadium, housing **subsidy**<sup>(?)</sup> program, or bailout of an automobile company, minority voters are forced to yield and pay taxes for support of such projects. Whether they benefit or not, they pay higher taxes, suffer loss of income, and may be harmed in other ways. It is important to realize that in this context, the term “minority” does not refer to an ethnic minority, although it may. It would be tempting in an unconstrained democracy for the citizens below the 60th percentile of income, let us say, to vote for a benefit such a generous health care or public pensions and pay for it by “taxing the rich,” despite the fact that, as we have already seen, becoming rich is frequently the result of providing goods and services that consumers (including the poor) value.

The power to tax and regulate makes it possible for the majority to coerce the minority. There is no such coercive power when resources are allocated by markets. Market exchanges do not occur unless all parties agree. Private firms can charge a high price, but they cannot force anyone to buy their products. Indeed, private firms must provide consumers with benefits that exceed the price charged to attract customers.

**Video:**

**The Power to Coerce**

Second, in a democracy, there is little incentive for voters to be well-informed about candidates or issues. An individual voter will almost never decide the outcome of an election. It is more likely that a voter will be struck by lightning on the way to the polling place than cast a decisive vote in an election! Therefore, most voters spend little, if any, serious time and energy studying issues and candidates to cast well-informed votes. Economists refer to this as the **rational ignorance**<sup>(?)</sup> effect. Voters are poorly informed, and their failure to obtain information is rational because it is a virtual certainty that their individual vote will not determine the winner or decide the issue. The data are consistent with this view. According to official results, the percentage turnout among all registered voters in national elections held in 2020 and/or 2021, ranged from 52 to 62 percent in the following countries: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova, and North Macedonia. Surveys indicate that most voters do not even know the names of their representatives, have little or no idea where candidates stand on issues, or what impact government actions or policies (such as agricultural subsidies and trade restrictions) have on the economy. It is an open question whether voters would be better informed in electoral systems where they vote for specific candidates or where they vote for party lists. Even though economists are often accused of placing too much emphasis on rationality, please do not take our analysis as indicating that you should avoid your civic responsibility of understanding issues and taking every opportunity of making your preferences known, whether through the ballot box or other (peaceful) means.

In sharp contrast to their political decision-making, consumers in the marketplace individually bear the consequences of their decisions on how to spend their money. If they make unsound choices, they directly experience the impact. That fact gives them the motivation to spend their money wisely. When consumers consider the purchase of an automobile, personal computer, gym membership, or thousands of other items, they have a strong incentive to acquire information to make informed choices.

Third, in a democracy, the political process generally imposes the same outcome on everyone, or at least everyone covered by that policy. Markets, on the other hand, allow for diverse representation. Put another way, government allocation results in a “one size fits all” outcome, while markets allow different individuals and groups to “vote” for and receive their desired options. This situation can be illustrated with schooling.

In some countries, students attending government-operated schools are assigned to specific schools based on their residential areas, and a standardized curriculum is mandated by the state. In contrast, when allocated by markets, those willing to pay the price find the option that best fits their preferences. As a result, there is diversity in their choices. While some parents will choose private schools, others will opt for homeschooling. Some will choose schools that stress religious values, while others will opt for education that emphasizes basic skills, cultural diversity, or vocational preparation. This ability to choose makes it possible for more people to obtain goods and services more consistent with their preferences. Markets also avoid the conflicts that inevitably arise when the majority imposes its will on various minorities. None of this analysis says that, to the extent, that education is a public good, it should not be paid for from public funds, whether through education vouchers or government grants that are allocated according to demand from parents for particular schools.

**Video:**

**Is Government Too Big?**

Fourth, in a democracy, market decision-makers and political decision-makers face different incentives. As previously discussed, the profit-and-loss mechanism of a market economy tends to direct resources toward productive projects and away from counterproductive ones. The political process does not have a similar mechanism, and thus it cannot be counted on to direct resources toward productive activities. This is true even when political decision-makers are controlled through voting, because, unless they are constrained by **constitutional**<sup>(?)</sup> limits, elected officials will tend to “buy” votes by providing favors to some of their voters at the expense of others. As the saying goes, if you take from Peter and give to Paul, you can usually count on support from Paul.

To a large degree, the modern democratic political process can be viewed as a series of “exchanges” between coalitions and politicians. Concentrated interest groups provide politicians with votes, financial contributions, high-paying jobs in the future, and other forms of support in exchange for subsidies, spending programs, and regulatory favors often financed

by taxpayers. The rational ignorance effect—the fact that voters choose not to spend the time required to be well-informed—facilitates this process because most voters are unaware of these “political deals.” As a result, resources are moved toward lobbying and other favor-seeking activities and away from production and development of better goods and services.

Only very rarely, when these deals get too far out of hand, do populations resort of extra-ordinary actions to change the situation. The various “color revolutions” in several post-communist countries provide good recent examples.

**Video:**

**Stimulus and Crony Capitalism**

As explained in elements 3.2 and 3.3, while economic analysis indicates there are cases where markets will fail to allocate resources efficiently, it is also true of the political process. Put another way, there is government failure as well as market failure. **Government failure<sup>(?)</sup>** is present when the incentives confronted by political participants encourage counterproductive rather than productive use of resources. Like market failure, government failure reflects a situation in which there is a conflict between what is best for individual decision-makers and what is the best use of resources. For example, government failure can be observed in the case of Venezuela's economic crisis, particularly in the management of its oil industry. Venezuela possesses one of the largest oil reserves in the world and heavily relies on oil exports for revenue. When the oil industry was nationalized in 1976, the state took control of oil production, refining, and distribution. While high oil prices initially allowed the government to finance social programs and subsidies, mismanagement, corruption, and a lack of investment in infrastructure and technology led to a decline in oil production over time. As Venezuela's economy became increasingly dependent on oil revenues, it became more vulnerable to fluctuations in global oil prices. When oil prices plummeted in the early 2010s, Venezuela's economy went into a downward spiral, characterized by hyperinflation, shortages of basic goods, and a severe economic recession. Thus, Venezuela's economic collapse, which has now lasted for many years, illustrates the consequences of government failure in resource

management and economic policy. Once repressive, authoritarian kleptocratic governments are in place, with control of the public purse and the military and financial favors to keep their cronies happy, they can be very difficult to dislodge. Even death of the dictator didn't work. Nor did it work for Zimbabwe.

Let's look at a somewhat different example. After significantly liberalizing economic policy in Georgia, the framers of the Rose Revolution were aware that even a democratic and liberal-oriented government might undertake counterproductive actions. Thus, in 2010, the Constitution incorporated restraints on the economic role of government. Article 94 specified what taxes were permissible (the number of taxes, and their rates) and allocated the power to change tax rates or introduce new taxes to the people, via referendum. Furthermore, under the so-called "Liberty Act," the government budget deficit was restricted to less than 3 percent of GDP, and debt to no more than 60 percent of GDP. As time passed, however, and governments changed, the majority party in Parliament initiated changes aiming to release this restriction and restore the power to initiate new taxes and/or change existing rates.

Perhaps we have been overly zealous in pointing out the possible problems with democracies, but we agree with Winston Churchill who said to the UK Parliament in 1947:

*"Many forms of Government have been tried ,and will be tried in this world of sin and woe. No one pretends that democracy is perfect or all-wise. Indeed, it has been said that democracy is the worst form of Government except for all those other forms that have been tried from time to time."*<sup>(85)</sup>

In the remainder of Part 3, we will examine the operation of the democratic political process in more detail and consider modifications that might bring political decision-making into greater harmony with economic growth and prosperity.

**Read:**

**Politics and Foreign Trade by Dwight Lee**

## ELEMENT 3.5

# 5. Adopt Rules to Limit the Influence of Special Interests

*“When buying and selling are controlled by legislatures, the first things bought and sold are legislators.”*

— P. J. O’Rourke

Democratically elected officials can often benefit by supporting policies that favor special-interest groups at the expense of the general public. Consider a policy that generates substantial personal gain for the members of a well-organized group (for example, an association representing business interests, members of a labor union, or a farm group) at the expense of the broader interests of taxpayers or consumers. While the organized interest group has fewer members than the total number of taxpayers or consumers, the personal benefits derived by their members from the favored policy are generally large. In contrast, while many taxpayers and consumers are harmed by the policy, the cost imposed on each is small, and the source of the cost is often difficult to identify.

Because the personal stake of the interest-group members is substantial, they have a powerful incentive to form alliances to let candidates and legislators know their position on a particular issue. Many interest-group members will decide who to vote for and who to support



financially almost exclusively based on a politician's stand on a few issues of special importance to them. In contrast, as the rational ignorance effect illustrates, the bulk of voters will be generally uninformed and they will not care much about the harm from the **special-interest issue**<sup>(?)</sup>, given its minimal impact on their personal welfare.

If you were a vote-seeking politician, what would you do? Clearly you would not get much campaign support by favoring the interests of the largely uninformed and unorganized majority. But you can get vocal supporters, campaign workers, and most important, campaign contributions by favoring the position of the special interest. In this age of media politics, politicians are under strong pressure to support special interests, tap them for campaign funds, and use the contributions to project a positive candidate image on television and the internet. Politicians unwilling to play this game—those unwilling to use the government treasury to provide well-organized interest groups with favors in exchange for political support—are seriously disadvantaged. Given these incentives, politicians are led as if by an invisible political hand to reflect the views of special-interest groups, even though this often leads to policies that, summed across all voters, waste resources and reduce their living standards. Economists refer to this bias in the political process as the **special-interest effect**<sup>(?)</sup>.

**Video:**

**The Power of Special Interests**

The power of special interests is further strengthened by logrolling and pork-barrel legislation. **Logrolling**<sup>(?)</sup> is the practice of vote trading between politicians to get the necessary support to pass desired legislation. **Pork Barrel legislation**<sup>(?)</sup> is the bundling of unrelated projects benefiting many interests into a single bill. Both logrolling and pork-barrel legislation often make it possible for counterproductive projects benefiting concentrated interests to gain legislative approval.

Exhibit 20 illustrates how pork-barrel politics and vote-trading reinforce the special-interest effect and lead to the adoption of counterproductive projects. In this simple example, a five-member legislature is considering three projects: (1) building a sports stadium in District

A; (2) construction of an indoor rainforest in District B; and (3) subsidies for ethanol that generate benefits for the corn farmers of District C. For each district, the net benefit or cost is shown—that is, the benefit to the district minus the tax cost imposed on it. The total cost of each of the three projects exceeds the benefit (as shown by the negative number in the total row at the bottom of Exhibit 20). Therefore, each is counterproductive.

If these counterproductive projects were voted on separately, each would lose by a four-to-one vote because for each option, only one district would gain and the other four would lose. When the projects are bundled together, however, through either logrolling (representatives A, B, and C could agree to trade votes) or pork-barrel legislation (all three programs could be incorporated into a single bill), they can all pass even though all are inefficient. This can be seen by noting that the total combined net benefit is positive for representatives A, B, and C. Given the weak incentive for voters to acquire information, those harmed by pork-barreling and other special-interest policies (such as D and E, in this case) are unlikely to even be aware of them. Thus, the incentive to support special-interest projects, including those that are counterproductive, is even stronger than is implied by the simple numeric example of Exhibit 20.

### Exhibit 20: Trading Votes and Passing Counterproductive Legislation

<b>Net Benefits (+) or Costs (-) to Voters in Equal Size Districts</b>				
Voters of District	Sports Stadium	Indoor Rainforest Project	Ethanol Subsidy	Total
A	\$100	-\$30	-\$30	\$40
B	-\$30	\$100	-\$30	\$40
C	-\$30	-\$30	\$100	\$40
D	-\$30	-\$30	-\$30	-\$90
E	-\$30	-\$30	-\$30	-\$90
<b>Total</b>	<b>-\$20</b>	<b>-\$20</b>	<b>-\$20</b>	<b>-\$60</b>

Market exchange is a win-win, positive-sum activity. Both trading partners expect to gain or the exchange will not occur. In contrast, “political exchange” can be a win-lose, negative-sum activity, wherein the voting majority gains but the minority loses more. Here, there is no assurance that the gains of the winners will exceed the losses imposed on others.

The tendency of the unrestrained political process to favor well-organized groups helps explain the presence of many programs that reduce the size of the economic pie. Consider the case of the roughly 20,000 American sugar growers. For many years, the price of sugar paid by American consumers has been 50–100 percent higher than the world sugar price because of the federal government’s price support program and highly restrictive quotas limiting the import of sugar. As a result of these programs, sugar growers gain about \$1.7 billion, or approximately \$85,000 per grower. Most of these benefits are captured by large growers whose owners have incomes far above the national average. On the other hand, each year sugar consumers pay between \$2.9 billion and \$3.5 billion, or approximately \$25 per household, in the form of higher sugar prices.<sup>(86)</sup> In recent years candy manufacturers and other major users of sugar have been moving to Canada, Mexico, and other countries where sugar can be purchased at the world market price. Illustrating our earlier discussion of trade, the import restrictions that “saved” jobs in the sugar growing industry caused job losses in other industries, particularly those that use sugar intensely.

As a result, Americans are worse off because their resources are wasted producing something Americans are ill-suited to produce and that could be obtained at a substantially lower cost through trade.

Nonetheless, Congress continues to support the sugar program, and it is easy to see why. Given the sizable impact on their personal wealth, it is perfectly sensible for sugar growers, particularly the large ones, to use their wealth and political clout to help politicians who support their interests. This is precisely what they do. During each election cycle, the sugar lobby and sugar growers contribute many millions of dollars to Democratic and Republican candidates and political-action committees. A single firm, the American Crystal Sugar Company, typically contributes about one-third of the total. In contrast, it would be irrational for the average voter to investigate this issue or give it any significant weight when deciding for whom to vote. In fact, most voters are unaware that this program costs them

money. Thus, politicians gain by continuing to subsidize the sugar industry even though the policy wastes resources and reduces the wealth of the nation.

In the aftermath of World War II, the British government implemented a series of subsidies to support the coal mining industry, which was considered vital to the nation's economy and energy security. The subsidies were aimed at maintaining coal production levels, preserving jobs in mining communities, and ensuring a stable energy supply for industrial and residential use. Despite the substantial financial support from the government, however, the coal subsidy program faced several challenges and ultimately failed to achieve its objectives. The subsidies created dependency among coal mining communities, discouraging innovation and diversification of local economies. Instead of facilitating a transition to more sustainable industries, the subsidies perpetuated the economic stagnation of mining regions and contributed to social and economic inequalities. The coal subsidy program in the United Kingdom serves as a cautionary example of how government intervention in the form of subsidies can favor specific groups but fail to address underlying structural challenges or achieve long-term economic objectives.<sup>(87)</sup>

The special-interest effect often leads to counterproductive government action favoring specific industries over consumers. The US Merchant Marine Act provides another example. This act, passed in 1920, mandates that goods shipped from one American port to another must be transported on ships that were built in the United States, owned by an American firm, and that at least three-fourths of each ship's crew members must be American. But the cost of building modern ocean ships in the United States and operating them primarily with an American crew often doubles or even triples shipping costs. While the Act benefits those in the American shipping industry, it increases the cost of shipping products among American cities, thereby harming American consumers.

Thus, goods that could be transported more economically by water are sent by rail, truck, or air. Moreover, shipments between American cities often are routed via a foreign port in order to evade rules and realize gains from the lower shipping costs of foreign vessels. For example, shipments to and from Gulf Coast cities like Houston or New Orleans to East Coast cities like New York and Boston are often routed through countries like Jamaica and the Bahamas. Similarly, cruise ships from West Coast cities to Alaska make stops in Canada.

These roundabout routes not only increase cost, they also waste fuel and generate more pollution than would otherwise be the case.

The higher shipping costs accompanying the Jones Act are particularly harmful to those living in Alaska and Hawaii because they have few alternatives other than using US ships for obtaining and selling goods. Why isn't this highly inefficient act repealed? The answer is obvious. The concentrated interests in the shipping business have more political clout than the disorganized consumers who are harmed by the legislation.

The primary business of modern politics has become to extract resources from the general public in order to provide favors to well-organized voting blocs in a manner that will create a voting majority in the legislature. Consider the following: taxpayers and consumers spend approximately \$20 billion annually to support grain, cotton, tobacco, peanut, wool, and dairy programs, all of which have a structure like the sugar programs. The political power of special interests also explains the presence of tariffs and quotas on steel, shoes, textiles, and many other products. Federally funded irrigation projects, banking bailouts, and subsidies to sports stadiums, ethanol producers, and airports in specific districts—the list goes on and on—are all policies politically motivated by the special-interest effect rather than the net benefits to Americans.

Similar cases of government actions favoring specific industries over consumers can be found worldwide. For example, several European countries, such as France and Germany, have a long history of providing financial support to their national airlines, such as Air France and Lufthansa,<sup>(88)</sup> through various forms of subsidies. These subsidies are often aimed at maintaining competitiveness in the global aviation market, preserving jobs, and supporting national pride in having a flagship carrier. It can be argued, however, that these subsidies distort competition within the aviation sector by providing an unfair advantage to certain airlines, particularly national carriers, over their competitors, including low-cost carriers and airlines from outside the EU. This can lead to higher ticket prices for consumers, as well as reduced choice and innovation in air travel.

Ironically, the subsidy program, often promoted in the name of the equity, almost never achieves its goal and often has the opposite effect. In 2014, less than 20 percent of Egyptian food subsidies benefited poor people. Gasoline subsidies in most countries benefit the middle

class, while the poor walk or take public transportation. In India, less than 0.1 percent of rural subsidies for Liquefied Petroleum Gas (LPG) go to the poorest quintile, while 52.6 percent go to the wealthiest. Worldwide, far less than 20 percent of fossil-fuel subsidies benefit the poorest 20 percent of the population.<sup>(89)</sup> Although each of these programs imposes only a small drag on economies, together they expand government budget deficits, waste resources, and significantly lower the standard of living. As you can see from these examples, it is always the case that the political power of special interests explains the presence of direct subsidies, tariffs, or quotas on certain products, and all these kinds of policies are politically motivated to special-interest effect rather than to the net benefits of the overall population.

The special-interest effect also tends to stifle innovation and restrict the competitive process. Older, more established businesses with stronger records of political contributions, better knowledge of lobbying techniques, and closer relationships with powerful political figures, predictably, have more political clout than new startups, entrepreneurs, and family-owned businesses. They will use their influence to deter new rivals and squash innovations that threaten them.

Consider the experience of Uber, which uses technology to bring willing drivers together with potential ground-transportation passengers. Consumers searching for ground transportation request cars via their smart devices, and the Uber app immediately provides a price, wait time, and ride-sharing options. Uber also provides feedback information about drivers to potential passengers and vice versa. The technology reduces transaction costs. The process of getting to and from a location is often faster and cheaper than traditional taxi services. As Uber entered markets in large cities throughout the world, the traditional taxi industry fought hard for and often achieved legislation prohibiting the use of the ride-sharing technology, keeping passengers from getting lower-priced rides and many drivers from earning income.<sup>(90)</sup> As a result, the gains from this innovative technology and expansion in the volume of exchange were slowed, but not for long. Consumers eventually won the day. Now, there is a plethora of ride-sharing services all over the world.

The experience of Tesla, an electric car manufacturer, provides another example of existing producers using the political process to deter the entry of a newcomer. Tesla's business model was based on the sale of its autos directly to consumers. But a well-organized interest

group—established auto dealers—lobbied state legislatures demanding that they adopt laws prohibiting manufacturers from selling their cars directly to consumers. Approximately half of the states adopted prohibitions on such direct sales. These laws made it much more difficult for Tesla to enter the auto manufacturing market.

One particularly harmful type of special interest impact on government policy widely seen, especially in the early post-communist years, involved both high tariffs and currency exchange restrictions that protected powerful entrenched domestic manufacturers at the expense of consumers. Uzbekistan, for example, practiced foreign currency exchange restrictions to reduce the volume of imports in 1996-2003 and 2007-2016. The import restrictions resulted in higher domestic prices. Relaxing these restrictions meant that consumers benefited from increased choice, improved quality of goods and decreased prices. Producers competing with increased imports were on the losing side with weak industries forced to leave the market. While this might create losses for the domestic industry in the short run, the country is nevertheless be better off in the long run as it specializes in its areas of competitive advantage. Once again, what matters is that those who benefit are diffuse, hard to organize, and may not even be aware of the opportunities they are being denied, while those who are no longer be competitive are acutely aware of their potential losses. They are easily motivated to attempt to influence policy either by legal lobbying and campaign contributions or even by bribery and other form of corruption.

The special-interest effect is a major source of the growth of government and counterproductive political action. Politicians spend significant time catering to interest groups and seeking political contributions, then use the funds to pursue narrow interests rather than society's interests. The relationship between political decision-makers and interest groups is not only a major source of economic inefficiency, it contaminates and weakens political democracy.

The framers of the Constitution of the United States understood the problems arising from the power of special interests. They called the interest groups “factions.” The Constitution sought to limit their access to the federal treasury. Article I, Section 8, specifies that Congress is to levy taxes only for programs that promote the common defense and general welfare. For many years, this clause restrained the use of general tax revenues to provide

benefits to subgroups of the population at the expense of the general populace. However, through time, court decisions and legislative acts have altered its meaning. Thus, as it is currently interpreted, the Constitution does little to deter the political power of well-organized interest groups.

## ELEMENT 3.6

# 6. Avoid Excessive Spending and Deficits

*“The attractiveness of financing spending by debt issue to the elected politicians should be obvious. Borrowing allows spending to be made that will yield immediate political payoffs without the incurring of any immediate political cost.”<sup>(91)</sup>*

— James Buchanan, 1986 Nobel Laureate

When government’s spending exceeds revenues, a budget deficit results. Governments generally issue interest-earning bonds to finance their budget deficits. These bonds comprise the **national debt**<sup>(?)</sup>. An annual budget deficit increases the size of the national debt by the amount of the deficit. In contrast, when government revenues exceed spending, a **budget surplus**<sup>(?)</sup> is present. This allows the government to pay off bondholders and thereby reduce the size of its outstanding debt. Basically, the national debt represents the cumulative effect of all the prior budget deficits and surpluses.

**Video:**

**Does Government Spending Create Jobs?**

Prior to 1960 the consensus among economists was that, while debts typically increased during wars, it was the responsibility of governments to run budget surpluses to pay down these debts as quickly as possible. There were major debt reductions in the United

Kingdom in the century following the Napoleonic Wars, in France following the Franco-Prussian War, and in the United States following the American Civil War.<sup>(92)</sup> UK government debt stood at 20% of GDP at the start of the 20<sup>th</sup> century but rose to over 200% of GDP by the late 1940s due to the two World Wars and the Great Depression. Following the World War II the country followed conventional economic wisdom and brought its debt down to 25% of GDP by 1990.

The English economist John Maynard Keynes (pronounced “canes”) wrote a prescient essay in 1936 in which he claimed:

*“Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas. Not, indeed, immediately, but after a certain interval; for in the field of economic and political philosophy there are not many who are influenced by new theories after they are twenty-five or thirty years of age, so that the ideas which civil servants and politicians and even agitators apply to current events are not likely to be the newest. But, soon or later, **it is ideas, not vested interests, which are dangerous for good or evil.**”<sup>(93)</sup>*

Starting with the latter part of the 20<sup>th</sup> century Lord Keynes himself became that “academic scribbler.” In 1936 he published a theory that provided both an explanation for the length and severity of the Great Depression and a remedy for preventing such events in the future. During the 1940s and 1950s, the Keynesian view swept the economics profession, and it soon dominated the thinking of intellectual and political leaders. According to Keynesian analysis, government spending and budget deficits could be used to promote a more stable economy. Keynesians argued that rather than balancing the budget, the government should run budget deficits during periods of recession and shift toward a budget surplus when there was concern about inflation.

The first part of that advice was easy for politicians worldwide to follow, but somehow the second half was never internalized. Spending now is easy for voters to see, while paying

later is not so salient. By 2023 cumulative budget deficits in the UK had raised the ratio of national debt to GDP to over 100%. Freed from the **balanced budget**<sup>(?)</sup> constraint, politicians have consistently spent more than they were willing to tax. Exhibit 21 shows a trend over the past 19 years, from 2005 to 2023, where governments of advanced economies consistently ran budget deficits each year. Emerging market and developing economies began experiencing budget deficits from 2009 onwards. For emerging market and developing economies, the budget deficit averaged 2.8 percent of GDP, whereas for advanced economies, it averaged 4.3 percent of GDP during the same period of 2005–2023. Unsurprisingly, deficits were more pronounced during recessions, particularly during the financial crisis of 2008–2009. It's worth noting that advanced economies were more affected by the financial crisis, exacerbating their deficits. Exhibit 21 also illustrates that some developing economies mirrored this trend of budget deficit dynamics. Ukraine stands out as an exception, however, experiencing a dramatic increase in its budget deficit after 2022 due to Russia's invasion. This continued war has led to the deficit reaching nearly 20 percent of GDP by 2023.

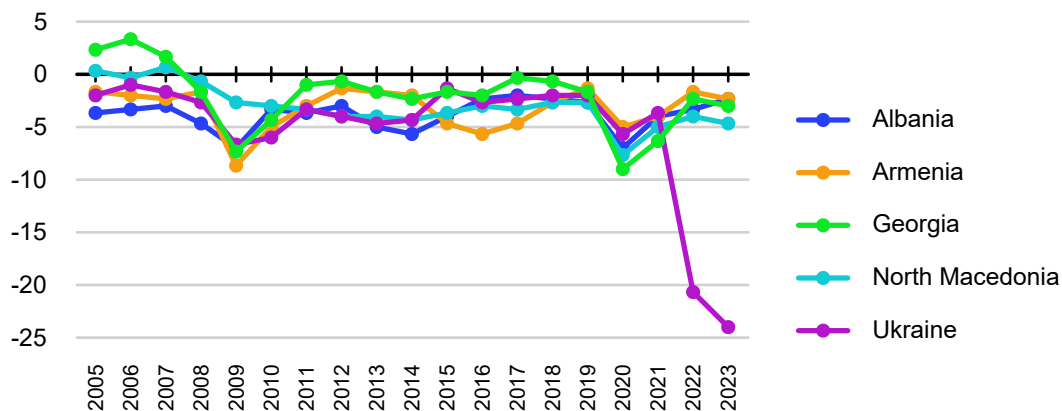
Deficits inevitably drive the national debt higher. In advanced economies, the general government gross debt, measured as a percentage of GDP, soared from 76 percent in 2005 to 112 percent in 2023. Similarly, in emerging market and developing economies, it rose from 41.5 percent to 67 percent over the same period.<sup>(94)</sup>

**Video:**

**Debts and Deficits**

In Albania, government debt amounted to 62.9 percent of GDP, while in North Macedonia it stood at 51.6 percent. In Armenia, the figure was 48.7 percent, followed by Georgia at 39.3 percent, and Ukraine with the highest at 98.6 percent of GDP.

**Exhibit 21: General government net lending/borrowing (Percent of GDP)**



Source: IMF, [www.imf.org](http://www.imf.org).

The political attractiveness of spending financed by borrowing rather than taxation is predictable. It reflects what economists call the **shortsightedness effect**<sup>(?)</sup>: the tendency of elected political officials to favor projects that generate immediate, highly visible benefits at the expense of future costs that are less visible. Legislators have an incentive to spend money on programs that benefit the voters of their district and special-interest groups that will help them win reelection. They do not like to tax, because taxes impose a visible cost on voters. Budget deficits and borrowing allow politicians to supply voters with immediate benefits without imposing higher taxes. Thus, deficits are natural outgrowths of democratic politics unrestrained by commitment to a balanced budget.

The unconstrained political process plays into the hands of well-organized interest groups and encourages politicians to increase spending to gain benefits for a few at the expense of many. For example, each member of a legislature has a strong incentive to fight hard for expenditures beneficial to his or her constituents. In contrast, there is little incentive for a legislator to be a spending “watchdog,” for two reasons. First, such a watchdog would

incur the wrath of colleagues because a spending restraint would make it more difficult for them to deliver special programs for their districts. They would retaliate by providing little support for spending in the watchdog's district. Second, and more important, the benefits of spending cuts and deficit reductions that the watchdog is trying to attain (for example, lower taxes) would accrue equally to voters in the other districts. Thus, even if successful, the constituents of the watchdog's district will reap only a small fraction of the benefits.

Perhaps the following illustration will help explain why it is so difficult for the parliaments of all countries to bring government spending and the budget deficit under control. The Verkhovna Rada (parliament) of Ukraine has 450 deputies. Imagine these 450 people dining together, each knowing that they will only pay for a fraction of the total bill. With such a small share, no one feels compelled to order conservatively. Why not order shrimp appetizers, steak and lobster entrées, and a lavish dessert? Even if one person's extravagant choices push the bill up by €45, their individual share of the cost would be 10 cents (1/450th of €45). It seems like a great arrangement! Of course, he will have to pay extra for the extravagant orders of the other 449 diners, too. But that's true no matter what he or she orders. The result is that everyone ends up ordering extravagantly, driving up the overall cost for all, with little added value relative to cost.<sup>(95)</sup>

The incentive structure outlined here explains why deficit finance is so attractive to politicians. During 2007–2023, EU countries deficits pushed up their debt by about 22 percentage points, reaching 84 percent of GDP.<sup>(96)</sup> Moreover, the benefits promised to senior citizens under the social protection programs are far greater than the payroll tax revenues that provide their financing. These unfunded liabilities are another form of debt. Social protection represented the largest area of general government expenditure in 2022 in all EU member states. It stood at 19.5% of GDP, the largest being in France and Finland—about 24 percent of GDP.<sup>(97)</sup> As the proportion of the working population shrinks and the number of those retired expands,<sup>(98)</sup> spending on social protection will outstrip the revenues for financing it, further complicating the debt liability of the federal government.

What will happen if the EU member governments (or any other country) do not bring their finances under control? Let's remember that just like people, governments must pay interest on the money they borrow. As a nation's debt gets larger and larger relative to the size

of its economy, there will be repercussions in credit markets. Extending loans to the government of a country with a large ratio of debt to GDP is risky. As a result, the highly indebted government will have to pay higher interest rates. In turn, the higher interest costs will make it even more difficult for the government to keep within its budget or to keep taxes, a less popular way to raise money to finance government spending, at reasonable levels.

If the debt continues to rise relative to income, investors will become more and more reluctant to buy the bonds issued by a country's treasury. Eventually a financial crisis will result—either outright default by the government or financing the debt by money creation and inflation. In either case, the impact on the economy will be destructive. This has occurred in many countries, such as Greece, Venezuela Sri Lanka, and Zimbabwe, that have failed to control government finances. No country is immune to the laws of economics.

The bias of the political process toward debt financing and unfunded future obligations is a time bomb. If it is not corrected, it will result in an economic crisis: debt obligations that cannot be met. Efforts to meet these obligations with higher taxes or money creation will lead to inflation, a severe reduction in income, or both. Control of government debt, both the outstanding national debt and the unfunded promised benefits, is unlikely to happen without a change in the political rules to make it more difficult for politicians to spend and promise more than they are willing to tax. There are several ways this could be done. The country's constitution could be amended to require the government to balance its budget. Or a constitutional amendment could mandate that spending proposals and increases in the government's borrowing power require either a two-thirds or three-fourths approval by the legislature. Or the current year's spending might be limited to last year's level of revenues. Proposed constitutional rule changes of this kind would both improve the efficiency of government and avert a future catastrophic debt crisis.

We do not mean to imply that all government debt is harmful. Just as a business may responsibly borrow money to invest in productive assets, so may a government. Examples might be building a road or bridge where the debt can be repaid through tolls, or more abstractly, support for scientific research that has broad externalities. Unfortunately, much government debt throughout to world today is undertaken to pay for current consumption at the expense of future generations. Without a solid understanding of the economic consequences of

excessive debt it is far too easy for politicians to “bribe” current voters with goods and services today, knowing that the bill will not come due until long after they (the politicians) are out of office.

## ELEMENT 3.7

# 7. Avoid Subsidies Not Based on Economic Logic

*“The tool of politics (which frequently becomes its objective) is to extract resources from the general taxpayer with minimum offense and to distribute the proceeds among innumerable claimants in such a way as to maximize the support at the polls. Politics, so far as mobilizing support is concerned, represents the art of calculated cheating or, more precisely, how to cheat without being caught.”<sup>(99)</sup>*

— James R. Schlesinger, Former Secretary of Defense

There are two ways individuals can acquire wealth: by production or by **plunder**<sup>(?)</sup>. People can get ahead by producing goods or services of value and exchanging them for income. This positive-sum method of acquiring income helps both trading partners and enhances the wealth of society. But sometimes people will try to get ahead through plunder, taking from others without their consent. Of course, the victims of plunder will lose what the plunderer gains. In addition, where plunder is feared, potential victims will employ resources to defend themselves against it. In a society in which burglary is common, for example, people will buy more locks, use more security services, demand more police, and even design their homes in ways to discourage theft. The costs imposed on those plundered (or fearing plunder) will include both their losses and their investments in protection than the gains obtained by those engaging in plunder. When we talk about plunder here, of course, it may not be physical theft. It could be theft of intellectual property, for example, and the costs of protection might be fees paid to lawyers. In contrast to positive-sum exchange activities, plunder is a negative-sum activity. It

not only fails to generate additional income but also consumes resources, reducing the wealth of the society.

**Video:**

**Subsidize Silly Walks**

Governments promote **economic prosperity**<sup>(?)</sup> when they encourage production and exchange and discourage plunder. When effective laws and their enforcement make it difficult to take from others, either via crime or use of political action, few resources will flow into those actions. Moreover, the resources employed defending against plunder will also be small.

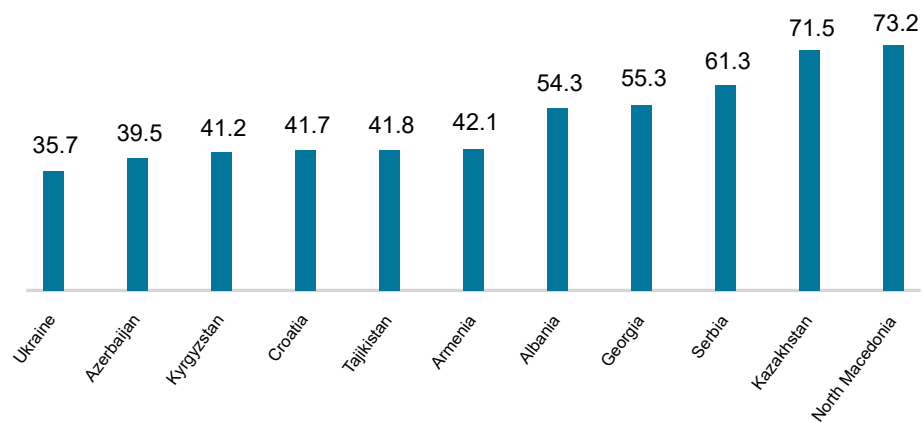
In the modern world, however, governments themselves have often become major plunderers. Governments provide subsidies and favors to some by taking resources from taxpayers, shuffling budget allocations and borrowing. While technically not theft because it is done through laws, it is still a negative-sum activity that harms the citizenry and slows economic growth.

**Video:**

**No More Skinny Sheep**

In the EU, subsidies and other transfers amounted half of total budget expense in 2021.<sup>(100)</sup> In France, for example, subsidies and other transfers account for about 65 percent of total expenses. Social Protection subsidies comprise the bulk of the transfers (about 39 percent of the total expenditure).<sup>(101)</sup> Subsidies and other transfers as a percent of total expense in other selected countries are summarized in Exhibit 22.

### Exhibit 22: Subsidies and other transfers (% of government expenditure in 2021)



Source: International Monetary Fund, Government Finance Statistics Yearbook and data files.

Subsidies and government favoritism are dangers to both political democracy and economic efficiency. There are several reasons why this is the case.

First, the subsidies encourage businesses to spend more time searching for favoritism in central governments and less time developing better and more economical products. Predictably, an increase in the availability of government favoritism will strengthen the power of special interests and encourage deception. To obtain more government funds and gain advantages relative to rivals, businesses and other favor-seekers will tie their interests to popular objectives, such as increasing employment, reducing poverty, improving environmental quality, and lessening dependence on foreigners. Even when their actions are motivated by financial gain and political power, interest groups will have a strong incentive to claim they are seeking to achieve broader, more popular objectives than is actually the case.

Second, subsidies to some firms and sectors distort market prices, placing others at a disadvantage. Some of the unsubsidized firms will be driven out of business or fail to enter the market because they can't compete with subsidized rivals. Alternatively, businesses may move to another country without these barriers. For example, firms using a great deal of sugar in their production process have moved to Canada to avoid the artificially high price of US sugar created by subsidies. The result is a diversion of resources from businesses dependent on market consumers to those favored by politicians.

Third, and perhaps most important, the subsidies and favoritism will create an improper, unethical relationship between business and political officials. "Corporate welfare" and "Crony capitalism" are thereby encouraged, and the interests of taxpayers are compromised. The greater the degree of corporate welfare (that is, the more numerous the government subsidy programs directed toward business), the greater the flow of resources into favor-seeking activities. (Note: Economists often use the term **rent-seeking**<sup>(?)</sup> to describe this favor-seeking by businesses and other groups.) As politics replaces markets, the economy will be increasingly characterized by cronyism, corruption, counterproductive activities, and economic growth will fall below its potential.

**Video:**

**[Politics, Economics, and Farm Subsidies](#)**

**Read:**

**[Energy Production versus Conservation by Dwight Lee](#)**

**Video:**

**[Corporate Welfare](#)**

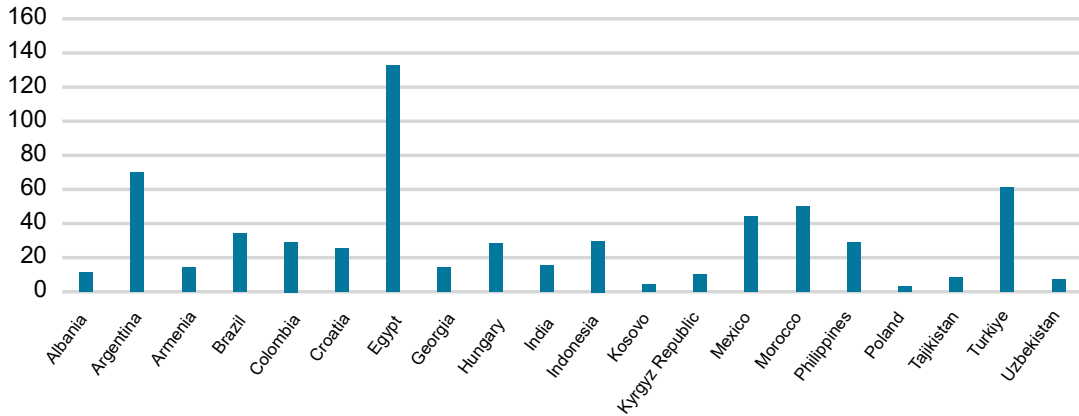
Increasingly, the governments of high-income democratic countries (and not only, as

demonstrated by Exhibit 22) use taxes and borrowing to provide subsidies and other favors to specified voting blocs in exchange for political contributions and support. A statement widely attributed to 19<sup>th</sup> century Scottish lawyer and historian Alexander Fraser Tytler, argues:

*“A democracy cannot exist as a permanent form of government. It can only exist until the voters discover that they can vote themselves largesse from the public treasury. From that moment on, the majority always votes for the candidates promising the most benefits from the public treasury with the result that a democracy always collapses over loose fiscal policy.”<sup>(102)</sup>*

Despite frequent issues of corruption in the post-communist transition economies, as of 2023 their debt levels could still be brought under control, given the political will. Exhibit 23 shows the share of government revenue required to pay interest on government debt for various transition and middle-income countries.

### Exhibit 23: Debt Service as % of Government Revenue - 2023



Source: Debt Service watch Database, [www.development-finance.org](http://www.development-finance.org), Retrieved April 9, 2024

The warning is clear, however. Once businesses and other interest groups become heavily involved in providing politicians with support in exchange for subsidies and favoritism, these harmful influences will be very difficult to restrain. As government favoritism grows and both the recipients and politicians become more dependent on it, transfer spending will grow and resources will move away from productive activities. Moreover, deceitful behavior, unethical relations, and even corruption will become commonplace. There will be upward pressure on taxes, budget deficits will expand even further, and the politically manipulated economy will stagnate. Unless the constitutional protection of property rights and limitations on the spending, subsidizing, and borrowing activities of government are in place and enforced, democratically elected politicians will increasingly enact programs that waste resources and impair the general standard of living.

## ELEMENT 3.8

# 8. Limit Welfare-Reducing Transfers

*“I’ve been around long enough to establish that there are two things that, once people have them, they don’t want to give up.... One is privileges and the other is subsidies.”*

— Kofi Annan



*“You can collect for disability. I don’t know about inability.”*

CartoonStock.com

To non-economists, **income transfers**<sup>(?)</sup> look like an effective way to help targeted beneficiaries. Economic logic, however, indicates that transferring income to a group of recipients to improve their long-term well-being is very difficult. As is often the case in economics, the unintended secondary effects explain why this is so.<sup>(103)</sup>

Three major factors undermine the effectiveness of income transfers. While the process may be most vivid in the case of direct income transfers like welfare assistance, the same types of forces occur when the benefits are in-kind transfer such as India’s Food Distribution System, which provides billions of dollars in free or low-cost staple foods to low income families every year. Indeed, subsidies for production such as agricultural subsidies or grants to corporations raise similar issues.

First, an increase in government transfers will generally reduce the incentive to earn of both the taxpayer-donor and the transfer recipient. Under many transfer programs, as the recipient’s income rises, the magnitude of the transfer is reduced, because the recipient is now technically better off. As the poor work harder or get better jobs, it often generates taxes, that

are, in fact, higher than those on more well-off citizens, therefore resulting in a loss of income. Recipients, therefore, have less incentive to earn because additional earnings will increase their net incomes by only a fraction—and in many cases only a small fraction—of the additional earnings. Similarly, as taxes increase to finance additional transfers, all taxpayers have less incentive to make the sacrifices needed to produce and earn and have more incentive to invest in “**tax shelters**<sup>(?)</sup>” to try to hang on to their money. Thus, neither transfer recipients nor taxpayers in general will produce and earn as much as they would in the absence of the transfer programs. As a result, economic growth will be slowed.

To see the negative effect of almost any transfer policy on productive effort, consider the reaction of students if a professor announces at the beginning of term that the grading policy will be to redistribute the points earned on the exams so that no one will receive less than a C. Under this plan, students who earned As on exams by performing at the top of the class would have to give up enough of their points to bring up the average of those who would otherwise get Ds and Fs. Of course, the B students would also have to contribute some of their points as well, although not as many as A students, to achieve a more equal grade distribution.

Does anyone doubt that at least some of the students who would have made As and Bs will study less when their extra effort is “taxed” to provide benefits to others? Moreover, would the students who would have made Cs and Ds study less, since the penalty they pay for less effort would be cushioned by point transfers they would lose if they earned more points on their own. The same logic applies even to those who would have made Fs, although they probably weren’t doing very much studying anyway. Predictably, the outcome will be less studying, and overall achievement will decline.

The impact of tax-transfer schemes will be similar: less work effort and lower overall income levels. Income does not just happen -- it is something that people produce and earn. Individuals earn income as they provide goods and services to others willing to pay for them. We can think of national income as an economic pie, but it is a pie whose size is determined by the actions of millions of people, each using production and trade to earn an individual slice. It is impossible to redistribute income without simultaneously reducing the work effort and innovative actions that generate the income.

Second, competition for transfers will erode most of the long-term gains for the

intended beneficiaries. Governments must establish a criterion for the receipt of income transfers and other political favors. If they do not, the transfers will bust the budget immediately. Generally, the government will require a transfer recipient to own something, do something, or be something. Two examples: the recipient of unemployment compensation must be out of a job; to qualify for a small-business grant or loan a company must have a limited number of employees. Once the criterion is established, many people will modify their behavior to qualify for the “free” money or other government favors. As they do so, and hire fewer workers or work less in order to qualify for the transfer their net gain from the transfers declines. In effect, the phase out rules for transfers as income rises actually imposes a very high tax rate on work, strongly reducing the incentive to take such work and often resulting in the recipient not gaining much labor market experiences and reducing their chances of getting better job offers in the future.

Think about the following: suppose that the German government decided to give away a €100 bill between 9:00 a.m. and 5:00 p.m. each weekday to all persons willing to wait in line at the teller windows of the Ministry of Finance. Long lines would emerge. How long? How much time would people be willing to take from their leisure and their productive activities to wait in line? A person whose time was worth €15 per hour would be willing to spend about six hours waiting for the €100 bill. Others whose time was worth less, say €10, €8, or €5 per hour would wait longer—ten hours or more. And everyone would find that the time waiting consumed much of the value of the €100 transfer. If the proponents thought the program would make the recipients €100 better off, they would have been wrong.

This example illustrates why the intended beneficiaries of transfer programs are not helped as much as most supporters of such programs perceive. When beneficiaries must do something (for example, wait in line, fill out forms, lobby government officials, take an exam, endure delays, or contribute to selected political campaigns) to qualify for a transfer, much of their potential gain will be lost as they seek to meet the qualifying criteria. Similarly, when beneficiaries must own something (for example, land with a wheat production history to gain access to wheat program subsidies, or a license to operate a taxicab to get a subsidy), people will bid up the price of the asset needed to acquire the subsidy. The higher price of the asset, such as the taxicab license or the land with a history of wheat production, will capture the

value of the subsidy.

In each case the potential beneficiaries will compete to meet the criteria until they dissipate much of the value of the transfer. As a result, the recipient's net gain will generally be substantially less than the amount of the transfer payment. Indeed, the net gain of the marginal recipient (the person who barely finds it worthwhile to qualify for the transfer) will be very close, if not equal, to zero.

Consider the impact of the subsidies (grants and low-cost loans) to college students in the United States. These programs were designed to make college more affordable, but the subsidies increase the demand for college, which pushes tuition prices upward. About 60 percent of the increase in transfers to students was passed through in the form of higher tuition prices according to a 2017 report from the Federal Reserve Bank of New York. Put another way, for every \$3 increase in student subsidies, colleges and universities raised tuition by almost \$2.<sup>(104)</sup> It is no coincidence that as the grant and loan aid programs for college students have increased substantially since 1990, tuition and other expenses of college have increased far more rapidly than the general level of prices.<sup>(105)</sup> Furthermore, the subsidy programs have contributed to a glut of college students entering the job market, which has reduced their employment prospects as well as their future earnings, making it harder to pay back their loans. When the secondary effects—higher college costs and less attractive employment opportunities—are taken into consideration, the net benefits to college students may be substantially less than the transfers. In post-communist transition countries, rapid expansion, combined with low quality and irrelevance (in many fields) of university education, has resulted in a serious problem of “overeducation” where graduates end up taking jobs in which they do not need a university education. Many such graduates remain trapped in low-skilled jobs years after completing schooling.<sup>(106)</sup>

Transfer programs can even leave intended beneficiaries worse off. The US Homestead Act of 1862 illustrates this point. Under this legislation, the federal government provided a land plot of about 65 hectares, which later expanded to up to 240 hectares in parts of the West, to settlers who staked a claim, built a house on the land, and stayed for five years. This option attracted many, but it was not easy to survive in the early West, even with 65 hectares. Thus, more than 60 percent of the land claims were abandoned before the five years elapsed.<sup>(107)</sup> In

essence, this transfer program encouraged people to settle the land before it was economical to do so, and as a result, many of the homesteaders suffered severe financial losses.

In today's world, the issue of incentives generated by subsidies can be starkly seen when examining the problem of homelessness. In New York City, for example, the vast majority of homeless individuals are sleeping in a city-run or private shelter, not on the street. Many may have real mental or addiction problems, but many are also simply responding to incentives. If you are not currently homeless the wait time for receiving government low-cost housing in New York is more than 15 years, but if you are homeless, it is just a few months. Can you spot the incentive here? It may be optimal for someone who is not getting along with their parents to move to a shelter and become "homeless" in order to jump to the head of the queue for housing benefits. The possible negative secondary effect can only be imagined. Once again, we see the fundamental insight of economics, "Incentives Matter!"

Similarly, but perhaps less dramatically, as discussed in Part 2, Element 2.4, US government regulations designed to make home ownership more affordable encouraged lenders to extend loans to homebuyers with little or no down payment who could not qualify for conventional mortgages. The impact of these regulatory subsidies was much like those of the Homestead Act: high default rates, foreclosures, and financial troubles for many of the intended beneficiaries.

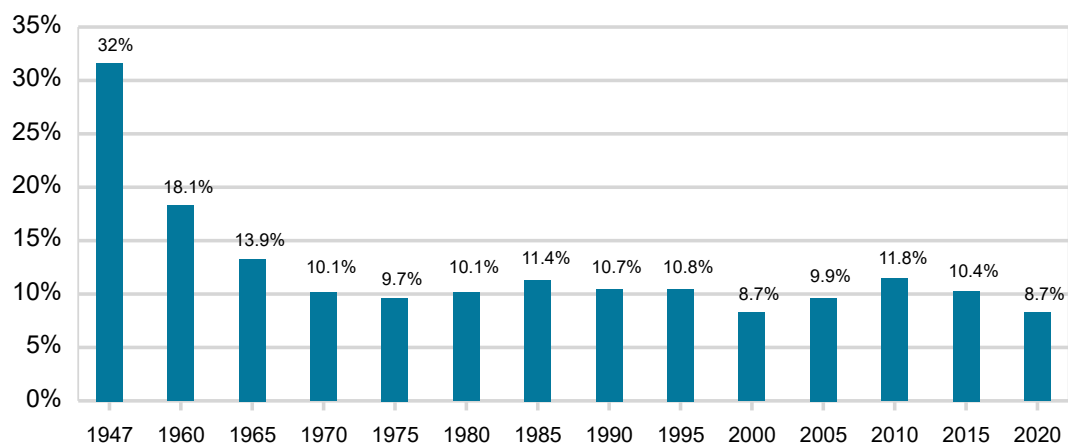
The third reason for the ineffectiveness of transfers is that transfer programs reduce the adverse consequences suffered by those who make imprudent decisions, reducing their motivation to avoid adversity. For example, government subsidies of insurance premiums in hurricane-prone areas reduce the personal cost to individuals protecting themselves against losses. There is a cost to society, however. Because the subsidy makes the purchase of hurricane insurance cheaper, more people will build in hurricane-prone areas than would be true if they had to pay the full cost. As a result, repairing the damage from hurricanes is greater than would otherwise be the case.

The impact of unemployment compensation is similar. The benefits make it less costly for unemployed workers to refuse existing offers and, instead, keep looking for better jobs. Therefore, workers engage in more lengthy job searches, pushing the unemployment rate upward.<sup>(108)</sup> When the War on Poverty was declared in the United States in the mid-1960s,

President Lyndon Johnson and other proponents of the program argued that poverty could be eliminated if only Americans were willing to transfer a little more income to the less fortunate members of society. They were willing, and income-transfer programs expanded substantially. Measured as a proportion of total income, transfers directed toward the poor or near-poor (for example, Aid to Families with Dependent Children, food stamps, and Medicaid) doubled during the 1965–1975 period. Since 1975, anti-poverty income transfers have continued to grow as a share of national income.

No doubt, the proponents of the War on Poverty programs were motivated by lofty objectives. As we have stressed, however, good intentions do not guarantee the desired outcome. As Exhibit 24 shows, the poverty rate was declining rapidly prior to the War on Poverty. The share of families in poverty declined from 32 percent in 1947 to 13.9 percent in 1965. The downward trend continued for a few more years, reaching 10.1 percent in 1970. In the late 1960s, only a few years after the War on Poverty transfers were initiated, the declining trend in the poverty rate came to a halt. Since 1970, the poverty rate of families has fluctuated within a relatively narrow range between 8 percent and 12 percent. The poverty rate was 11.8 percent in 2010, and by 2020, just before the pandemic, it declined to approximately 9 percent. These rates are only slightly lower than the figure when the War on Poverty programs were initiated. Given that the 2020 income per person, adjusted for inflation, was two-and-a-half times the level of the late 1960s, this lack of progress in reducing poverty is startling.

## Exhibit 24: Percentage of Families Below the Poverty Rate in the US



Source: U.S. Census Bureau, Current Population Survey, *Annual Social and Economic Supplements*, 1960 to 2022 (CPS ASEC).

### Video:

### Equality vs. Entrepreneurship

The calculation of the official poverty rate does not include noncash benefits such as those of food, health care, and housing. If noncash benefits were counted as income, the family poverty rate would be about 3 percentage points lower, but the pattern is still the same as that in Exhibit 24. When noncash benefits are counted as income, the family poverty rate in 2015 is still almost the same as in 1970.

Why haven't the anti-poverty transfer programs been more effective? The transfers generate three unintended secondary effects that slow progress against poverty.

**Video:**

**Better Than Charity**

First, the income-linked transfers reduce the incentive of low-income individuals to earn, move up the income ladder, and escape poverty. There are more than 75 means-tested government programs in the United States (for example, food supplements, Medicaid, housing subsidies, school lunches, and child health-care insurance) that target the poor for assistance. Benefits from most of these programs are scaled down and eventually eliminated as the recipients' earnings rise. As a result, many low-income recipients get caught in a poverty trap. If they earn more, the combination of the additional taxes owed and transfers lost means that they get to keep only 10, 20, or 30 percent of the additional earnings. In some cases, the additional earnings may even reduce the recipient's net income. This poverty trap reduces the incentive for many low-income recipients to work, earn more, acquire experience, and move up the job ladder. In 2018, the OECD reported that lost benefits as a result of increased earnings equaled 93 percent of the minimum wage for workers in the Czech Republic and 92 percent of this wage in Croatia.<sup>(109)</sup> In some cases, the additional earnings may even reduce the recipient's net income. Thus, the poverty trap substantially reduces the incentive for many low-income recipients to work, earn more, acquire experience, and move up the job ladder. To a large degree, the transfers merely replace income that would have otherwise been earned, and as a result, the net gains of the poor are small—far less than the transfer spending suggests.

This insight is not a new. Observing the English Poor Laws in 1835, French political philosopher and economist, Alexis de Tocqueville wrote in *Memoirs on Pauperism*:

*“Man, like all socially-organized beings, has a natural passion for idleness. There are, however, two incentives to work: the need to live and the desire to improve conditions of life... Any measure which establishes legal charity on a permanent basis and gives it an administrative form thereby creates an idle and lazy class, living at the expense of the industrial and working class.”<sup>(110)</sup>*

Second, transfer programs that significantly reduce the hardship of poverty also reduce the opportunity cost of risky choices. Dropping out of school or the workforce, childbearing by teenagers and unmarried women, divorce, abandonment of children by fathers, and drug use often lead to poverty. As more people choose these high-risk options, it is very difficult to reduce the poverty rate. The poverty rate of single-parent households is substantially greater than that of two-parent households.

In the Czech Republic, for example, 9.7

percent of the general population lived below the poverty line in 2017, while 37 percent of people in households with single mothers or fathers fell below this line. In Belarus in 2013 the poverty rate among single-parent households was 17 percent as compared to 11 percent for the general population. Isabel Sawhill and Ron Haskins of the Brookings Institution found evidence that a person can reduce the chances of living in poverty from 12 percent to 2 percent by doing just three basic things: completing high school (at a minimum), working full-time, and getting married before having a child.<sup>(111)</sup> When young people choose these options, it is unlikely that they will spend any significant time in poverty. This is a vitally important point that educators, parents, guardians, and others need to discuss with young people, many of whom are making these life-changing decisions.

Third, government anti-poverty transfers crowd out private charitable efforts. When people perceive that the government is providing for the poor, action by families, churches, and civic organizations becomes less urgent. When taxes are levied and the government does more, predictably, private individuals and groups will do less. Yet private givers have real advantages over government transfers. They are typically local, therefore seeing the real nature of the problems more clearly, are often more sensitive to recipients' lifestyles, and typically focus their giving on those making a good effort to help themselves.



"SOMEHOW, MR. WEBER, I DON'T THINK YOU'RE PUTTING A CONCERTED EFFORT INTO FINDING A JOB."

In the words of Spencer Cox, governor of the State of Utah:

*“We don’t need bigger government. We need bigger people. This is the model for a high-functioning society. It requires our best people to be regularly involved with our most challenged communities. From the doctor teaching literacy at an elementary school to the college student enrolled in weekly service at the food bank, the health of a society is determined by the internal forces in that community.”*

From an economic viewpoint, the poor record of transfer programs, ranging from farm price supports to anti-poverty programs, is not surprising. When the secondary effects are considered, economic analysis indicates that it is extremely difficult to help the intended beneficiaries over the long term.

**Read:**

**[Social Cooperation and the Marketplace by Dwight Lee](#)**

## ELEMENT 3.9

# 9. Stay Away from Central Planning

*“The man of system . . . is apt to be very wise in his own conceit. . . . He seems to imagine that he can arrange the different members of a great society with as much ease as the hand arranges the different pieces upon a chess-board. He does not consider that the pieces upon the chess-board have no other principle of motion besides that which the hand impresses upon them; but that, in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might choose to impress upon it. If those two principles coincide and act in the same direction, the game of human society will go on easily and harmoniously, and is very likely to be happy and successful. If they are opposite or different, the game will go on miserably, and the society must be at all times in the highest degree of disorder.”<sup>(112)</sup>*

— Adam Smith

As previously discussed, governments can often coordinate the provision of public goods—that is, those relatively few goods for which it is difficult to limit consumption to paying customers—better than markets can. Many people might also argue that government officials can manage most or all of the economy better than can markets. Since the Bolshevik Revolution in 1917, numerous proponents of central planning claim that the general populace would be better off if government officials used taxes, subsidies, mandates, directives, and regulations to centrally plan and manage the key sectors of the economy. Central planning replaces markets with government allocation. It can involve direct command and control, as under the old Soviet system. It can also occur when elected political officials create strong

incentives to substitute their preferences for those of consumers, investors, and entrepreneurs that are directed by market forces.

It is easy to see why central planning has appeal. Surely, it makes sense to plan. Are not elected officials and government experts more likely than business entrepreneurs to represent the “general welfare” of the people? Won’t government officials be “less greedy” than private businesses? The attractiveness of central planning among those who lack familiarity with public choice theory and its implications for the operation of the political process is understandable. Economic logic, however, indicates that central planning will almost always be inefficient. Five major reasons explain why this is the case.

First, central planning merely substitutes politics for market decisions. Real-world central planners (and the legislators who direct them) are not a group of omniscient selfless saints. Inevitably, the subsidies and investment funds allocated by planners will be influenced by political considerations. Think how this process works even when decisions are made democratically.

Expenditures will have to be approved by the legislature (for example, the Congress of the United States). Various business, unionized labor, and other **special interests**<sup>(?)</sup> will lobby for investment funds and subsidies. Legislators will be particularly sensitive to those in a position to provide campaign contributions or to deliver key voting blocs. This process will favor older firms with more lobbying experience and political influence, even if they are economically weak, over newer growth-oriented firms. In addition, legislative committee chairs will often block various programs unless other legislators agree to support projects that benefit their constituents and favored interest groups (that is, “pork-barrel” projects). Given this incentive structure, only a naive idealist would expect this politicized process to result in less waste, more wealth creation, and a better allocation of investment funds than would markets. It is not just managers who lack incentives to achieve the greatest efficiency. Workers who are guaranteed jobs and are paid the same regardless of how hard they work have an incentive to minimize their effort. The Soviet reality was captured in the old phrase: “They pretend to pay us and we pretend to work.” (Another well-understood Soviet expression was “Anyone who does not steal from the state steals from his family.”)

Second, the incentive is weak for **government enterprises**<sup>(?)</sup> and agencies to control

expenditures and supply goods efficiently. Rather than building their agencies by meeting their clients' needs, they rely on the government budget. That directors of government organizations will be motivated to pursue a larger budget should come as no surprise. A larger budget will provide funding for expansion, salary increases, additional spending on clients, and other factors that will make life more comfortable for the managers. Managers of government enterprises and agencies, almost without exception, will try to convince legislators that their activities are producing goods or services that are enormously valuable to the general public and, if they were just given more money, they would do even more marvelous things for society. Moreover, they will argue, if the funding is not forthcoming, people will suffer and the outcome will be disastrous. It will be difficult for legislators and other government planners to evaluate such claims.

Furthermore, the incentive is weak for directors and managers of public-sector enterprises to produce efficiently and keep costs low. Unlike private owners, public sector managers do not gain much from improved efficiency and lower costs. There is nothing comparable to private-sector profit that provides evidence that a government agency or enterprise is well managed. In the private sector, **bankruptcy**<sup>(?)</sup> eventually weeds out inefficient producers, but in the public sector, there is no parallel mechanism that forces unsuccessful programs to be shut down. In fact, poor performance and failure to achieve objectives are often used as arguments for increased government funding! For example, the police department will use a rising crime rate to argue for additional law-enforcement funding. If the achievement scores of students are declining, for example, public school administrators will use this failure to argue for still more funds. Given the strong incentive of government enterprise managers to expand their budgets, and the weak incentive to operate efficiently, government enterprises can be expected to have higher per-unit costs than comparable private firms.

Third, there is every reason to believe that investors risking their own money will make better investment choices than central planners spending the money of taxpayers. Remember, an investor who wants to profit must discover and invest in a project that increases the value of resources. The investor who makes a mistake—that is, whose project results in losses—will bear the consequences directly. In contrast, the success or failure of government projects

seldom exerts much impact on the personal wealth of government planners. Even if a project is productive, the planner's personal gain is likely to be modest. And if the project is wasteful—if it reduces the value of resources—this failure will exert little negative impact on the income of planners. They may even be able to reap personal gain from wasteful projects that channel subsidies and other benefits toward politically powerful groups, who will then give their agency or enterprise added political support. Given this incentive structure, there is no reason to believe that government planners will be more likely than private investors to discover and act on projects that increase society's wealth.

Fourth, the efficiency of government spending will also be undermined because the budget of an unconstrained government is something like a common pool resource. When money and resources are owned in common, there is little motivation to consider the future. As we saw in element 2.1, however, private ownership provides a strong motivation to take the future effects of current decisions into consideration. For example, fish in the ocean are owned in common until someone catches them and, as a result, many species are on the verge of depletion because of overfishing. Everyone in the fishing industry would be better off if the fish were harvested less rapidly so there would be more opportunity for their populations to rebound. On the other hand, because of the common ownership, each fisherperson knows that fish not caught today will be harvested by someone else tomorrow. Thus, there is little incentive for anyone to reduce today's catch so more fish will be available in the future.

Similarly, when interest groups are “fishing” (that is, lobbying political planners) for government spending, they have little incentive to consider the adverse consequences of higher taxes and additional borrowing on future output. The proponents of each spending project may recognize that future output would be greater if taxes were lower and **private investment**<sup>(?)</sup> higher. But they will also recognize that if they do not grab more of the government budget, some other interest group will. Given these incentives, inefficient spending projects and perpetual budget deficits are an expected result. We saw in Element 3.6 the growing problem of the United States' chronic government budget deficits.

Fifth, there is no way that central planners can acquire enough information to create, maintain, and constantly update a plan that makes sense. We live in a world of dynamic change. Technological advances, new products, political unrest, changing demand, and shifting

weather conditions are constantly altering the relative scarcity of both goods and resources. No central authority will be able to keep up with these changes, politically assess them, and/or provide enterprise managers with sensible instructions. Government planners have neither the information nor the incentive to plan efficiently.

**Video:**

**Rinkonomics (Spontaneous Order)**

Central planning often generates unintended secondary effects and outcomes that differ substantially from what was promised. As Adam Smith indicated more than two and a half centuries ago, individuals have minds of their own, what Smith calls “a principle of motion.” (See the quotation at the beginning of this element.) Because citizens have minds of their own, their actions often generate unanticipated secondary effects. Examples abound. When the Chinese government instituted a one-child policy in the 1980s, potential parents disproportionately aborted female fetuses, leading to a massive gender-imbalanced population. As a result, males now constitute nearly 60 percent of the Chinese population under age 35. Now the PRC faces an inverted demographic triangle with not nearly enough population growth to support an aging population increasing at an alarming rate. The PRC does have an old age pension scheme but funding it will become more and more difficult. Moreover, a young married couple, each the child of a one-child family, will face the burden alone without the help of siblings to care for two sets of aging parents. An unintended consequence of the one child policy is that it could eventually mean “the end of China’s comparative advantage of cheap skilled labor as well as the daunting challenge of caring for its rapidly aging population.”

Secondary effects have also led to undesired planning outcomes in the United States. In the early 1990s, Congress requested that housing planners take action to increase home ownership among those in the middle-and lower-income brackets. Government planners responded by lowering down payment requirements and credit standards needed to obtain a mortgage loan, actions that encouraged people to take out larger loans than they could afford.

With time, this led to progressively more serious unintended consequences: rising mortgage defaults and **foreclosure rates**<sup>(?)</sup>, the bankruptcy of several lending institutions, a financial crisis, and the severe recession of 2008–2009, essentially a domino effect felt by the economies of many countries around the world.

Central planning outcomes can also be affected by conflicts among the central planners of various nations. The efforts of governments world-wide to phase out the use of fossil fuels provide vivid examples. When the Biden administration assumed the presidency in 2021, it eliminated construction of key pipelines, prohibited fracking (a process that extracts more oil and gas than conventional drilling) on government lands, and terminated drilling in a slice of Alaska’s Arctic National Wildlife Refuge. It imposed regulations to curtail the use of fossil fuels while expanding subsidies for wind and solar energy. Although the costs of wind and solar energy have come down over the years, both wind and solar still rely heavily on subsidies. Also, they are less reliable than oil and gas and must always have backup power from other sources such as fossil fuels.

As a result of these policies, the cost of energy-intensive production in the United States rose. At the same time, Chinese central planners were following policies designed to keep energy costs low. In 2021 and 2022, the Chinese were building two coal-powered plants per week. While coal is relatively cheap, it is the dirtiest of the major fossil energy sources. Thus, while the U.S. central planners were increasing energy costs, the Chinese were reducing them. As a result, energy-intensive production shifted from the United States, which has high costs but low carbon-dioxide emissions, to China, which has low costs but much higher emissions. Worldwide carbon dioxide emissions increased—an outcome that was the opposite of what the U.S. planners intended. Moreover, the reductions in U.S. output of petroleum pushed the world price of crude oil and natural gas higher, thereby enriching the treasuries of petroleum exporters such as Russia, providing it with additional funding for its war against Ukraine. The world is complex and therefore outcomes often differ from the intentions of the planners.

Central planning almost always leads to entrenchment of political power. This is true even when the policies are counterproductive. Consider the case of Venezuela. The central planning policies of the Socialist Party led to a two-thirds reduction in the output of the

nationalized petroleum industry, hyperinflation, increasing poverty, and falling living standards. In recent years, four million people, more than 10 percent of the population, have left the country. Nonetheless, the Socialist Party continues to maintain its dominant political position.

The Great Leap Forward, a pivotal period in China's history characterized by ambitious economic goals, ultimately resulted in disaster. Scholars like Li and Yang<sup>(113)</sup> argue that this catastrophe stemmed from significant shortcomings in central planning. The government's focus on achieving rapid industrialization, at the expense of agriculture, led to a misallocation of resources and unrealistic production quotas. The consequences of these central planning failures were devastating, culminating in the Great Chinese Famine of 1959–1961. This famine claimed the lives of an estimated 20 to 50 million people, making it one of the deadliest famines in human history. The Great Leap Forward is viewed as a failure of central planning.

**Video:**

**[The Economics of the Lego Movie](#)**

During the 1970s and 1980s, many intellectuals and media sources believed that government planning and “industrial policy” provided the keys to economic growth. Economists Paul Samuelson and Lester Thurow were among the leading proponents of this view. They argued that market economies faced a dilemma: They would either have to move toward more government planning or suffer the consequences of slower growth and economic decline. The collapse of the Soviet system and the poor performance of the Japanese economy have largely eroded the popularity of this view.

What are the implications of public choice and the record of government planning? Nobel laureate F. A. Hayek provides the answer to this question. In his acceptance speech for the Nobel Prize, F. A. Hayek stated:

*“If man is not to do more harm than good in his efforts to improve the social order, he will have to learn that in this, as in all other fields where essential*

*complexity of an organized kind prevails, he cannot acquire the full knowledge which would make mastery of the events possible. He will therefore have to use what knowledge he can achieve, not to shape the results as the craftsman shapes his handiwork, but rather to cultivate growth by providing the appropriate environment, in the manner in which the gardener does this for his plants.”<sup>(114)</sup>*

In other words, the economy is far too complex to be micromanaged. Instead, as stressed in Part 2, the best strategy to achieve growth and prosperity is the establishment of sound institutions and long-range policies. These will create an environment in which individuals pursuing their own interests will undertake productive, wealth-creating activities.

## ELEMENT 3.10

# 10. Decentralization, Competition and External Anchors Are Key

*“The curious task of economics is to demonstrate to men how little they really know about what they imagine that they can design. To the naïve mind ... it may seem absurd that in complex conditions, order ... can be achieved more effectively by decentralizing decisions.”*

— Friedrich Hayek

Competition is a disciplinary force. In the marketplace, businesses must compete for the loyalty of customers. Almost everyone recognizes this point regarding the private sector. Unfortunately, the importance of competition in the public sector is often overlooked.

The primary purpose of government is to secure and protect the rights of individuals. A government is granted a monopoly on the legitimate use of force to protect the rights of individuals or other entities such as corporations against those who would use force to threaten, take, or damage the person or property of another. As history illustrates, the coercive powers of government, particularly those of the central government, also pose a potential danger to the rights of individuals. This is why it is generally a good idea for political power to



be both limited and divided.

As discussed in the prior element, the structure of incentives confronted by government agencies and enterprises is not very conducive to efficient operation. There is nothing comparable to profits and losses to help citizens evaluate the performance of public sector agencies and enterprises. As a result, managers of government firms can often gloss over economic inefficiency. There is little incentive to control spending. If an agency fails to spend this year's budget allocation, its case for a larger budget next year is weakened. Agencies typically go on a spending spree at the end of the budget period if appropriations have not yet been spent.

Given the structure of incentives within the public sector, it is vitally important that government faces competition wherever feasible. If we are going to get the most from the available resources, private firms must be permitted to compete on a level playing field with government agencies and enterprises. For example, when governments operate vehicle maintenance departments, printing shops, food services, garbage collection services, street maintenance departments, schools, and similar agencies, private firms can easily be given an equal opportunity to compete with public enterprises, especially if care is exercised to avoid political favoritism or even bribery. Competition can improve performance, reduce costs, and stimulate innovative behavior in government, as well as in the private sector.

One way of promoting competition among governments is to divide horizontally among the executive, legislative, and judicial branches of government. If well-structured, each will provide a check on the power of the other two branches. Political power can also be divided vertically among the central, state or provincial, and local levels of government. **Decentralization**<sup>(?)</sup> reduces the power of political leaders, such as presidents, prime ministers, and legislators, who exercise power at the central government level. Decentralization and expansion of the role of state and local governments relative to the central government can help protect citizens from exploitation. This is because it is much easier to escape the oppressive powers of state and local governments than a central government. One can much more easily move to another location within a country to escape high taxes and poor government services than move out of a country. Decentralization makes it easier for citizens to choose the "exit option" and find a location providing government services and taxes more

to their liking. In turn, this ability to move enhances the incentives for state and local officials to be more sensitive to the concerns of their residents.

Decentralization increases competitiveness within governments. As we have stressed throughout, competition among business firms protects consumers against high prices, shoddy merchandise, poor service, and rude behavior. When firms serve their customers poorly, they lose business to rivals providing consumers with a better deal. Competition is a disciplinary force, and it can improve performance, reduce costs, and stimulate innovative behavior in government, just as in the private sector.

Decentralization and variations in the activities of state and local governments also can provide citizens with a broader range of options for goods and services offered through the political process, enhancing their ability to obtain government services more consistent with their preferences. Just as people differ regarding how much they want to spend on housing or automobiles, they will also have different views concerning expenditures on public services. Some will prefer higher levels of services and be willing to pay higher taxes for them. Others will prefer lower taxes and fewer government services. Some will want to fund government services with taxes, while others will prefer greater reliance on user charges. Within the framework of a decentralized political system, individuals will be able to group together with others desiring similar combinations of government services and taxes, and this grouping will make it possible for a larger number of people to obtain services more consistent with their preferences.

Moreover, the movement of people among the decentralized governmental units will also help improve efficiency. If a government levies high taxes (without providing a parallel quality of service) and regulates excessively, some individuals and businesses that make up the tax base will choose the exit option.

**Video:**

**[Competition and Efficiency of Government](#)**

Nearly 40 million Americans move each year. That's a lot of moving! Moreover, their

movements are not random. Between 2013 and 2022, the populations of the ten states with the highest tax burden—that is, income plus sales (VAT) and property taxes—grew by an average of 3.7 percent as the result of births minus deaths plus immigration from other states and abroad. During the same period, the ten states with the lowest tax burden grew more than twice as fast, 7.7 percent. Changes in employment also provide insight into the pattern of population movements. Among the four most populous states, employment between 2000 and 2022 increased in the low-tax states of Texas and Florida by 41 percent and 36 percent respectively, compared to only 16 percent and 4 percent in the high-tax states of California and New York. These movers are sending a message to high taxing, poorly run governments. Like businesses that realize losses when they fail to serve their customers, democratic governments lose citizens when they serve them poorly.

Similarly, within the European Union, countries where after-tax incomes are a greater proportion of pretax incomes attract significantly larger numbers of foreign high-skilled workers.<sup>(115)</sup> These movers are sending a message to governments. Like businesses that realize losses when they fail to serve their customers, governments lose citizens when they serve them poorly, unless they use the power of the state to restrict movements, as China does by not allowing those who do not have an urban residence permit (hukou) for a specific city to receive medical care or send their children to school.

In summary, decentralization allows people to move toward governmental units that provide desired public services at a relatively low cost. In turn, the movements of voters will help keep governments in line with the preferences of citizens.

If competition among decentralized governments is going to serve the interests of citizens, however, it must not be stifled by the policies of the central government. When the national government (or the European Union) subsidizes, mandates, and regulates the bundle of services provided by provincial and local governments, it undermines the competitive process among them. The best thing the central government can do is perform its limited functions well and remain neutral regarding the operation and level of services provided by provincial and local governments. Like private enterprises, units of government prefer protection from rivals. There will be a tendency for governments to seek a monopoly position. Therefore, competition among governments does not evolve automatically. It must be

incorporated into the political structure.

Is there a country that typifies the idealized decentralization model outlined here? With a population of about 8.8 million Switzerland, a small landlocked country surrounded by European powers comes close. Its geographic size of 41,285 square kilometers is mountainous and little of it is suitable for agriculture.

Despite its small size, the Swiss government is highly decentralized, and political power is divided both horizontally and vertically. There are twenty-six cantons (twenty full cantons and six so-called half cantons) that operate as independent states with substantial powers to restrain the central government. Any eight cantons can call for a popular referendum to repeal an action of the central government. There are two legislative branches of the central government—the Council of States and the National Council. The members of the Council of States are elected by majority vote with two members from each of the twenty full cantons and one from each of the six half cantons. In contrast, the National Council is based on proportional representation. This difference in how members of the legislative branches are elected reduces the power of political parties and makes it more difficult to obtain legislative approval at the central level. In Switzerland, there is no chief executive with powers similar to those of a president or prime minister. The central executive branch is directed by a seven-member council selected by the legislative bodies. The taxing powers of the central government are limited, which explains why more than half of total tax revenue and 80 percent of the income tax revenues are raised at the canton and municipal government levels. Switzerland's decentralized structure has served it well. Even though it has little in the way of natural resources, it has the highest per capita income among the industrialized countries and ranks among the world's freest economies.

## Part 3 Final Thoughts

*“There is enormous inertia—a tyranny of the status quo—in private and especially government arrangements. Only a crisis—actual or perceived—produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around. That, I believe, is our basic function: to develop alternatives to existing policies, to keep them alive and available until the politically impossible becomes politically inevitable.”<sup>(116)</sup>*

— Milton Friedman, 1976 Nobel Laureate

We have examined the operation of both markets and the political process. While both have shortcomings and there are legitimate roles for governments, the empirical evidence indicates that countries with more economic freedom and greater reliance on markets grow more rapidly and achieve higher income levels. (See Part 2, Exhibits 13 through 18.) Why is this the case? Incentives provide the answer. Markets create a powerful force for individuals and businesses to serve others, providing others with goods and services they value highly relative to cost. In a market economy, income is earned by helping others. If you want to earn a lot of income, you had better figure out how to help others a lot. Even though this attribute is seldom recognized, perhaps because people are unaware of it, markets motivate people to undertake actions that promote human progress. As Adam Smith noted nearly 250 years ago, the invisible hand of market prices directs self-interested individuals to undertake actions that promote the general welfare.

Political allocation is a fundamentally different alternative to markets. There are two general structures of democratic political regimes: presidential and parliamentary.

Regardless of whether the political system is presidential or parliamentary, political allocation of resources, even in democratic countries, often leads to a conflict between

personal interests and the general welfare. Voters have little incentive to cast a well-informed vote. While the outcome of a political decision may affect the potential voter a great deal, what are the chances that any given vote will determine the outcome of an election? Using a rational “cost-benefit” analysis, it is amazing that anyone ever votes in an election. Voting as a civic duty is a generally accepted norm, but that does not mean that most voters make the effort to understand the issues confronting them. Surveys indicate, for example, that only 37% of Americans can name their representative in Congress.

To review, politicians and political parties, seeking to assemble a majority coalition, have a strong incentive to use debt financing, money creation, and hidden taxes to conceal the cost of resources extracted from the citizenry. The extracted resources can then be used to provide subsidies and other forms of favoritism to “buy” the support of various voting blocs. But political favoritism encourages business, labor, and other interest groups to shift resources away from productive activities toward rent-seeking designed to get more of the government favors. Political allocation may sound like a great idea, but the real-world results are unattractive. Such a system of allocation undermines economic efficiency and leads to interest-group politics, cronyism, excessive debt, and conflict among citizens.

What could be done to minimize the adverse consequences of democracy? What would a political structure more consistent with economic progress look like? These are complex questions, but key elements can be outlined.

1. **Political power must be both divided and constitutionally limited.** As Lord Acton stated, “Power corrupts, absolute power corrupts absolutely.” As discussed in Element 3-10, successful governments apportion power among many competing entities, thus dividing power. For instance, the Constitution of Serbia, adopted in 2006, provides for decentralization, allowing for the establishment of autonomous provinces. In practice, however, there has been pressure on decentralization efforts, with the central government retaining substantial control over key areas such as finance and security. The Serbian case exemplifies the erosion of constitutional restraints over time. Thus, structural factors are also needed to constrain the centralization of government.

2. **Checks and balances must serve to keep governmental power clearly divided across independent units.** Governments typically have three areas of activity: a legislative branch that makes the laws, an executive branch that administers the laws, and a judicial (court) branch that interprets the laws. There are, however, a large number of institutional arrangements of these three basic functions. Ignoring monarchies, dictatorships, and military juntas (which may have the trappings of more democratic regimes but are, in fact, dominated by a single individual or small clique), the basic types of systems can be classified as:

- i. **Parliamentary**, in which executive power is held by a leader (typically called a “Prime Minister”) selected by the parliament, and parliament through the Prime Minister selects the cabinet of ministers. In such systems the Prime Minister serves at the will of the parliament and can be removed at any time. Such countries may have a figurative head of state (a monarch such as the King of England) or a President with limited powers (as in Germany).
- ii. **Presidential**, in which the executive is selected directly by the voters and appoints his or her cabinet, typically subject only to approval by the legislative body. The United States is a good example of such a system.
- iii. **Semi-Presidential or Mixed**, in which the voters select the President, who has limited but meaningful powers, but the Cabinet (ministers) is accountable to the parliament. Such a system can be found in France.

In examining parliamentary systems, specific institutional factors are important. Are elections run in small districts that elect a single member or in larger districts that elect multiple members? In the latter case, are seats allocated based on share of the votes and what is the minimum share necessary to enter the legislature?

The majority of post-communist transition countries (about 60 percent) have adopted a mixed system. Thirty percent have a parliamentary system and the remainder a presidential system. Over time, some countries—including Georgia in 2004, the Czech Republic in 2012, and Armenia in 2015—have switched from parliamentary to mixed systems. The powers of the President in these mixed systems vary a great deal across countries. Ukraine has been especially unstable, with revisions in the relative power of the President and Parliament in 1994, 1996, 2004, 2010, and 2014. Such instability of basic institutions clearly makes planning on the

part of investors extremely difficult.

While there are advantages and disadvantages to all the above types, research suggests that presidential systems tend to have smaller governments. This may be because parliamentary systems are more likely to be coalition governments where multiple parties make demands for their constituents and priorities in order to support the government. On the other hand, parliamentary systems across the world seem to grow faster than presidential ones. In post-communist countries, however, presidential systems seem to have an additional disadvantage and be of larger size due to a tendency to centralize power, even to the extent of becoming autocratic states with only a façade of democracy.

**Read:**

**[A Case for Constitutional Reform in Ukraine](#)**

There are several possible modifications that might improve the operation of parliamentary governments. Roger Myerson, who won the Nobel Prize in Economics in 2007, has suggested a practical structure that respects the concept of checks and balances. Given the extensive problems with corruption in transition economies, one logical solution is to divorce responsibility for operating the government from responsibility for investigating and prosecuting criminal activity. The former could be vested in the Prime Minister and the latter in the President's office. The basic principle is that even in a long-established legal system, but especially in newly democratizing countries, having an independent power source in charge of investigating corrupt acts significantly reduces the ability of such actors to subvert justice.

Another possibly beneficial modification is to require larger majorities for approval of projects at higher levels of government. For example, while a simple majority could approve action at the local level, a three-fifths majority could be required for legislative approval at the provincial level and two-thirds for approval at

the central level. This reform would strengthen local and provincial government and help to correct the tendency of power and control to flow toward the central government. Further, these supermajority requirements for approval at provincial and central levels would mean that broad agreement, not just a simple majority, would be required before a project could be undertaken at these levels. This would help to minimize another deficiency of unconstrained democracy: the ability of special interest groups to obtain government favors at the expense of taxpayers, consumers, and other citizens.

**3. The third branch of the government, the judiciary, must be an independent judiciary.** While control of judicial appointments is important, it is not the only factor that contributes to the legal system functioning as a check and balance. Economic research has shown, over and over, that the independence of the judiciary is an important determinant of economic prosperity. It must be clear that by “independence” we mean real independence (*de facto*—or independence *in fact*), and not merely what is formally written in the law, but which entities can be avoided (*de jure*—or independence *in law*).<sup>(117)</sup>

**4. Debt financing must be restrained.** Both economic analysis and recent history indicate the political process is biased toward debt because it enables politicians to increase spending without having to levy taxes, which impose a more visible cost on voters. If this bias is ignored, shortsighted politicians will predictably expand debt to levels that undermine prosperity, as they did in Greece. In many other countries, as in Greece, the issue of government debt has been a persistent concern, particularly in recent years due to economic challenges and financial instability. While there are provisions in the Greek constitution for fiscal responsibility and budgetary discipline, there are no explicit constitutional restrictions on government borrowing. This absence of constraints has contributed to the accumulation of significant levels of national debt, reaching alarming proportions. According to World Bank data, total central government debt accounted for 237.4% of Greece's GDP in 2021. Similarly, despite having different provisions in their constitutions for fiscal responsibilities, Albania and Croatia have experienced relatively high government debt-to-GDP

ratios (91% for Croatia and 82.4% for Albania in 2021). Introducing a constitutional supermajority requirement at the parliamentary level to authorize government borrowing could be a potential solution to address this deficiency. For instance, requiring a two-thirds or three-fourths majority approval for borrowing decisions would impose a higher threshold for committing a country to additional debt.

5. **The Central Bank must be independent.** As discussed in Element 2.5, money with a stable value is essential for the smooth operation of markets. That means controlling inflation. One disadvantage of a democratic system (although certainly one that does not offset its many advantages) is that politicians facing a contested election may make decisions that create benefits now but impose much larger costs in the future when they will no longer be in office. This brief time horizon can lead to high public spending without increased taxes to pay for such spending. Faced with this dilemma, politicians are often tempted to “pay for” their spending by ordering the central bank to create money. As we saw in Part 2, Element 5, excessive creation of money will lead to a high level of inflation. Monetary policymakers need to be made more accountable for their failure to maintain approximate price stability. One way this could be done is to require that those individuals in charge of monetary policy—the Board of Governors of the Central Banks—resign if they fail to keep the inflation rate within a specified range, for example, 0 to 3 percent. This type of provision makes monetary policymakers’ responsibilities clear and holds them accountable should they fail. New Zealand has already adopted policy along these lines. perhaps even hyperinflation. Both economic theory and past evidence say that by introducing uncertainty and changing incentives, making planning for the future difficult, such inflation will lower economic growth and citizens’ well-being in years to come. When Central Banks have the independence to resist pressure from politicians, the results have been lower and more stable prices and higher growth rates.

6. **The judiciary must protect property rights.** The philosopher John Locke, writing in the late seventeenth century, claimed that the right to own and use private property was a “natural right” and that the “preservation of property” was the “great and chief

end” for which human beings created governments. Almost every constitution makes mention of the protection of property. Examples include the United States Constitution and The European Charter of Fundamental Rights, which says:

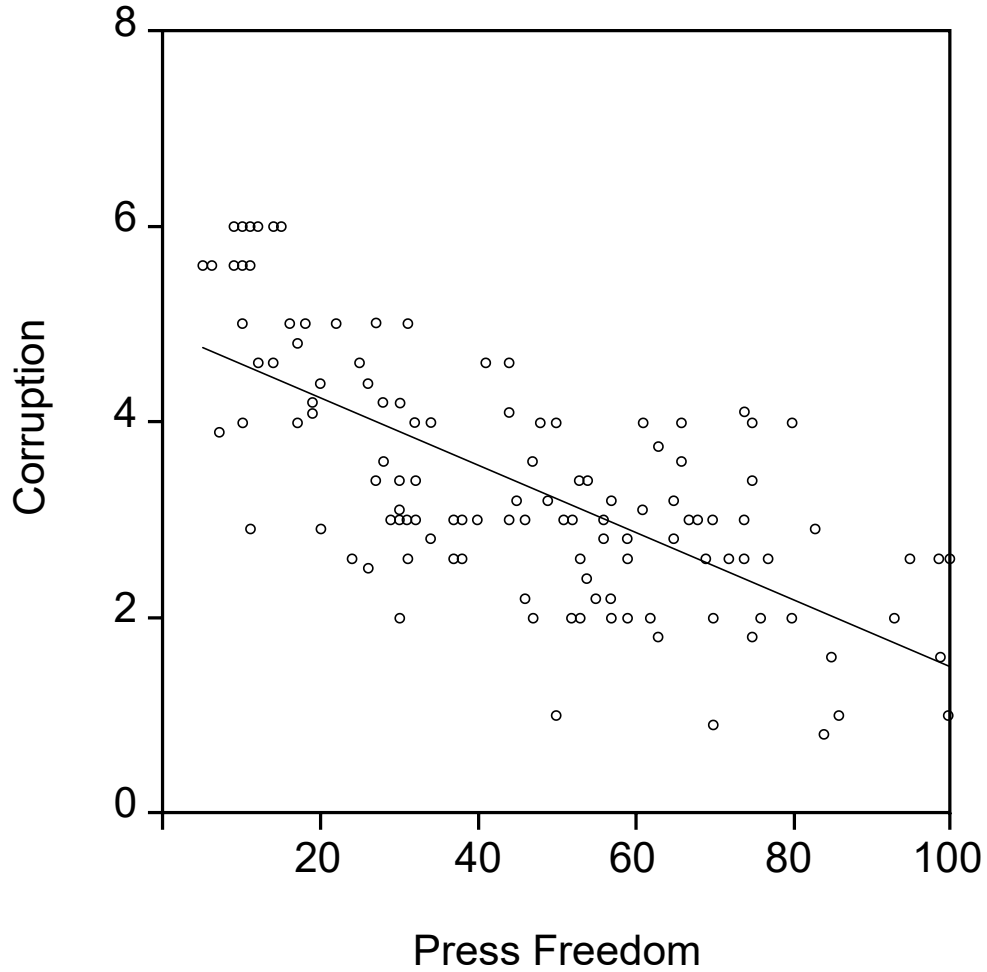
*“Everyone has the right to own, use, dispose of and bequeath his or her lawfully acquired possessions. No one may be deprived of his or her possessions, except in the public interest and in the cases and under the conditions provided for by law, subject to fair compensation being paid in good time for their loss.”*

Unfortunately, many of these high sounding principles are, as the saying goes, “not worth the paper they are printed on.” Governments frequently erode the protections of property. Phrases like “public interest,” “just compensation,” or “fair compensation” are subject to interpretation. Governments frequently use regulations to take or control private property without compensation, even though the property owner had not violated the rights of anyone. Courts have generally allowed such takings of private property if a legislative body deemed the action to be “in the public interest,” or that the taking did not deny the owner all uses of his or her property. This issue of effective taking (denying many uses of the property while technically not changing ownership) is especially problematic. What does it mean, for example, for an individual to “own” a piece of beachfront property if there is a regulation that it cannot be built on, or another that everyone must be allowed to use it? In sum, simply writing property rights into law or even constitutions is not sufficient to promote economic growth. Such rights must be credible and believed by potential investors. Economic research has shown that the effect of property rights on growth is much stronger when combined with judicial independence and a greater level of checks and balances in government structure.

- 7. There must be Freedom of Speech and a Free and Independent Press.** While, as discussed above, checks and balances within the structure of government are important, they need to be supplemented with external monitoring. This is especially

the case for what is known as “collusive corruption” in which both the payer of a bribe and the recipient are legally punishable, meaning that it is hard to gather evidence since no one involved has an incentive to betray the other. While there are more sophisticated statistical tests, the link between a free press and the overall effectiveness of government (and related greater economic success) is clear from a simple graph such as the one below. It is no wonder that in an authoritarian government, journalists are threatened with censorship, arrest, and even murder.

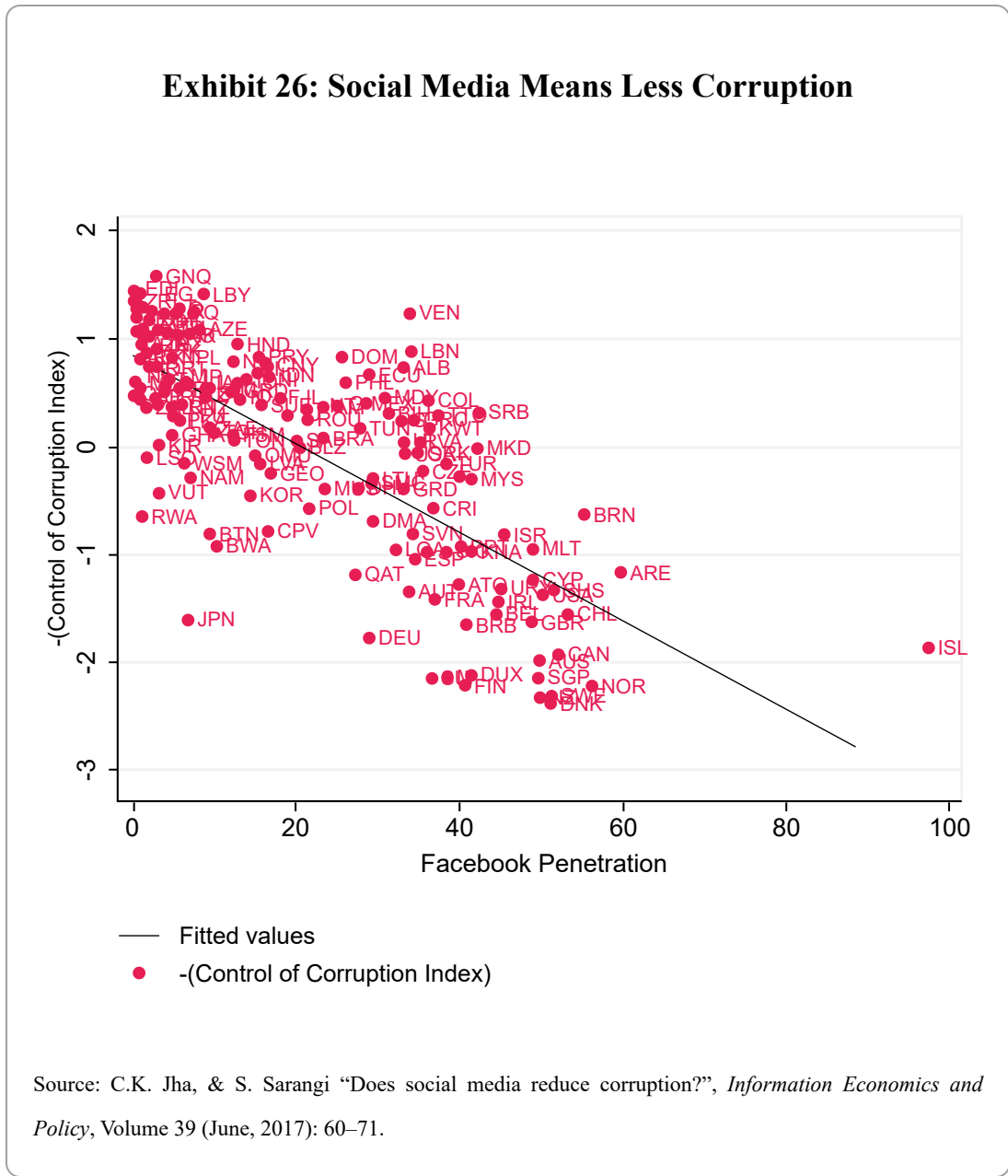
### Exhibit 25: Press Freedom Reduces Corruption



Source: Aymo Brunetti, Beatrice Weder, “A free press is bad news for corruption,” *Journal of Public Economics*, (2003), 87(7): 1801–1824, 10.1016/S0047-2727(01)00186-4.

Technological advances over the past 20 years have massively increased citizens’ ability to monitor governments and hold them accountable. Again, a simple graph makes the connection between internet penetration and low corruption obvious. (Here, Facebook is used simply as a stand-in for all social media.) Of

course, this is a two-way street. Technological advances have made it much easier for totalitarian governments to keep track of what their citizens are doing (or even thinking).



Press freedom means more than simply not suppressing outlets or threatening journalists. Governments controlling and using television for propaganda is a

problem in many countries. An additional disturbing tendency is for rich politicians to purchase their own newspapers, television and radio stations. While interfering with private owners is always questionable, this is one area where sound public policy may well require limitations.

**8. Freedom of Movement, Investment and Trade must be available to all citizens.**

The freedom of individuals to compete in business and engage in voluntary exchange activities is a cornerstone of both economic freedom and progress. Price controls, business and occupational entry restraints, laws restricting the exchange of goods and services across national boundaries, and other government regulations that restrain trade are not sound economics. Occupational licensing (which requires government approval to engage in an occupation such as, to take an extreme but real example, hair braiding) is a major anticompetitive device that restricts work opportunities, including those of many of the least well-off members of society. When there is concern about protecting the public, certification (which provides information about an individual's training but leaves consumers free to evaluate the relevance of that training) provides a superior option. With certification, buyers are provided with the information to make sound choices without closing off the opportunity for others to prove that they are capable providers. Predictably, licensing will be used to restrain trade and provide existing suppliers with monopoly power. The freedom to trade is a basic human right, just like freedom of speech and freedom of religion. There is no reason citizens should not be permitted to buy from, and sell to, whoever will give them the best deal, even if the trading partner lives in another country. Somewhat surprisingly, while reciprocal free trade (where both partners are open to buying and selling from each other) is clearly advantageous, the consensus among economists is that reciprocity is not essential. In almost all cases a country will improve the lives of its citizens if it drops barriers to free import of goods, regardless of the policy of its trading partners. The logic of such "unilateral free trade" can be seen in a quotation from Joan Robinson (1903–83), one of the most original and prolific economists of the last 100 years:

*“Even if your trading partner dumps rocks into his harbour to obstruct arriving cargo ships, you do not make yourself better off by dumping rocks into your own harbour.”*

Public discussion often tries to analyze freedom of trade, freedom of movement, and freedom of investment as separate topics. They are not. If workers are paid less in one country than another, all three channels will come into play. Workers will try to move to the higher wage area, investors will come to the lower wage country to take advantage of cheap labor, and goods produced using this labor will be less expensive in global markets. Blocking any one of these channels will only increase the pressure on the others.

9. **EXTERNAL ANCHORS ARE CRITICAL.** Voters, like all economically rational people, make decisions by comparing costs and benefits. Politicians, as we have already discussed, often have very short time horizons, ending at the next election. This disconnect creates difficulty in adopting policies that impose current costs in return for much larger long-term benefits. This time inconsistency makes it hard for politicians to make believable policy commitments. Leaders may also be subject to pressure from powerful vested interests to adopt policies that favor insiders at the expense of the public at large. One possible solution is for far-sighted leaders to limit their ability to respond to pressure by joining an international organization that requires good policies as a condition of joining or continuing membership. There are many such organizations. The European Union (EU) imposes requirements of a low budget deficit and a limit to total level of government borrowing. It also requires members to adopt a set of common legal rules (called the *Acquis Communautaire*). While some EU policies (for example, farm subsidies under the Common Agricultural Policy) may not be beneficial or are even contrary to sound economics, they are typically far better than those that might have been adopted by many post-communist countries without the incentive of prospective EU membership. Countries with a reasonable expectation of joining the EU made many painful reforms that ultimately benefited their citizens.<sup>(118)</sup>

Other organizations that could have a similar positive influence include the North Atlantic Treaty Organization (NATO), the World Trade Organization (WTO), the European Court of Human Rights, the Organization for Economic Cooperation and Development (OECD), and the International Centre for Settlement of Investment Disputes (ICSID). The International Monetary Fund (IMF) is particularly important in inducing governments to adopt growth-enhancing governmental policies. Countries tend to turn to the IMF for assistance when excessive government spending has created currency crises where international credit markets are no longer accessible to finance even more government. An example would be the Greek debt crisis of 2010–2018. Only pressure from the IMF and the European Central Bank (ECB) persuaded the Greek government to adopt necessary reforms.

Even external rankings by organizations that do not require membership can have a positive influence on government performance. Georgia, for example, takes immense pride in being ranked among the top 10 countries in the World Bank’s “Ease of Doing Business” index and government ministers are held accountable for reforms that improve this ranking.

These principles will provide people with protection against the oppressiveness of centralized power and help bring government spending and borrowing under control, while limiting the inclination of politicians to serve special interests and to undermine personal freedom. Taken together, the changes would be a positive step toward the restoration of government based on mutual agreement rather than the power to plunder. We have no doubt that they would assure growth and prosperity for future generations.

We are aware that structural changes like those outlined above are unlikely to be adopted universally or in the immediate future. We also recognize that, other than a few public-choice economists, most people do not even think about the problem of how the political process works and what might be done to make it work better. The media and opinion leaders focus on who is gaining political power and generally ignore the adverse consequences of how that power is exercised.

Thus, getting people to think seriously about the structure of government and what

might be done to improve its operation will be a challenge. But economic analysis tells us that even the most democratic countries are on unsustainable paths. If change does not occur, a crisis is likely and that may create an opportunity for constructive change. (See the quotation from Milton Friedman at the beginning of this element.)

It is of vital importance when thinking about the structure of government to distinguish between the form and the reality. Many countries have a government structure that looks like the ideal we have been discussing. They have multi-candidate elections, nominally independent legislatures and judiciaries, and multiple levels of government from national to municipal. Yet, they are not truly responsive to the will of their citizens. Examples abound among post-communist countries as well as post-colonial countries in Africa and Latin America.

Such exploitive governments are rare, however, in well-established free market economies. Economic freedom is hard to reconcile with political repression.<sup>(119)</sup> As populations become assured of day-to-day survival, they tend to focus more on abstract issues such as political and religious freedom and gender equality. Entrepreneurial discovery is a powerful force for human progress.

We have emphasized the role of markets and exchange, as opposed to governments, in ensuring social benefits because all too often this difference is misunderstood. We are well aware, however, that not all the actions individuals undertake to serve others are compensated through markets. Individual rewards frequently come in forms other than money. Indeed, the division we have drawn between the public and the private (market) sector is incomplete. There is also what economists call the **third sector**<sup>(?)</sup> including charities, nonprofit organizations, social enterprises, and community groups that deliver essential services, help to improve people's wellbeing, and thus, contribute to economic growth. This third sector is often of considerable size in developed economies. Indeed, one recent estimate put the number of unpaid volunteers serving society in Europe at the equivalent of more than 15 million full-time workers.

Evidence about the relationship between the third sector and the first (private) and second (public) sectors is mixed but tends to show that a more successful private sector increases charitable cash donations while having a negligible effect on donations of time. It is

clear, however, that expansion of the public sector crowds out private response to social or other problems. Evidence from the US and Canada indicates that government grants tend to reduce private support for nonprofit organizations by up to 75 percent. Grants to individuals tend to reduce work effort and family formation among recipients. On the other hand, the evidence is that a government that better fulfills its basic functions of reducing unemployment and inflation and promoting economic growth enhances the tendency of citizens to volunteer both money and labor.

Indeed, Elinor Ostrom became the first woman to win the Nobel Prize in economics for her pioneering work showing that voluntary, community organizations perform better than either pure markets or government policies in solving problems of public goods.

Sections 2 and 3 focused on national prosperity. Looking ahead, Section Element 4 will focus on personal prosperity. It will consider practical strategies to help you better prepare for the future and achieve a more prosperous life. As we do so, we urge you to keep in mind the words of Albert Schweitzer:

*“I do not know what your destiny will be. Some of you will perhaps occupy remarkable positions. Perhaps some of you will become famous by your pens or as artists. But I know one thing: the only ones of you who will be really happy are those among you who have sought and found how to serve.”*

Often markets will, as we have emphasized, reward such service, but on other occasions the rewards will be in the joy and satisfaction you receive from helping others.

## PART 4

# Twelve Key Elements of Practical Personal Finance



### Elements:

1. Discover Your Comparative Advantage.
2. Increase Your Value to Others.
3. Budget Your Spending and Saving.
4. Manage Credit Wisely.
5. Spend Strategically.
6. Plan for the Unexpected.

7. Put the Power of Compound Interest to Work.
8. Diversify Your Assets.
9. Realize No One Can Consistently “Beat the Market”.
10. Match the Length of Your Investments to the Timing of Your Needs.
11. Reduce Your Risks.
12. Use Insurance to Manage Unavoidable Risks.

## Introduction

*“You’ve got to be very careful if you don’t know where you are going, because you might not get there.”*

— **Yogi Berra, American baseball star and philosopher**

In other words, each of us needs a plan for our finances. If we don’t have one, we may end up where we don’t want to be. The twelve Elements in Part 4 form the core of a practical plan that focuses on things you can do immediately that will help you make better financial decisions whatever your current age, income level, or background.

If you do not take charge of your finances, they will take charge of you. Why is it that although people in the US and the European Union have much higher incomes compared to those of people in post-communist countries, many struggle with financial stress? The answer is that financial insecurity is mainly the result of the choices we make, not the income we earn.

Personal finance and investment decisions can seem totally divorced from economics, but they are not. The law of comparative advantage (see Element 1.4), which explains why countries benefit from specializing in the activities they do best, also explains why you as an individual can benefit from specialization in things that you do well and are highly valued by others. Similarly, when it comes to building wealth over time, entrepreneurship, financial

accountability, career planning, and investment in capital (especially human capital) are as important for individuals as they are for countries.

The twelve Elements outlined in Part 4 will not make you a financial wizard or an instant millionaire, but they will get you started right away with the basic steps to building wealth. More importantly, they will help you avoid major financial errors. Individuals who think they don't have the time or the expertise to develop a sound financial plan may not apply even simple guidelines and may eventually find themselves in financial trouble.

Life, like economics, is about choices. Our goal is to enhance your ability to choose financial options that lead you toward a happy, comfortable, and rewarding life. That goal is not just about making money. When it comes to happiness, intangible assets, such as family, friends, engaging work, a good marriage, religious convictions, enjoyable hobbies, and helping others are equally if not more important.

Desiring more wealth is not unseemly, however. No matter what your objectives in life are, they are easier to achieve with less debt and more wealth, which offer you more choices, and not just in your own life. Some of the world's most affluent people like Bill Gates and Warren Buffet have used their extraordinary wealth through their philanthropy to help others in multifarious ways and to tackle some of the world's most intransigent problems. But you don't have to be among the super rich to want more wealth to help your elderly parents or donate to religious, cultural, and charitable organizations.

*"I [have] always told my students," says John Morton, one of America's leading economic educators, "that life is not a lottery and life is not a **zero-sum game**<sup>(?)</sup>. Your success will not take away from anyone else's success. Your success depends on your choices and choices have consequences."<sup>(120)</sup>*

Thus, all of us have an incentive to improve our financial decision-making. These twelve guidelines can help you do so.

ELEMENT 4.1

# 1. Discover Your Comparative Advantage

TheFreemanOnline.org



*“Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing it is stupid.”*

— Albert Einstein

We have used the principle of comparative advantage throughout this book to explain the rationale for international trade and specialization across firms. The principle of comparative advantage is just as important when individuals are considering occupational and business opportunities. Think about the relationship between your skills and opportunity costs. To pick one extreme, suppose that someone is better than everyone else in every productive activity (i.e. they have an **absolute advantage**<sup>(?)</sup> in everything). Should they try to meet all their needs and wants by spending a little time on each activity (and go to bed exhausted)? Now, let’s look at the other extreme: suppose someone is worse at everything than everyone else. Should they just give up and starve? The answer to both questions is “No!” In both circumstances each person would gain from specialization and trading with the other.

No matter how talented you are, when opportunity costs are considered, you will be relatively more productive in some areas than others. Similarly, no matter how poor your ability to produce, you will be able to make some things at a lower relative cost than other people. You will be able to compete successfully in some areas and can gain by specializing where you have a comparative advantage.

Your comparative advantage is determined by your relative abilities, not your absolute abilities. This point is very important. Instinctively you know this. Imagine your spouse is better than you are at both cooking and gardening. Marital harmony is unlikely if your spouse does all this work while you’re on social media all day. On the other hand, if you are even somewhat better at cooking than gardening and you trade your time and skills making delicious food for your spouse’s time and skills growing plants, you are both better off.

Some people start out with fewer advantages than others, but even they can do extremely well if they make the effort and apply themselves diligently. There is often great admiration for people who overcome difficult beginnings to become successful. Adversity—

the determination to get out of a poor situation—can be a great motivator.

It's never too early to take charge of your career development, to plan how you can best develop your talents and use market cooperation to achieve your goals. While you know your interests and skills, it will likely take information-gathering to shape them into goals. You may need to talk with the teachers who know you best, your parents and other relatives (from whom you will likely get the most risk-averse and conservative advice), and do some internet searches about the qualifications needed for a profession you might like to pursue. This blue-sky thinking costs almost nothing, and may lead you to consider professions you might not have thought of initially.

Three other helpful avenues to gain close-up experience about possible professions or professional environments are shadowing, volunteering and asking for informational interviews. Shadowing happens when you contact someone in a profession that interests you and ask if you can quietly be in the background with them for a day while they go about doing what they do. Don't be afraid to contact someone you don't know. Sometimes, people will just say, "no," but a respectful email or letter of genuine interest may get a "yes." It's rather flattering to have a young person interested enough in what the established person does to want to make contact. It also shows a certain amount of risk taking and confidence in one's interpersonal skills, qualities employers value. If fitting a day into your schedule doesn't work, you can ask for a meeting to discuss this career. I have seen these person-to-person contacts be very successful for students in landing internships, future guidance and mentoring on education or career contacts, and in one case a good job (assistant to the president of the company!)

Volunteering in a field where people are marginalized and help is always needed, like working with the elderly or with people with disabilities, can be personally rewarding, and a way to try out career possibilities. An example: as 10<sup>th</sup> grade students Zara and Tina volunteered 3 hours a week after school at a hospital talking with and reading to chronically ill patients. While both found great satisfaction and new empathy for others, Zara decided that being a medical professional was not for her because she herself felt the pain of others too deeply. Tina, on the other hand, became a doctor.

Back to comparative advantage in making educational and career choices. We usually

perceive costs as something that should be kept as low as possible. Remember, however, that costs reflect the highest valued opportunity given up when we choose an option. Thus, when you have attractive alternatives, your choices will be costly. Should you take that part-time job as a waiter or waitress to have more money while you're a student? Or should you borrow money to take an extra course so that you can complete your college degree more quickly? Both options are attractive. Furthermore, as you improve your skills and your opportunities become even more attractive, the choice among options will be more costly.

In contrast, your costs will be low when you only have very few good choices. For example, a very effective way to reduce the cost of reading this book would be to get marooned with it on a desert island so that reading it was the only opportunity you had other than staring at the ocean. It would reduce the cost of doing one attractive thing, reading this book, by eliminating your opportunity to do many other attractive choices. While you might not have a choice about being marooned on a desert island, you do have choices to make yourself better off by increasing your opportunities, not by reducing them.

Young people are encouraged to pursue higher education so they will have more attractive opportunities later in life. But this is the same as encouraging them to increase the costs of all the choices they make. A good education will generally increase your productivity and the amount employers are willing to pay you. Although it will enhance your future earnings, it also means you will have to forego the three years of lower income you would have earned by going to work right out of high school.

Sound career decision-making involves more than figuring out the things you do best. It is also vitally important to discover where your passions lie—those productive activities that provide you with the most fulfillment. If you enjoy what you do and believe it is important, you will be happy to do more of it and work to do it better. Thus, competency and passion for an activity tend to go together and can be enhanced by your generosity to work for the greater good of your community (or all humankind if you're really ambitious). Think about real wealth being measured in terms of personal fulfillment.

## ELEMENT 4.2

# 2. Increase Your Value to Others

*“When we see persons of worth, we should think of equaling them; when we see persons of a contrary character, we should turn inwards and examine ourselves.”*

— Confucius

In a market economy, financial success reflects one’s ability to provide others with value. This is true for both employees and businesses. If you want to achieve high earnings, you had better figure out how to provide others with services they value highly.

As previously stressed, improved knowledge, higher skill level, and experience generally increase productivity and enhance one’s ability to provide valuable services to others. As a result, investments in human capital—education, training, and other forms of skill acquisition—can improve both productivity and earnings. But other personal attributes also influence productivity. Two of the most important are personal attitudes and entrepreneurial thinking. The importance of these two attributes as a source of productivity is closely related to what psychologists call emotional intelligence (EQ). Many psychologists now believe that EQ is more important than IQ as a determinant of personal success.<sup>(121)</sup> Even economists often overlook these two vitally important sources of personal productivity. Let’s consider each of them.

How do one’s personal attitudes impact productivity and success? Consider the following simple thought experiment: suppose an employer is evaluating two potential employees. The first has the following set of attributes: honesty, dependability, persistence, reliability, trustworthiness, respect for others, desire to learn and improve, and ability to work with others. The second has a different set: disrespect for others, unreliability,

quarrelsomeness, contempt for education, vulgarity of speech, blaming others for problems, and dishonesty. If you were the employer, who would you hire? Predictably, most would hire the first candidate because those attributes are success-enhancing. Other things being equal, employees with these positive attitudes are usually more productive and function well with coworkers. In contrast, the second set of attributes are failure oriented. They will undermine productivity and the ability of the employee to work with others.

If you want to be successful, you need to cultivate, develop, and strengthen the first set of attributes so they become habits—the core values of your life. Equally important, cast the second failure-oriented set out of your life. Do not let anyone, including friends, convince you that any of the failure attributes are “cool.” They are paths to trouble, and you do not want to go down those routes.

The good news is that you can choose success attitudes rather than the failure ones. Moreover, you can do so regardless of your family background, current income, educational level, or choice of career. Your attitudes will exert a huge impact on your future financial success. Positive attitudes will help you overcome other disadvantages, such as a poor education or a financially restricted childhood.

What are these attitudes? They are well summarized in a class book 7 Habits of Highly Effective People as:

1. Be Proactive (take responsibility for your own choices)
2. Begin with The End in Mind (have a clear vision of your desired destination)
3. Put First Things First (Prioritize your actions)
4. Think Win-Win (as we have emphasized throughout – seek mutually beneficial outcomes)
5. Understand and Be Understood (engage in active listening and empathetic communication)
6. Synergize (value differences and diverse perspectives)
7. Sharpen the Saw (an analogy to a dull saw—it means to invest in life-long self-care, continuous learning and personal development).

**Video:**

**The Economics of Ghostbusters**

Of course, if you choose failure attitudes, you can blame others—your family, your ethnicity, your neighborhood, the schools you attended, or society in general. These factors may influence your choices, but they do not determine them. Your attitude characteristics are under your control. If you grew up in a troubled environment, it may be more difficult to attain and maintain these attitudes. But a person who overcomes a negative environment is admired and respected by almost all. A troubled background can even help launch your success if you choose to develop positive attitudes.

**Video:**

**Poverty and Entrepreneurship**

Some of you may be thinking, “My attitudes are my own business. No one is going to tell me what to do or change my behavior!” Suppose a business owner, let’s call him Alexei, has this perspective. Alexei ignores the wishes of consumers and instead provides what he thinks consumers should value, nor does he treat his employees with respect. Alexei is free to make these choices. If he does so, however, he will pay a price in the form of lost sales and probable business failure.

Similarly, potential employees are free to “do their own thing.” They can ignore how their attitudes and behavior affect productivity and employability. But, like the business that ignores the desires of consumers, employees who ignore how their attitudes and behavior influence their productivity will pay a price in the form of poor opportunities, low earnings, and spells of unemployment. None of us is an island unto ourselves. If we want others to provide us with income, we need to cooperate and make our services valuable to them.

**Video:**

**Haiti's Solar Entrepreneurs**

The bottom line is straightforward. Success-oriented attitudes are highly important determinants of financial success. You cannot buy these attitudes. Neither can someone provide them to you. You must choose them and integrate them into your life. Furthermore, if you do so, it is a near certainty that you will have a substantial degree of economic success. The opposite is also true. If your life is largely a reflection of the failure set of attitudes, it is a virtual certainty that your future will be characterized by financial troubles and personal bitterness.

Another personal attribute that can enhance your productivity is entrepreneurial thinking. While entrepreneurship is often associated with business decision-making, in a very real sense we are all entrepreneurs. We are constantly making decisions about the development and use of knowledge, skills, and other resources under our control. Our financial success will reflect the outcome of these choices.

If you want to be financially successful, think entrepreneurially. Put another way, focus on how to develop and use your talents and mobilize available resources to provide others with things that they value highly, of course always keeping in mind your own values and ethics. We are not suggesting that you make your fortune by providing harmful drugs no matter how high the demand!

**Video:**

**CreAction**

Once you begin to think entrepreneurially—to think about how you can increase the value of your services to others—do not underestimate your ability to achieve success. Entrepreneurial talent is often found in unexpected places. Who would have thought that a middle-aged, milkshake-machine salesman, Ray Kroc, would revolutionize the franchising

business and expand a single McDonald's restaurant in San Bernardino, California, into the world's largest fast-food chain? That the athletic shoe brand Adidas, started by Adi Dassler in his mother's kitchen in 1924 would grow to \$22 billion in sales?<sup>(122)</sup> How could anyone have anticipated that Jeff Bezos, starting an online bookstore in his garage in 1994, would expand Amazon into the world's largest retailer? Did anyone in the 1950s expect Ingvar Kamprad, founder of IKEA, to take his first small showroom in the town of Älmhult in Sweden and make it the largest furniture retailer in the world?<sup>(123)</sup> These are high-profile cases, but the same pattern occurs over and over. Successful self-employed professional and business leaders or founders of world-beating firms often come from diverse backgrounds that appear to be largely unrelated to the areas of their achievement.

Self-employed entrepreneurs are disproportionately represented among the wealthy. While the self-employed constitute a big part of the labor force, they account for a much larger share of millionaires. On average, self-employed people are four times wealthier than wage and salaried workers.<sup>(124)</sup> Four major factors contribute to the financial success of self-employed entrepreneurs. First, they are good at identifying and acting on attractive opportunities that have been overlooked by others. Second, they are willing to take risks. Greater risks and higher returns go together. To a degree, the higher incomes of self-employed entrepreneurs are merely compensation for the uncertainties accompanying their business activities. Third, they have high investment rates. Self-employed business owners often channel large shares of their incomes into growing and expanding their businesses. Fourth, they generally love what they do and therefore work long hours.<sup>(125)</sup>

It is also the case that employees can gain by "thinking like entrepreneurs." Just as the income of business entrepreneurs depends on their ability to satisfy customers, the earnings of employees depend on their ability to make themselves valuable to employers, both current and prospective. If employees want to achieve promotions and high earnings, they need to develop skills, knowledge, attitudes, and work habits that are highly valued by others.

Development and use of your talents in ways that provide large benefits to others are keys to financial success. They are also central to what Arthur Brooks calls "earned success," the central element of happiness and life satisfaction.<sup>(126)</sup> No one can give you earned success; you must achieve it. Earned success is present when your education, work, and lifestyle

choices reflect the purpose of your life. Throughout our careers, we have asked our students what they want to do with their lives. In one form or another, the response is nearly always the same: *I want to do things that will make the world a better place to live.* Of course, individuals will differ regarding how they plan to do so. But, regardless of their plans, a positive set of attitudes and an entrepreneurial thought process will enhance their ability to live a meaningful and rewarding life.

**Video:**

**Lending to the Poor**

## ELEMENT 4.3

# 3. Budget Your Spending and Saving

*“Money is only a tool. It will take you wherever you wish, but it will not replace you as the driver.”<sup>(127)</sup>*

— Ayn Rand

Most financial insecurity today is the product of unwise choices. Lack of budgeting, spending more than you earn, building up debt without concern for how to repay it, and other unwise financial habits create havoc and cause stress. A commitment to budgeting is key to obtaining a healthy financial life, building wealth, and achieving your personal goals. People, like nations, build wealth through saving and investment, but this takes strategic planning. There must be a plan in place to guide how the spending, saving, and investment are directed toward wealth creation. For the individual or household, that plan is a **budget**<sup>(?)</sup>. A budget helps you channel your funds toward sound spending, regular saving, and diversified investments in a manner that will provide you with the most value from your income. Think of your budget as your wealth GPS. It will direct you to your goals or alert you when you’re veering away from them.

Effective budgeting is an ongoing process, not a one-time event. It is comprised of two specific actions. First, you must create the initial budget<sup>(128)</sup> that is simply a document that identifies all your planned or expected spending for a particular time period. Most people create a monthly budget, but a yearly budget is also common. It is important to carefully consider all your spending, not just the highly visible spending like groceries, car payments, and rent or mortgage. Do not forget about birthday gifts, license tag renewal fees, streaming subscriptions, and oil changes for your car. Estimate your monthly or annual income, then identify where you are going to spend every penny. We recommend zero-based budgeting, which means that saving and investment are specific items in your budget, not just the leftover

balance (if there is any). Many experts recommend a basic allocation of 50% for “needs” (thing you must pay like rent or tuition), 30% for “wants” (things you enjoy but could skip like meals out or movies), and 20% for “savings.” Of course, often savings are a means of setting aside funds for future expenses such as buying a car or a flat or starting a family. You may also responsibly borrow for such events such as investing in education so long as your planning, looking into the future clearly anticipates enough income beyond you day-to-day needs to repay the loan on time. We will discuss borrowing and lending extensively in the next element.

The second action is documentation of actual spending and making needed budget adjustments. Keeping track of all spending and placing it into the categories of your budget provides valuable information about your habits and the progress made toward achievement of your financial goals. Tracking your spending will also help you develop a better, more precise budget in the future. For example, if you fail to include a spending item or two in your initial budget, when that actual spending is observed, you can then make sure to adjust your budget accordingly. Suppose you budget €100 for restaurant meals for the month but then realize that you spent €150. You will know that to either change your budget or your spending to account for this difference. The documentation of your actual spending provides you with a feedback mechanism that will help you adjust your budget and spending on an ongoing basis so you never get too far from your goals. It’s best to train yourself to do it on a daily basis.

Budgeting your income and monitoring your behavior will help you evaluate your spending and direct it toward the categories that will provide you with the most overall value. Four simple steps will get you on the path to financial stability: Begin immediately, set goals, get tools, and design a budget to meet your goals.

***Step 1. Start now and increase the likelihood of success!*** Don’t fool yourself into thinking that budgeting is only for people with jobs or high salaries or that you’ll start “later.” Children receiving allowance, students receiving support from their parents, and people without direct incomes should still budget and develop goals. Budgeting will not be easier when you are older or when you are earning more money. In fact, it will probably be more complex. It is easy to procrastinate. People who budget, spend their money wisely, and save for the future generally started early when their incomes were relatively low.<sup>(129)</sup>

***Step 2. Set goals. Incentives matter.*** Recognize this in your personal life and let your

goals drive your actions. Set short, medium, and long-term financial goals and incorporate them into your budget. Short-term milestones can be achieved within the next year and provide immediate gratification. Depending on your situation, they might include the elimination of the credit-card debt on your highest interest-rate loan (although except in emergencies accumulating such debt in the first place was probably not a great idea), a significant increase in your emergency fund for coverage of unexpected expenditures, or money for an upgrade of your phone or other technological device. Midterm goals are achieved over a longer period—anywhere between one and three years. Purchasing a pre-owned car with cash, making a down payment on a flat or other home, and building a solid savings account leading to a well-diversified portfolio are examples of goals that will generally require more time to achieve. Finally, saving and investing for your children's college and for retirement, and paying off student loans or a home **mortgage**<sup>(?)</sup> provide examples of longer-term goals many people will want to pursue.

As indicated earlier, saving and investing should be specific categories in your budget. The sooner you start spending strategically, saving, and investing, the more wealth you will build. What is not so obvious is how much more wealth you can accumulate by starting early. Even the smallest amount saved or invested today can make a noticeably significant difference. Consider the following long-range plan:

Suppose you started regularly saving as little as €2 a day for two years when you turn twenty-two years of age. That's probably not as much as you will spend on coffee, bottled water, snacks, or have in loose change at the end of the day. Then from your twenty-fourth until your twenty-sixth birthday, you increased saving to €3 a day. That's just a Euro more, and your income will probably have increased. Between the ages of twenty-six and thirty, bump up your savings amount to €4 per day. By not spending this amount daily and putting it aside in an account with a positive rate of return, you won't cramp your style much. By the time you reach thirty, you will have saved €9,490, plus the interest received—quite a nice sum. Saving €2, €3, or €4 a day really adds up.

But here's the real surprise. By the time you retire at age 67, the saving from just this early nine-year period can add more than €150,000 to your wealth if invested conservatively, and that's in today's purchasing power. This will be the case if you earn a real rate of return of

about 7 percent—what the stock market has yielded historically (more on this rate of return and the power of compound interest in future elements). Moreover, if you start early, you are far more likely to continue with a regular savings plan throughout your life.

**Step 3. Use budgeting tools.** Do not re-create the wheel by starting with a blank piece of paper to develop a budget. With today’s websites, spreadsheets, and apps, budgeting has never been easier. A plethora of resources exist at little or no cost. You can conduct an internet search for “budgeting tools” and find numerous high-quality and secure budgeting options. Choose one that helps you become meticulous in logging your expenses and income, keeps your financial goals in front of you, issues payment reminders, helps you control any impulses to spend outside your budget, and links you to options on how to achieve these goals. Make a habit of using your selected budgeting tool. Keeping track of your spending and income can be easy with the right tools. The trick is just to set aside 5 minutes every day to record your activity. People are often shocked to see just how their money has trickled away without their realizing it.

**Step 4. Devise a plan of action.** Create a personal budget with actual and proposed items to achieve your goals. Although we constantly think about all the things we “need” to buy, there are very few things we are really required to have beyond adequate food, clean water, basic shelter, simple clothes and a smartphone. The best way to see where you can begin to achieve your goals is by listing your “needs” and separating them from your “wants.” Reduce your wants to make way for savings and investing, and for devising a plan within your budget to meet your short, medium, and long-term goals. This places you in the driver’s seat of your financial life.

An architect does not build a house without a blueprint. A surgeon does not remove a patient’s appendix without coordinating her plans with other members of the medical team. An athlete does not end up competing at the Olympics without committing to a philosophy of success long before reaching the Olympics. Developing a detailed plan of action, sticking to it, and updating it when necessary are essential if you are going to succeed in all aspects of life, including your financial life.

Each budgetary item needs to be evaluated within the context of the others. Since you have limited income, increased spending in one area translates into decreased spending in

another, unless new sources of income are identified. As stressed in Part 1, every choice has an opportunity cost. Consider yours when making a spending decision. Examine the big picture through your budgetary lens. Figure out your monthly basics: Show how much you earn, pay in taxes, save, invest, spend, and face in debt.

Regardless of your occupation, income, or position in life, the two actions in the budgeting process—creation of your budget and tracking and adjusting your spending to improve your welfare—will help you systematically examine and guide your spending to get where you want to go. Make your plan crystal clear and become the CEO of you. Commit to creating a budget that organizes your spending, controls your debt, provides emergency funds, helps you meet various financial goals, and supplies funds for investing.

Dave Ramsey, a leading financial advisor in the United States, highlights the importance of making a personal commitment to forming sound money habits. *“The thing I have discovered about working with personal finance is that the good news is that it is not rocket science. Personal finance is about 80 percent behavior. It is only about 20 percent head knowledge.”*<sup>(130)</sup> After reading the entirety of Part 4, you will have the head knowledge. Are you ready to focus and commit to aligning your consumption, saving, borrowing, and earning decisions with those that promise financial stability and lead to a rewarding life?

## ELEMENT 4.4

# 4. Manage Credit Wisely

*“There are but two ways of paying debt — increase of industry in raising income, increase of thrift in laying out.”*

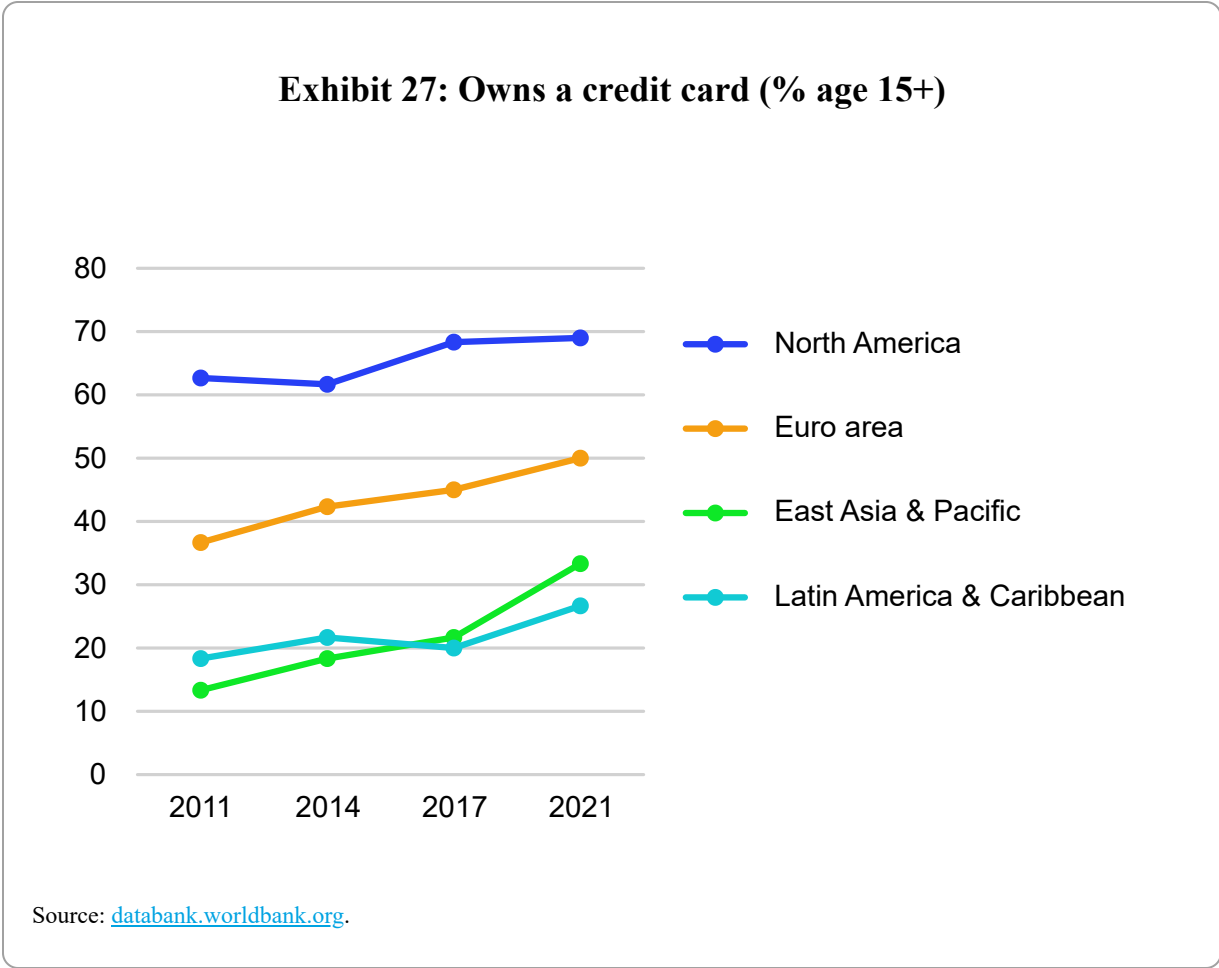
— Thomas Carlyle

In William Shakespeare’s play Hamlet, Polonius advises his son, Laertes who is going off to college, *“Neither a borrower nor a lender be, for loan oft loses both itself and friend, and borrowing dulls the edge of husbandry.”* Not only good advice in that specific context, responsible planned borrowing and lending (also called investment) are essential aspects of a modern economy. The problem arises when emotions overcome rational, forward-looking decisions.

Imprudent use of credit cards and debt can be a huge obstacle to financial success. Although many people use credit carefully, others behave as if an unused balance on a credit card is like money in the bank. This is blatantly false and dangerous thinking. An unused balance on your credit card merely means that you have some additional borrowing power; it neither enhances your wealth or provides you with more money. It is best to think of your credit card as a means of using what you have in your checking account. If you have funds in your checking account, you can use your credit card to access those funds, provided you pay off the bill every month. If you don’t have sufficient funds in your account, don’t make the purchase.

Exhibit 27 demonstrates that the percentage of credit card ownership varies across regions. In the Euro area, it reaches up to 50 percent, while in North America, it stands at 68 percent. Comparatively lower rates are observed in East Asia and Latin America. It is important to note, however, that credit card ownership is increasing worldwide. Over the

decade between 2011 to 2021, credit card ownership among individuals aged 15 and over rose globally from about 15 percent to 25 percent.



While credit cards and their electronic counterparts (Digital Wallets, such as PayPal and Mobile Payment Apps, such as Apple Pay) are convenient to use, they are also both seductive and costly methods of borrowing. Your outstanding credit-card balance is a loan—a debt that must be repaid. Because credit cards make it easy to run up debt, they are potentially dangerous. Some people seem unable to control the impulse to spend when there is an unused balance on their cards.<sup>(131)</sup> If you have this problem, you need to take immediate action! Stop using credit for spending you cannot afford. Get a pair of scissors and cut up all your credit cards. If you do not, they will lead you to financial misfortune.

Making purchases using your credit card gives the illusion that you are buying more

with your money. Invariably, when the bill comes due it presents another temptation: the option to send a small payment to cover the interest plus a tiny fraction of the balance, and keep the bulk of your money to spend on more things. If you choose this option and continue to increase your balance, however, you will quickly confront a major problem—the high interest rate charges on the unpaid balance. Interest charges of 15 to 18% or more on credit-card debt are common in the United States and Euro area.<sup>(132)</sup> In less established markets, rates are often much higher. At the time of our writing reputable banks in Kazakhstan were offering consumer credit cards with annual interest rates of 39.9% while in Azerbaijan the interest was only 25%. These rates are far higher than most people, even successful investors, can earn on their savings and investments. As we shall see in later elements, you can become wealthy earning 7 percent per year on your investments. Unfortunately, high interest rates on outstanding debt will have the opposite impact. Paying 15 to 18 percent on your credit-card debt can drive even a person with a good income into financial distress.

Consider the example of Ivan, a young professional who decides to take several days to relax on Santorini. The trip costs €1,500, which Ivan puts on his credit card. But instead of paying the full amount at the end of the month, Ivan pays only the minimum, and he keeps doing so for the next ten years, when he has finally paid off the bill. How much did Ivan pay for his trip, assuming an 18 percent interest rate on his credit card? He pays €27 per month for 120 months, or a total of €3,243. So, Ivan ends up paying his credit-card company more than twice what he paid for travel, hotel, food, and entertainment.

Ivan could have taken the trip for a great deal less by planning ahead and starting to make payments to himself before the trip, instead of making payments to the credit-card company after the trip. By saving €75 a month at 5 percent per year in compound interest (we will discuss compound interest in Element 4.7) for 20 months, Ivan could have had €1,560.89 for the trip, rather than paying €3,243 including interest for the same trip (but taken earlier) on the credit card. In other words, by saving and planning to make his trip, instead of running up credit-card debt to pay for it, Ivan could take two trips for less than he ended up paying for one on credit.

Suppose you already have a sizable credit-card bill? If you are serious about achieving financial success, the very first thing you should do, if possible, is *pay off the debt* from

savings, and if you don't have enough savings, reduce expenses. Although it would have been better if you had avoided that debt, paying it off does provide an opportunity for you to get a very high return. Let's suppose the interest rate on the debt is 18 percent. Every euro you save now to pay down the credit-card debt effectively earns an interest rate of 18 percent. Look at it this way: if you put one euro into an investment paying 18 percent, then one year from now it has added €1.18 to your net worth. Likewise, if you save a euro to pay off your credit-card debt, then one year from now it will also add €1.18 to your net worth. Your debt will be that much lower—first, from the euro you saved that reduced your debt initially and, second, from the 18 cents you would have otherwise owed in interest.

Does it ever make sense for an individual or family to purchase a good on credit? The answer is “yes,” but only if the good is a long-lasting asset and if the borrowed funds are repaid before the asset is worn out. This way you pay for the asset as you use it.

Very few purchases meet these criteria. Three categories of major consumption expenditures come to mind: housing, automobiles, and education. If maintained properly, a new house may provide useful life for forty or fifty years into the future. Under these circumstances, the use of the longest mortgage you can get to finance the expenditure is perfectly sensible. Similarly, if an automobile can be expected to be driven for five or six years, there is nothing wrong with financing it over a four-year period.

Notice that we have been speaking about consumption purchases, not the investments that may be necessary to start a business where you expect to be able to repay the loan from the profits of your enterprise. When long-lasting assets are still generating additional income or providing a valuable service after the loans used to finance their purchase are repaid, some of the loan payments are actually a form of savings and investment, which will enhance the net worth of a household. Like housing, investments in education generally provide net benefits over a lengthy period. Young people investing in education through debt financing may reap dividends in the form of higher earnings. The educational investment will be a good one if, over the next twenty or thirty years, the higher earnings are sufficient to pay off the borrowed funds. But there are risks here: if the additional education does not increase future earnings, at least not by much, it may be exceedingly difficult to repay the borrowed funds. (Note: This issue will be considered in more detail in Element 4.11.)

Financing an item over a period longer than the useful life of the asset forces you to pay in the future for something that will no longer be of value to you. As a result, you will be forced to reduce your future consumption. Further, this strategy increases your indebtedness, and you will become poorer in the future.

For most households, the implications of this guideline are straightforward: do not borrow funds to finance anything other than housing, automobiles, and education, or to invest in a business. Furthermore, make sure that funds borrowed for the purchase of these items will be repaid well before the expiration of the asset's useful life. Application of this simple guideline will go a long way toward keeping you out of financial trouble.

How can you tell if you are managing your credit and debt wisely? Here are two general guidelines. First, no single monthly debt payment should be greater than 28 percent of your monthly gross income. Second, all combined debt payments should be no greater than 36 percent of your monthly gross income. Even if you follow these two, your credit score is the primary indicator. Numerous corporations calculate and provide credit scores based on various models. These models may differ in scoring ranges, algorithms, and factors considered, but they all aim to assess individuals' creditworthiness. In the United States **FICO score**<sup>(?)</sup>, created by the Fair Isaac Corporation, is the most widely used metric. With a range of 300 to 850, it is used by banks and other financial institutions to assess risk and determine the interest rate you will pay on loans. Another global information services provider of credit information and analytics is Experian. Its credit scoring model is tailored to the European market. The **Experian Credit Score**<sup>(?)</sup> evaluates individuals' creditworthiness based on multiple factors, including payment history, credit utilization, and credit mix. Maintaining a consistently high score will enhance your wealth-building potential.

Notice that in this section we have almost exclusively discussed borrowing from formal, legal institutions such as banks (or for investment microcredit institutions that may finance investment loans). There are, of course, other sources of credit. Families often lend to one another, particularly when a young person is going to university, starting a family, or beginning a business. Such solidarity is both admirable and somewhat dangerous. It is important that all involved understand the implicit expectations about repayment and other conditions so as to avoid later stresses. Short-term, informal loans between friends and

neighbors are often a part of community life in developing countries.

What is essential is to avoid if at all possible relying on shady characters such a “loan sharks” who will lend at very high interest rates to desperate borrowers who may never be able to get out from under the accumulating debt burden. Even with careful planning emergencies do happen, but if you have shown yourself but unlucky (say after an auto accident), help from friends, family or the community is almost available.

## ELEMENT 4.5

# 5. Spend Strategically

*“Let us not be too particular; it is better to have old secondhand diamonds than none at all.”*

— Mark Twain

Most of us would like to have more in the future without having to give up much today. Many people, including those with incomes well above average, do two things that undermine this objective. First, as we saw in the previous element, they go into debt to buy things before they can afford them. Second, they buy items before carefully considering alternatives.

As we saw in Element 4.3 on budgeting, make sure your purchases are within your budget. Ask yourself the following questions before buying. Is this purchase taking me toward or away from my goals? What will my life be like with the purchase? What would it be like without it? Is this a need or a want? Am I simply replacing an item I already have that is still usable, or am I obtaining something new? Are there any alternatives? Your goal should be to get the most value for your money.

You can stretch your money by buying used items when they will serve you almost as well as new ones. The problem with buying things new is that they depreciate or decline in value almost immediately. Almost as soon as an item is purchased, it becomes “used” in terms of market value. Buying things that are used—or, in today’s parlance, “pre-owned”—can lead to substantial savings. Consider the cost of purchasing a new automobile compared with a used one. Figures vary a great deal across local markets but a general rule of thumb is that the per-kilometer depreciation in the first year or two after a new car is purchased averages well over twice as much as during the rest of its life. We calculated that each kilometer driven lowers the value of a 2024 Toyota Camry by about US\$ 0.23, but as the car gets older this **depreciation**<sup>(?)</sup>

falls to just a few pennies a kilometer. Given how long cars last, if you take care of them, by buying a used car and letting someone else pay the high depreciation in the first few years you should easily be able to get excellent service from that used car for many years., saving thousands of dollars in depreciation. Of course, your repair bills may be somewhat higher after the car is a few years old, you will still be well ahead financially. maybe enough to pay for your daughter's college education! That is an awful lot to pay for the status of driving a brand new car.<sup>(133)</sup>

Many other items are just as functional used as new and often much less expensive. Clothes, furniture, appliances, refurbished phones, and toys come immediately to mind. You may want to spend some time at secondhand stores and markets but given the value of your time, looking online may be very productive. US giant e-Bay claims to be active in over 190 countries, so unless you live in Cuba, Iran or North Korea this global peer-to-peer market place is open to you. Similar websites exist in almost every country, without the global shipping costs. In a few clicks you can find items that are both in excellent condition and priced significantly below retail. For example, there may be a retailer who sells appliances or furniture that have cosmetic imperfections, like a small dent in a refrigerator door meaning that it cannot be sold for the full retail price but is otherwise brand new.

**Video:**

**[Strategies for Paying Down Debts](#)**

Of course, there are some cases when buying new is economical. There are retailers, especially for clothing, that buy up last season's clothing and sell it at a deep discount. If you do not need to wear the absolute latest fashions, these discount outlets can save you a great deal of money that you can then use for other purposes. We are merely encouraging you to consider the potential savings that can often be derived from used or discounted purchases without giving up much in terms of consumer satisfaction. Look for opportunities to get the most value from your money.

## ELEMENT 4.6

# 6. Plan for the Unexpected



*“There is no harm in hoping for the best as long as you are prepared for the worst.”*

— **Stephen King**

We have talked about the value of saving for your future, but you also need an emergency fund. What is that? Life has an endless string of surprise occurrences—a flat tire, a leaking roof, a suddenly dead phone — just to name a few.<sup>(134)</sup> We cannot predict which ones will occur or when, but we can predict that over any long period, each of us will confront such costly items. Thus, it makes sense to plan for them. This is what your emergency fund is for. It

will help you deal with unexpected bills that could otherwise cause you severe emotional and financial distress. Although the emotional and mental stress of an unexpected event may be difficult to deal with, an emergency fund makes the financial part simply an inconvenience. In other words, an emergency fund equals a financial freedom fund.

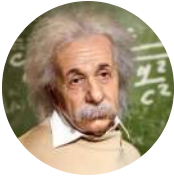
The alternative is to wait until the surprise event occurs and then try to devise a plan to deal with it. This strategy will generally mean running up credit-card balances or borrowing funds on highly unfavorable terms. Then you must figure out how to cover the interest charges and eventually repay the funds. All this anxiety is likely to result in unwise financial decisions.

How much should you set aside regularly to deal with such events? One approach would be to make a list of the various surprises you experienced in the past year and estimate how much each one cost you. Think about car repairs, unexpected travel, doctor's visits, a home appliance replaced—anything that you did not expect to happen last year. Add the costs up, divide that number by twelve, and begin channeling that amount monthly into your emergency fund. Another approach is to save three to six months of expenses. In other words, imagine you lose all your income for three months. Is your emergency fund large enough to replace that income and cover expenses?

You might even want to pay a little more into the account just in case you confront higher future spending in this area. If you pay too much into the account, you can build up a little cushion. If eventually the funds in the account become larger than necessary, you can shift the surplus into investments. The key point is to consider the monthly allocations into your emergency fund as a mandatory rather than an optional budget item. Thus, they should be treated just like your mortgage payment, electric bill, and other regular expenditures. An emergency fund allows you to purchase peace of mind rather than worry about the financial bumps of life. With such a fund you will be able to deal confidently with expenditures that, while unpredictable as to timing, can nonetheless be anticipated with a fair degree of certainty. During periods when your surprise expenditures are below average, the balance in your emergency fund will grow. When the surprise expenditures are atypically large, you can draw down the funds in your account, but you can remain calm because you are prepared. This is an essential element of what it means for you to “take charge of your money” rather than allowing “money to take charge of you.”

## ELEMENT 4.7

# 7. Put the Power of Compound Interest to Work



*“Compound interest is the most powerful force in the universe.”<sup>(135)</sup>*

— Albert Einstein

In Element 4.3, we emphasized the importance of budgeting regularly, saving habitually, and spending your money effectively. There are two major reasons for starting earlier rather than later. First, as discussed, those who yield now to the many excuses not to start budgeting, saving, and spending wisely will have a tough time doing so later. But in this Element, we want to talk more about the second reason to begin saving right away: the big payoff that comes from starting early. A small head start in your savings program leads to a substantial increase in the payoff when the savings are directed into investment. Recall the example in Element 4.3 of the additional retirement wealth a young person could have by saving a modest amount from age 22 to 30. Giving up just a little less than €9,500 in purchasing power for those nine years can easily add over €150,000 to retirement wealth at age 67. The key to converting a small amount of money now into a large amount later is to start saving immediately to take full advantage of the “miracle of compound interest.”

**Compound Interest**<sup>(?)</sup> is not really a miracle, but sometimes it seems that way. While easy to explain, the results are utterly amazing! Compound interest is simply earning interest on interest. If you do not spend the interest earned on your savings this year, the interest will add to both your savings and the interest earned next year. By doing the same thing each year in the future, you then earn interest on your interest on your interest, and so on. It may not seem like much, and for the first few years it does not add that much to your wealth, but before

too long your wealth begins growing noticeably, and the larger it becomes, the faster it grows. It is like a small snowball rolling down a snow-covered mountain. At first its size increases slowly, but as each extra bit of snow adds to the snowball's size, it allows even more snow to be accumulated, and soon it is huge and growing rapidly.

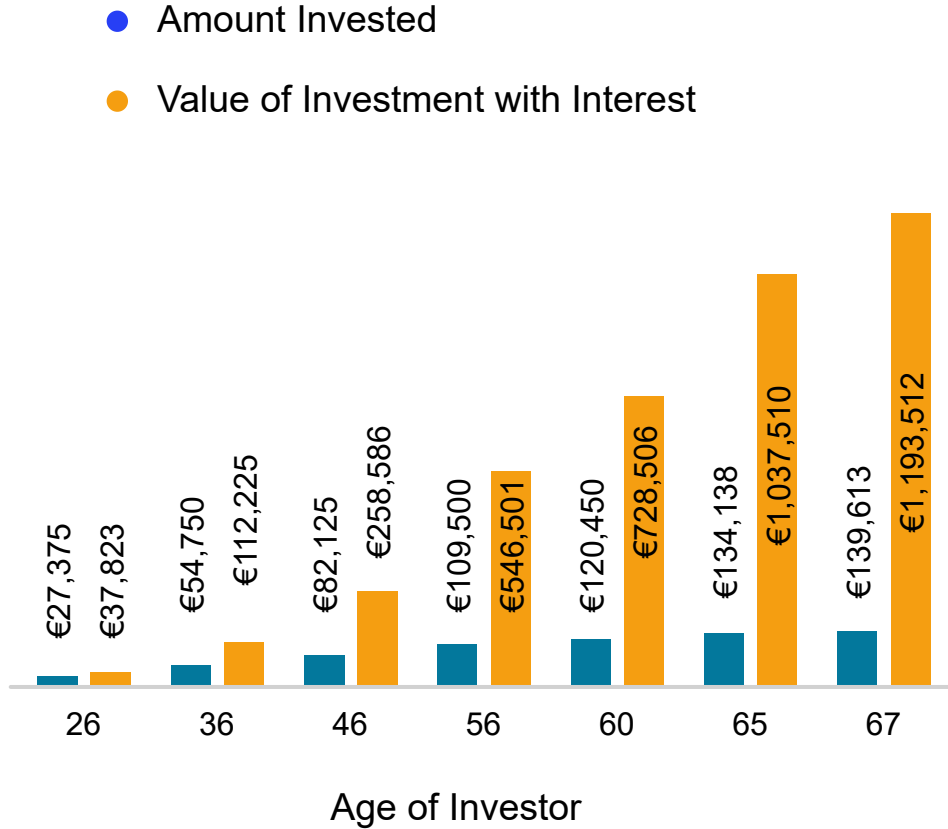
The importance of starting your savings program early is explained by how compound interest sets the stage for this later accelerating effect. The savings you make right before retirement will not add much more to your retirement wealth than the amount you save—a little but not much. The snowball that starts near the bottom of the mountain will not be much bigger when it stops rolling. Therefore, the sooner you start saving, the more time that early savings will have to grow, and the more dramatic the growth will be.

Consider a simple example. Assume a 16-year-old (let's call her Maya) is reading this book and decides to act on some of what she read. She sets goals, creates a budget, and strategically makes decisions in such a way that she reduces her spending by €7.50 per day. To put this amount in context, €7.50 is about the cost of a “Happy Meal” at McDonalds in Albania or Armenia. (Or, if Maya is a bit more self-destructive, a pack of Marlboros and a Heineken.) We use the €7.50 a day figure as a small number. With a good afterschool job, Maya may be able to do this every day, but what if she ordered half as much or only ordered three days a week? She could then save a bit more every week. If she can't, she can make up by adding extra when she has extra (maybe from asking for a contribution rather than some trinket for her birthday). Our point is that if our teenager alters her decisions just a little, she will save a non-trivial amount save a year. Suppose that instead of spending this amount on her indulgences, Maya invests it in a mutual fund that provides an annual rate of return of 7 percent in real terms—that is, after adjusting for inflation. This 7 percent return is approximately equal to the annual rate of return of the **Standard & Poor's (S&P) 500 Index**<sup>(?)</sup>, an index of the five hundred largest U.S. firms that mirrors the performance of the overall stock market.) This 7 percent average return is even a bit less than that of the DAX (Deutscher Aktien Index), Germany's equivalent index over the 50 years to 2024. Both calculations assume that dividends are reinvested. It is also very important to understand that these long-term averages mask considerable year-to-year variation. There have been years when the S&P or the DAX rose by over 40% as well as others when they fell by over 40%. If your time horizon is short

(say, next year's tuition or an upcoming wedding), it is better to put your money in a bank. Stock markets are for money that you will not need for some time so the variations will even out. We will discuss stock market investments in more detail in a future section.

As Exhibit 28 illustrates, if Maya keeps this up for ten years, when she is 26 she will have accumulated €37,823 from savings of €27,375. Not bad for a rather small sacrifice. If Maya's savings were a spacecraft this is just lift off; the payoff from compound interest is merely getting started. If Maya keeps this savings plan going until she is 36, she will have €112,225 from savings of €54,750. Continuing until she is 46 will find her with an expected €258,586 from savings of €82,125. And now the afterburners start kicking in. By the time Maya is 56 she will have €546,501 from saving contributions of €109,500. As Exhibit 28 shows, if she retires at age 60, she can expect to have €728,506 saved from direct contributions of €120,450. If she retires at age 67, she will have €1,193,512 from direct contributions of only €139,613.<sup>(136)</sup> Thus, by choosing a slightly different spending pattern and investing the funds, Maya accumulates nearly €1.2 million in retirement benefits—and this figure is in euros with today's purchasing power. If Maya then invested this money in what is called an **annuity**<sup>(?)</sup>, she would have €70,000 in income every year for the rest of her life!<sup>(137)</sup>

### Exhibit 28: Don't Smoke—Get Rich!



Source: Authors' calculations. Assumes altering spending habits to save €7.50 per day and earning interest of 7 percent per year.

Alternatively, consider what would happen if Maya continued her original spending habits from age 16 to 26, then altered her habits and started allocating the €7.50 per day into an investment fund. It is good that she made the changes, and she will still benefit from the savings. But by postponing her investing program by ten years, instead of having €1,193,512 at age 67 Maya will have only €587,494. Delaying a 51-year investing program by ten years costs Maya €606,018 at retirement!

You don't have to give up much to enlarge your savings. Making small sacrifices in consumption can yield powerful results. Instead of buying the premium cup of coffee every morning, purchase the generic one or make a cup at home. Instead of eating lunch at a restaurant every day, bring your lunch one or two days a week. Skip the soft drink or beverage at a restaurant and drink water. Carpool or take the bus to work to save gas money (or even walk and also save the gym membership). Everyone can find minor changes in their consumption habits to save money.

**Video:**

**Growing Money**

Again, our point is not that you should live a miserable life of austerity and sacrifice so that you can be rich when you retire. Where is the advantage in becoming rich in the future by living in poverty until the future arrives? Instead, we are stressing that anyone can have a high standard of living and still accumulate a lot of wealth, because it does not take much savings to get a big payoff. Of the €1,193,512 Maya accumulated by altering her spending, only €139,613 came from reducing her consumption. Indeed, people who save and invest will be able to consume far more than those who do not. At retirement—or sooner—Maya can start spending her wealth and end up having much more than if she had never saved.

All it takes is an early savings program, a little patience, knowing how to get a reasonable return on your investments (see Elements 4.8 and 4.9), and taking advantage of the power of compound interest.

There is a very important reason we have couched the analysis in this element in terms of saving for retirement, since saving for retirement is something that almost everyone should have as a goal. Of course, you may very well want to take the quarter of a million Euros you have saved by your mid-40s to start a business, believing you can grow your business faster than the stock market. Even if you work for a salary all your life, however, you will need to have substantial savings when you no longer want (or are able to) work.

Many young people think “Oh, I'll have a government pension plan that will take care

of me.” This is dangerous thinking. Throughout the world, except in a few very rich countries, public pensions pay only a fraction of a country’s poverty income. In several transition economies in 2024 the average payment was around \$100 a month. While these pensions may get somewhat more generous as a country grows, there is another sword of Damocles hanging over them. Unlike private pensions where you save from your earnings and that money waits for you to need it, public pensions are of a form known as a **pay as you go**<sup>(?)</sup> system. In other words, pensions for those retired at any time are paid by taxes levied on those working at that same time. Two factors will put great stress on these systems as current young people age. First of all, people are living longer. Over the past several decades the average future life expectancy of a worker retiring at age 65 in a developed country has increased by several years. While the effect of this on a country’s ability to support a pay-as-you-go pension plan can be mitigated by forcing workers to delay retirement, another looking problem is not so easy to avoid. Demographers agree that for a country’s population, and age distribution, to stay constant the average woman in each birth cohort should have approximate 2.1 children.<sup>(138)</sup> Any fewer and over an extended time the age structure of the population will look like an inverted pyramid—wider at the top and supported by a narrower base.

Among the post-communist world, only a couple of countries in Central Asia are above **replacement rate fertility**<sup>(?)</sup> levels. All the rest are below, often far below, meaning that eventually populations will start to shrink and each worker will have to support an ever-growing number of retirees under a pay-as-you-go public pension system. It also means that each elderly person will have fewer and fewer younger family members to rely on. This is why taking personal responsibility of saving for your own future is important and that the earlier you start doing this the better for you.

## ELEMENT 4.8

# 8. Diversify Your Assets

*“It is the part of a wise man to keep himself to-day for to-morrow, and not to venture all his eggs in one basket.”*

— Miguel de Cervantes

The two most common financial investments are stocks and bonds. Let us make sure you understand the nature of these two instruments. **Stocks**<sup>(?)</sup> represent ownership of corporate businesses. Stock owners are entitled to the fraction of the firm’s future net revenues represented by their ownership shares.<sup>(139)</sup> If the future net revenues of the business are expanding, the stockholders will gain. The gains of stockholders typically come in the form of either dividends (regular payments to owners) or appreciation in the value of the stock. But there is no assurance the business will be successful and earn income in the future. If unsuccessful, the value of the firm’s stock will decline. While the stockholders are not liable for the debts of the corporation, they may lose all the funds they used to purchase the stock. (Note: “Equity” is another term for stock.)

**Video:**

**[How the Stock Market Works](#)**

**Bonds**<sup>(?)</sup> provide businesses, governments, and other organizations with a convenient way to borrow money. These organizations acquire funds from bond purchasers in exchange for the promise (and legal obligation) to pay interest and repay the entire **principal**<sup>(?)</sup> (amount borrowed) at specified times in the future. As long as the organization issuing the bond is

solvent, the bondholder can count on the funds being repaid with interest.

All investments involve risk. The market value of a corporate stock investment can change dramatically in a relatively brief period of time. Even if the **nominal return**<sup>(?)</sup> is guaranteed, as is the case of high-quality bonds, changes in interest and/or inflation rates can substantially change the value of the asset. If you have most of your wealth tied up in the ownership of a small number of corporate stocks (or even worse, a single stock), you are especially vulnerable. The experiences of those holding a large share of their assets in the **equities**<sup>(?)</sup> of firms such as Blockbuster, Sears, and JCPenney illustrate this point.<sup>(140)</sup>

You can reduce your risk through **diversification**<sup>(?)</sup>—holding many unrelated assets. Diversification puts the law of large numbers to work for you. While some investments in a diversified **portfolio**<sup>(?)</sup> will do poorly, others will do extremely well. The performance of the latter will offset that of the former, and the rate of return will converge toward the average.

For those seeking to build wealth without having to become involved in day-to-day business decision-making, the stock market can provide attractive returns. It has done so historically. During the last two centuries, corporate stocks yielded a real return (real means adjusted for inflation) of approximately 7 percent per year,<sup>(141)</sup> compared to a real return of about 3 percent for bonds.

The risk with stocks is that no one can ever be sure what they will be worth at any specified time in the future. Inevitably, there will be periods over which the market value of your investments is falling, only to rise months or years later. But that risk, known as volatility, is a big reason why stocks yield a significantly higher rate of return than saving accounts, **money market certificates**<sup>(?)</sup>, and short-term **government bonds**<sup>(?)</sup>, all of which guarantee you a given amount in the future. Since most people value the additional certainty that the yields of bonds and savings accounts provide over stocks, the average return on stocks must be higher to attract investors away from their less risky counterparts with more predictable returns.

**Mutual funds**<sup>(?)</sup> can help investors diversify and reduce risk. Mutual funds simply combine the funds of a group of investors and channel them into various categories of investments, such as stocks (equities), bonds, real estate, or **treasury bills**<sup>(?)</sup>. Thus, there are a variety of mutual fund categories.

An **equity mutual fund**<sup>(?)</sup> channels the funds of its investors into the stock of many firms. These funds provide even small investors with an economical way to achieve diversity and reduce risk. The risks of stock market investments are substantially lower if one continually adds to or holds a diverse portfolio of stocks over a lengthy period, say thirty to thirty-five years. Historically, when a diverse set of stocks has been held over a lengthy period, the rate of return has been high and the variation in that return has been relatively low. Regular payments into an equity mutual fund holding a diverse set of stocks provide investors with a low-cost method of investing in the stock market.

Diversification will reduce the volatility of investments in the stock market in two ways. First, when some firms do poorly, others do well. An oil price decline that causes lower profits in the oil industry will tend to boost profits in the airline industry because the cost of airline fuel will decline. When profits in the steel industry fall because steel prices decline, the lower steel prices will tend to boost profits in the automobile industry.

Second, diversification can help protect you against a change in general economic conditions. A recession or an expansion will cause changes in the value of the stocks of almost all firms. But diversification reduces the volatility in the value of your investments because a recession is worse for some firms and industries than others, and a boom is better for some than for others. For example, a recession that harms Max Mara, a high-fashion brand sold worldwide, may boost sales and profits for Zara, a lower-priced competitor. Similarly, recessions may improve the relative position of Skodas compared to BMWs.

Some employers offer retirement programs that will match your purchases of the company stock (but not investments in other firms) or will allow you to purchase the company stock at a substantial discount. Such a plan makes purchasing the stock of your company attractive. If you have substantial confidence in the company, you may want to take advantage of this offer. After a holding period, typically three years, these plans will often permit you to sell the purchased shares and use the proceeds to undertake other investments. As soon as you are permitted to do so, you should choose this option. Failure to do so will mean that you will soon have too many of your investment eggs in the basket of the company for which you work. This places you in a position of double jeopardy: both your employment and the value of your investments depend substantially on the success of your employer. Do not put yourself in this

position.

Your job may offer you a general pension fund that is required by the government. These funds can have different investments depending on where you work. It is important to be aware of what your company pension fund is invested in, and to make sure your own personal investments diversify away from the pension fund's holdings.<sup>(142)</sup>

We can summarize the importance of stock investments and diversity this way: to achieve their financial potential, individuals must channel their savings into diversified investments that yield attractive returns. In the past, long-term investments in the stock market have yielded high returns. Equity mutual funds make it possible for small investors to hold a diverse portfolio, add to it monthly, and still keep transaction costs low. Investing in a diverse portfolio over a lengthy period reduces the risk of stock ownership to a low level. All investments have some uncertainty, but if the past 150 years are any guide, we can confidently expect that over the long run, a diverse portfolio of corporate stocks will yield a higher real return than will savings accounts, bonds, **certificates of deposit**<sup>(?)</sup>, money market funds, and similar financial instruments. Ownership of stock through mutual funds is particularly desirable for young people saving for their retirement years.

Even with bank deposits, which are generally considered of lower risk than stocks or bonds, it is essential to be aware of the risk of bank failure. In the event of a bank becoming insolvent and unable to return your money, most countries offer national deposit insurance that will reimburse you up to a certain limit, which they publicly disclose. If you have more money than the insured limit, it is wise to spread your funds across multiple banks to ensure that the amount in each bank remains below the insured limit. Be cautious if a bank offers an unusually high interest rate on deposits, as this could indicate that savvy investors are steering clear due to potential trouble, leaving the bank desperate for funds. Do not risk your money for slightly higher interest rates! (One notable economist in a post-communist country managed to lose money in three consecutive banks that were offering the "best" rates. Fortunately, he is a theorist, not a finance professor.)

It is also crucial to be vigilant against fraud, especially when presented with investments promising significantly higher returns than the market average (often referred to as "too good to be true"). A stark example was the Albanian Ponzi (or Pyramid) Schemes of 1996.

As Albania transitioned from a command to a market economy, many individuals were inexperienced with investments. Criminals exploited this by collecting cash investments, promising returns as high as 5 percent per month or 60 percent per year. Instead of generating profits from legitimate business activities, however, these returns were funded by collecting yet more investments and using that cash to pay earlier investors (hence, the pyramid). As the schemes grew, they became unsustainable, leading to their exposure as fraudulent and resulting in significant financial losses for participants when they collapsed.<sup>(143)</sup>

**Video:**

**[The Pyramid Scheme that Collapsed a Nation](#)**

Similar schemes have emerged in many countries, with notable examples including MMM in Russia during the 1990s. Even investors in seemingly sophisticated financial markets often fall victim to a “for you only” scheme that is too good to be true designed to appeal to their greed. Many Americans fell to the fraud that has proliferated worldwide often referred to as the "Nigerian prince" scam, where someone posing as a wealthy individual or person with access to significant funds. This scam, which initially spread via letters and fax machines in the 1980s and now spreads through social media or email, typically involves receiving a message from an individual claiming to be trapped in a war-torn or politically unstable country. The person promises to reward you handsomely for helping them transfer their money out of the country safely and requests your bank account details to facilitate the transaction. If you provide your account information, the scammer will use it to steal your funds, leaving you with little recourse to recover your losses. There are numerous variations of this scheme; sometimes the scammer will request money to cover fees or expenses, but no payment will ever materialize, and the requests for additional funds will continue indefinitely.

On an even greater level In 2009, when the Southern District of New York charged Bernie Madoff for his **\$64 billion** securities fraud 'Ponzi' scheme, it was one of the most prolific financial crimes in financial history.

## ELEMENT 4.9

# 9. Realize No One Can Consistently “Beat the Market”

*“A blindfolded monkey throwing darts at a newspaper can select a portfolio that can do just as well as one carefully selected by experts.”*

— Burton Malkiel

Many people refrain from investing in stocks because they feel they have neither the time nor the expertise to identify businesses that are likely to be successful in the future. They are correct about the difficulties involved in forecasting the future direction of either an individual stock or a broad measure of its average price. No one can say for sure what will happen to either the price of any specific stock or the general level of stock prices in the future.

Most economists accept the **random walk theory**<sup>(?)</sup>. According to this theory, current stock prices reflect the best information that is known about the future state of corporate earnings, the health of the economy, and other factors that influence stock prices. Therefore, future changes in stock prices will be driven by surprise occurrences that people do not currently anticipate. By their very nature, these factors are unpredictable. If they were predictable, they would already be reflected in current stock prices.

**Video:**

**[A Random Walk Down Wall Street: Are Stock Markets Efficient?](#)**

Why not pick just the stocks that are doing well like Apple, Google, and Microsoft, and

stay away from everything else? That is a great idea, except for one problem: the random-walk theory also applies to the prices of specific stocks. The prices of stocks with attractive future profit potential will already reflect these prospects. The future price of a specific stock will be driven by unforeseeable changes and additional information about the prospects of the firm that will only become known over time. Countless factors affect the future price of a particular stock, and they are constantly changing in unpredictable ways. The price of Apple stock could be driven down, for example, as the result of an idea a high-school kid is working on in his basement right now. Thus, there is no way that you can know ahead of time which stocks are going to rocket into the financial stratosphere and which ones are going to fizzle on the launchpad or crash after takeoff.

It is unlikely that you can even improve your chances a little by studying the stock market, the details of particular corporations, and economic trends and forecasts. Some of you will do better than the market, just by chance, while others will do worse. Meanwhile, many of you will spend a great deal of time and energy that could have been put to better use trying to game the market. The key is that while someone will always beat the market, researchers have no ability to predict in advance who that will be.

But what about all those ads you see on the Internet saying something like “Gorilla Investments has beaten the market for TEN years in a row!!! Send us your money NOW, before it’s too late!” Are they lying to you? Well, not quite. Try a thought experiment. Start with 10,000 friends and have each of them flip a fair coin (50% chance of landing heads and 50% tails). Half will call it right. Then do it again but only with the 5,000 who “won” the first time. At the end of ten tosses 20 of your friends will have called it right 10 times in a row. Those are the ones who will take out ads offering their coin-flipping services. Investment advisers work the same way.

For most of us, the best option will be to channel our long-term (that is, our retirement) savings into an equity mutual fund. **Exchange traded funds (ETFs)**<sup>(?)</sup> are similar to mutual funds but are traded on actual stock exchanges.

There are two broad categories of equity mutual funds: managed funds and indexed funds. A **managed equity mutual fund**<sup>(?)</sup> is one in which an “expert,” the fund’s portfolio manager, decides what stocks will be held and when they will be bought and sold. The fund

manager is almost always supported by a research staff that examines both individual companies and market trends to identify those stocks most likely to do well in the future. The manager seeks to pick the stockholdings of the fund in a manner that will maximize the fund's rate of return.

The second type of fund, an **indexed equity mutual fund**<sup>(?)</sup>, merely holds stocks in the same proportion as their representation in broad indexes of the stock market. Little trading is necessary to maintain a portfolio of stocks that mirrors a broad index. It is also unnecessary for index funds to undertake research evaluating the future prospects of companies. Because of these two factors, the operating costs of index funds are substantially lower, usually by 1 or 2 percentage points, than those of managed funds. As a result, index funds charge lower fees, and therefore a larger share of your investment flows directly into the purchase of stock.

An equity mutual fund indexed to a broad stock market indicator, such as the S&P 500, will earn approximately the average stock market return for its shareholders. The United States is not alone in having index funds. Most large economies have one or more such funds and more are being opened regularly. It is possible to purchase index funds for individual developing countries including some in Eastern Europe (iShares MSCI China ETF, Franklin India Index Fund, Expat Czech PX UCITS ETF or VanEck Vectors Russia ETF). You can also buy regional funds that track shares in a particular set of countries.<sup>(144)</sup>

What is so great about the average return? As noted earlier, historically the stock market has yielded an average real rate of return of about 7 percent. That means that the **real value**<sup>(?)</sup> of your stockholdings doubles approximately every ten years. That is not bad. Even more important, the average rate of return yielded by a broad index fund beats the return of almost all managed mutual funds when comparisons are made over periods of time, such as a decade. This is not surprising, because, as the random walk theory indicates, not even the experts will be able to forecast consistently the future direction of stock prices with any degree of accuracy. Some will just like some sets of coin flips above turned up heads ten times in a row, but economic research suggests this is due to either luck or something illegal.

Over the typical ten-year period, the S&P 500 has yielded a higher return than 85 percent of the actively managed funds. Studies of European active vs. passive managers support these findings.<sup>(145)</sup> Over twenty-year periods, mutual funds indexed to the S&P 500

have generally outperformed about 98 percent of the actively managed funds.<sup>(146)</sup> Thus, the odds are extremely low, about 1 to 50, that you or anyone else will be able to select an actively managed fund that will do better than the market average *over the long run*.

Just like your friends' flipping coins, just because a managed mutual fund does well for a few years or even a decade, it does not follow that it will do well in the future. For example, the top twenty managed US equity funds during the 1980s outperformed the S&P 500 Index by 3.9 percentage points per year over the decade. But if investors entering the market in 1990 thought they would beat the market by choosing the “hot” funds of the 1980s, they would have been disappointed. The top twenty funds of the 1980s underperformed the S&P 500 Index by 1.2 percentage points per year during the 1990s. Similarly, the average return of the top twenty US managed equity funds from 1990 to 1999 outperformed the S&P 500 Index by 3.1 percentage points per year, but from 2000 to 2009 those same funds underperformed the S&P 500 Index by 1.3 percentage points per year.<sup>(147)</sup> For the twenty-five-year period 1993–2017, the S&P 500 Index yielded an annual rate of return of 9.7% compared to an annual return of 8.6% for the average managed equity fund.<sup>(148)</sup>

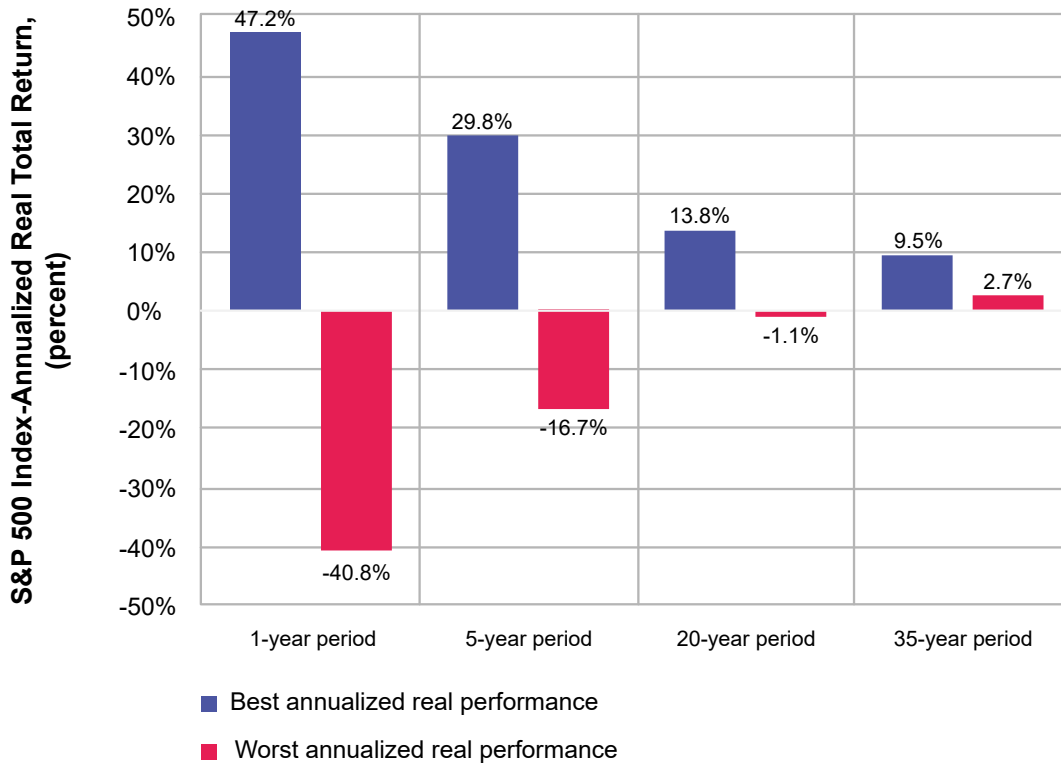
These examples actually understate the advantage of a mutual fund indexed to the S&P 500 compared to a managed equity fund because of the survivorship bias. The S&P 500 index is highly unlikely to go out of business, but over the period relevant to saving for retirement, a managed fund is quite likely to shut down. A mutual fund can disappear for two reasons, both related to poor performance: It may be shut down with the remaining value of the fund distributed to its owners or it may be merged into another managed fund with a better record. Although there are thousands of managed mutual funds today, in 1970 there were only 358 in the United States. Burton Malkiel followed those funds through 2013. During these forty-three years, 274 funds—over 75 percent of the total—ceased to exist. Out of the remaining 84, only four had outperformed the S&P 500 index by 2 percentage points or more on an annual basis.<sup>(149)</sup>

The stock market has historically yielded higher returns than other major investment categories, and index funds make it possible for the ordinary investor to earn these returns without worrying about trying to pick either individual stocks or a specific mutual fund. A study that compared 118 years of returns on stocks and bonds from 21 countries with data

going back that far showed that stock market returns outperformed bond returns over the period for every country.<sup>(150)</sup> They even returned an average of 3–6% annually, despite including the periods of the two World Wars.

Of course, there will be ups and downs and even some lengthy periods of declining stock prices. Therefore, many investors will want to reduce equities as a percentage of their asset holdings as they approach retirement (see Element 4–10). But, based on a lengthy history of stock market performance, the long-term yield derived from a broad index of the stock market can be expected to exceed that of any other alternative, including managed equity funds.<sup>(151)</sup>

### Exhibit 29: Stocks Are Less Risky When Held for a Lengthy Period of Time



Source: Linqun Liu, Andrew J. Rettenmaier, and Zijun Wang, *Social Security and Market Risk* (National Center for Policy Analysis Working Paper No. 244, July 2001). The returns are based on the assumption that an individual invests a fixed amount for each year in the investment period. Data are updated through 2019.

As Exhibit 29 illustrates, when held over a lengthy period, a diverse holding of stocks has historically yielded both a high and relatively stable rate of return. Data for the highest and lowest average annual real rate of return derived from broad stock market investments for periods of varying length between the years 1871 and 2019 are shown here. The exhibit assumes that the investor paid a fixed amount annually into a mutual fund that mirrored the S&P 500 Index.<sup>(152)</sup> Huge swings are possible when stocks are held for only a short time.

During the 1871–2019 period, the single-year returns of the S&P 500 ranged from 47.2 percent to –35.5 percent. Even over a five-year period, the compound annual returns ranged from 29.8 percent to –16.7 percent.

However, note how the “best returns” and “worst returns” converge as the length of the investment period increases. When a 35-year period is considered, the compound annual return for the best 35 years between 1871 and 2019 was 9.5 percent, compared to 2.7 percent for the worst 35 years. Thus, the annual real return of stocks during the worst-case scenario was about the same as the real return for bonds. This high and relatively stable long-term return makes stocks a particularly desirable method of investing for retirement.

Here is the most important takeaway from this element: Do not let lack of time and expertise keep you out of equity investments. You do not have to do a lot of research or be a “super stock picker” to be a successful investor. Regular contributions into an indexed equity mutual fund will provide you with attractive returns on long-term investments with minimal risk. For most people, these investments will be an important ingredient of a sound retirement plan. Every large reputable investment firm will have several indexed equity mutual funds from which to choose. Each firm may have a slightly different name for their fund, so be sure to read the description to determine the one that best fits your needs.

The second most important takeaway from this element is that economists enjoy poking fun at market “analysts.” Among the reported stock pickers that have outperformed “professionals” are a Russian circus chimpanzee who outperformed 94% of Russian mutual funds and a cinnamon ring-tailed monkey named Adam Monk who picked his stocks for the Chicago Sun-Times by circling his choices with an orange pen. The Observer, a British newspaper, organized a challenge in 2013 between three teams. One was a group of novice finance students, the second was comprised of a wealth manager, a stockbroker and a fund manager, while the third team was...a ginger tabby cat named Orlando. By the year’s end, the students lost money, the pros gained 3.5 percent, while Orlando (who would toss his toy mouse on a grid of choices) showed a return of nearly 11 percent. As one commentator observed, “The great thing about letting a cat pick your stocks for you is the low fees.” Had they been actual investments, Orlando would have provided an excellent return for kibble and catnip.

## ELEMENT 4.10

# 10. Match the Length of Your Investments to the Timing of Your Needs

*“You shouldn't own common stocks if a 50% decrease in their value in a short period of time would cause you acute distress.”*

— Warren Buffett

When making long-term investments, such as the funds allocated into a retirement plan, a stock index fund is generally your best investment. While the long-term return of stocks is substantially greater than bonds or cash in a bank account, the value of the latter is more stable over short (and even medium) time periods. As the time approaches when the funds from an investment plan may be needed, it will make sense to shift funds toward these more stable investments. Given a five-year horizon, purchasing a bond that matures in five years, at which point you will receive your initial investment plus interest, is a relatively safe investment. As a general proposition, buy bonds that mature at about the time you will need the funds, perhaps for graduate school tuition, a down payment on a home or income during retirement.

The primary risk of owning bonds is inflation, which lessens the value of both the principal and the fixed-interest payments. This risk may be reduced through the ownership of Inflation-Protected Bonds, such as **Treasury Inflation Protected Securities (TIPS)**<sup>(?)</sup> in the United States, or Obligations Assimilables du Trésor (OATs) in France, which pay a market-determined fixed interest rate set at the time they are purchased, plus an annual adjusted yield for the rate of inflation during the life of the bond. Germany, Canada, Greece, Australia, Italy, Japan, Sweden, Israel, and Iceland also issue Inflation-Protected Bonds. Because unanticipated

inflation is one of the factors that causes the return from bonds to be worth less than expected, buying and holding Inflation-Protected Bonds will protect the holder against that risk. When people expect inflation, the initial fixed interest rate of Inflation-Protected Bonds will tend to be lower than the rate for regular government securities, which already incorporate some expected inflation in their committed payback. If the actual rate of inflation is higher than was expected, Inflation-Protected Bonds will generally yield a higher rate of return than regular government securities, but the opposite will be the case when the actual rate of inflation is less than what was expected. Thus, Inflation-Protected Bonds provide the bondholder with protection against an unanticipated surge in the inflation rate by offering her less money when there is an unexpected fall. Inflation-Protected Bonds are particularly attractive for retirees seeking to generate a specific stream of real purchasing power from their assets. However, their short-term value will also be influenced by changes in interest rates and how policy is expected to impact the future rate of inflation. Therefore, we recommend that one consult with a financial advisor before investing heavily in Inflation-Protected Bonds.<sup>(153)</sup>

An additional risk associated with bonds is the impact of changes in interest rates. Suppose you buy a €1,000, thirty-year bond that pays 5 percent interest. This bond promises to pay you €50 in interest every year for thirty years, at which time it matures, and you get €1,000. But if the overall or general interest rate increases to 10 percent soon after you buy this bond, then your bond will immediately fall in value to about one-half of what you paid for it. The reason? At a 10 percent interest rate, an investor can get €50 in interest every year by buying a €500 bond. So now, €500 is about all anyone will be willing to pay for your €1,000 bond. Of course, if the interest rate drops to 2.5 percent soon after you buy your thirty-year 5 percent bond, then its price will approximately *double* in value. But this volatility (or risk) is more than you may want to assume if you are saving for something you expect to buy in five years.

How long should a portfolio consist of stocks, and when should the move to bonds be made? That depends on the length of time before you want to access the investment funds. As we suggested above, relatively short-term investments may do best in bonds exclusively. For example, a young couple saving to make a 20 percent downpayment on a mortgage to buy a house may be better off avoiding the stock market entirely—for that portion of their savings

*only*—and investing it in bonds. That is because placing a down payment on a house or condominium often involves saving for just a few years. In contrast, a couple might save for 18 years to finance university education for a newborn, or 35 to 45 years to build up savings for their retirement. In these two cases, equities should be an important part of, or perhaps the entire investment fund for most of their saving years.

The parents of a newborn who begin saving right away for the child's university education have more years to build wealth and to diversify the risk of capitalizing on stocks to build it faster. In that case, having some of that university portfolio in equities may make sense. However, as the plunge in stock prices during the Great Recession of 2008 and the market decline in 2022 illustrates, even with an 18-year horizon, stockholdings involve risk. Again, investors seeking to reduce risk in their university funds can do so by holding fewer stocks and more bonds, especially as the time approaches when the funds will be needed.

As people earn more and live longer, saving for retirement expenses becomes ever more important. We do not want to drastically, and negatively, alter our lifestyle upon retirement; and we cannot afford to outlive our retirement nest eggs. For the saver whose retirement is more than ten years ahead, a diversified portfolio of stocks, such as a mutual fund indexed to the S&P 500, probably makes the best investment portfolio. For the more conservative saver, having 10, 20, or even 40 percent of one's portfolio in bonds will generally provide more stability in the value of one's retirement assets, even though total returns will probably be lower in the end.

As the need for retirement income approaches, it is prudent for all but the wealthiest among us to begin to switch from an all-stock portfolio gradually into bonds. When that switch should begin depends partly on when and how much monthly income is needed during retirement. For those individuals with a large portfolio or a good pension income relative to their retirement income needs, much of their savings can be left longer in equities to maximize the expected total return. The goal of switching to bonds is primarily to avoid the need to sell stocks at temporarily low prices. The sooner you expect to turn to your portfolio to meet monthly living expenses, the more important it is to reduce risk by moving strategically and gradually into bonds.

Regarding retirement investments, it is also vitally important to consider the tax

treatment of both your investment contributions and retirement income. In many countries, saving for retirement is protected from some income taxes, allowing your savings to grow faster. For example, in Ukraine, contributions to non-state pension funds are deductible from gross income up to 15 percent of the person's salary, and investment return is not taxed, so the total accumulates faster.<sup>(154)</sup> Lower taxes are a way governments can encourage citizens to save for retirement. Some countries, such as Bulgaria, even exempt savings, returns, and distributions from private pension funds from all taxes.<sup>(155)</sup> While some Central and Eastern Europe countries do not yet have private pension investments available, there is a global trend to increase voluntary pension contributions through tax incentives. If you cannot access tax-advantaged private retirement accounts, continue to save; that way, when the accounts become available, you will be able to save the maximum amount allowed each year.

Our advice to those seeking to prepare for future retirement can be summed up this way: Start saving for retirement early, stay with diversified portfolios of stocks until the need for funds is near enough in time to justify gradual shifts toward lower-risk, lower-return assets such as bonds, and take advantage of the favorable tax treatment provided for retirement plans.

**Video:**

**Availability Bias**

**Video:**

**Loss Aversion**

**Video:**

**Home Country Bias**

**Video:**

**Herding**

## 11. Reduce Your Risks

*“Look Before You Leap”*

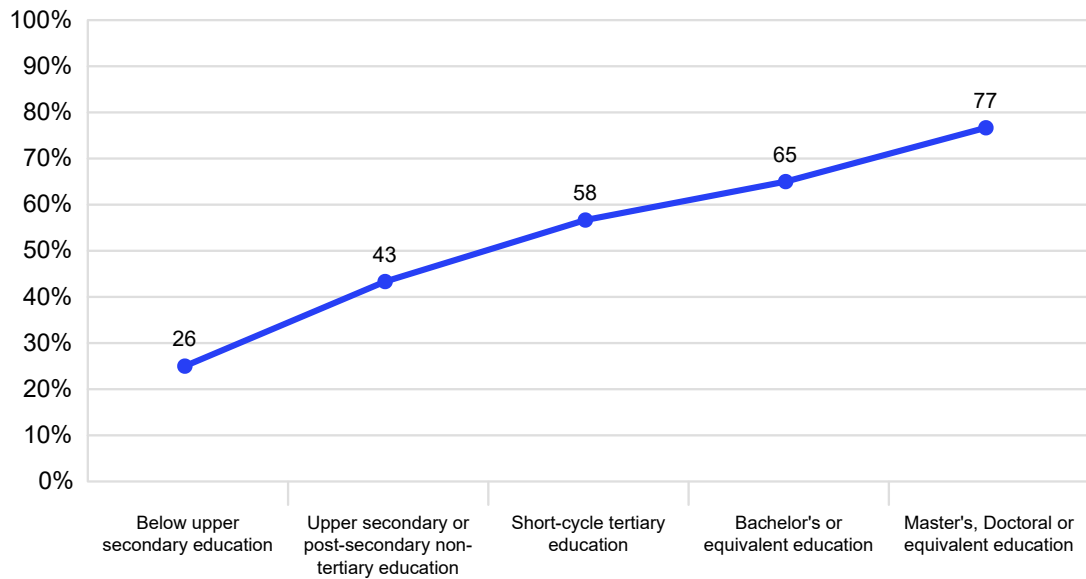
— Aesop, The Fox and the Goat

Many reading this book will soon be making important decisions regarding what to do after completing school. Should you go to university, acquire vocational training, or enter the labor force immediately? If you go to university, which one will you choose? Should you select a three-year or four-year, private or public, local language or foreign language program, local or abroad university? How will you choose a major? Which university provides you with the most attractive options? These are important investment choices, and a significant amount of money and hours of potential emotional satisfaction are at stake. Thus, it is crucially important that your educational choices are well-informed. As you make educational choices, here are some important factors to consider.

While university may be a desirable option, it is not for everyone. Going to university is costly. If a student incurs the time and money cost of going to university for a couple of years, then drops out without a diploma, the investment is unlikely to be an attractive one. The biggest risk for a student considering postsecondary education is the possibility of a negative return on his or her investment. This would occur if the higher earnings achieved from that education are less than the costs involved in obtaining the education.

According to the OECD higher educational attainment significantly increases the likelihood of earning above the median income, as shown in Exhibit 30. Among individuals with below upper secondary education, only 26 percent earn above the median, whereas among those with a Master's, doctoral, or equivalent degree, 77 percent earn above the median.

**Exhibit 30: Percentage of Population with Earnings Above Median, by Education Attainment (OECD Average)**



Source: [stats.oecd.org](https://stats.oecd.org).

In general, the median annual earnings for workers holding bachelor's degrees is higher than for those who only have a school diploma. This holds true for just about every country in the world. (If you can find an exception, let us know and we will cite you on our webpage!) But there is substantial variation in the earnings of university graduates. The actual earnings after graduation depend on many factors, including the skills acquired, major, and the overall demand and supply conditions of a particular labor market. In early 2024 The Federal Reserve Bank of New York published a study of mid-career earnings of college graduates with 75 different majors. The top 10 best paid are:

1. Chemical Engineering

2. Computer Engineering
3. Aerospace Engineering
4. Electrical Engineering
5. Computer Science
6. Mechanical Engineering
7. Civil Engineering
8. Industrial Engineering
9. Economics
10. Construction Services<sup>(156)</sup>

Can anyone see the pattern here? As a hint – it becomes even more striking when you know that “Construction Services” includes “Structural Engineering.” Please know that we are not saying you should not study History, Latin, Sociology or Drama, if that is what will make you happy. Just be aware that there will be an opportunity cost in lower earnings. Just be sure you love the field enough to make the financial sacrifice. Also, be aware that if you borrow to pay for your education, you will be paying back out of lower earnings.

Let’s consider why students sometimes choose educational options that result in negative returns. First, many students have unrealistic expectations about future earnings accompanying career choices. With inflated expectations, they may be willing to pay more for their education than what their future earnings can support. You should investigate resources to keep informed of current and predicted future labor market conditions and earnings potential. You need to search for the handbooks or statistics for your country and those to which you might possibly migrate. These will provide information on main occupations, including their requirements, job outlook and growth prospects, and median pay. Many contain projections of future demand. (It is easy, for example, to know that if there is a drop in the birth rate there may not be many new school teachers needed in the next few years.) Having realistic expectations about future income is a vital ingredient in making better decisions about postsecondary education. In the context of possible migration, it is also important to start at an early age learning useful languages. Do you want your options to include English-speaking countries or French-speaking ones?

Second, many students underestimate the cost of education. The total cost of education includes the direct cost of tuition, books, fees, and room and board. But don't forget about opportunity costs. Going to school, even part-time, means giving up current income from a job. Make sure to properly account for the total cost of education.

Third, students overuse debt. Some view the student loan check as free money and borrow too much. Many young people are ill-prepared to judge how difficult it will be to squeeze the funds for repayment of student loans out of their monthly budget after graduation. Assuming a 3 percent interest rate, you will pay €345 per month for fifteen years to repay \$50,000 in loans. You will pay €518 per month for fifteen years to repay €75,000, and €691 every month to repay €100,000. Will your future earnings be sufficient to make the monthly payment on your student loans within the context of your overall budget? Think seriously about this issue prior to taking out a student loan.

Fourth, students often assume that the rich and famous "success stories" they hear about are typical of what they will make if they choose that career. What percentage of drama school graduates end up as movie stars? Many more are likely to end up like the gentleman in the cartoon.

We are not saying that you should never borrow to finance education. There are many times when this option makes sense. It is helpful to think of education has having two very different components: consumption (rooting for the college team), making friends (including possible spouses), late-night beer parties and some pretty fascinating courses (like "16th Century Religious Movements"). The second part is investment in learning skills (including how to figure out new stuff by going to the library) that will benefit your career. Just like we would never encourage



"I'm not really a waiter, I'm an actor. I'll act like I'm waiting on you."

CartoonStock.com

you to borrow money to buy a ticket to the World Cup (consumption), we would be all in favor of your borrowing money to buy machinery to produce your newly-invented electronically guided football (investment). Like any other form of debt, student loan debt requires repayment of principal plus interest and fees. A variety of student loan programs exist. Investigate them carefully to decide what's best for you. You can get a great education at lower-cost schools that don't bundle their actual education with consumption items like gourmet dining halls and rock-climbing walls. As an example, graduates of the University of Chicago and the University of California, San Diego have precisely the same earnings, but those who are currently going to Chicago are paying \$62,200 a year (less any scholarships), while those who are going to San Diego pay \$16,050 a year unless they come from another state, in which case they pay \$48,600 a year. Over a 4-year college career this means the San Diego student pays \$54,000 LESS if they come from out of state or a whopping \$185,000 LESS if they are a California resident and yet earn the same educational outcome.<sup>(157)</sup>

To further minimize education risks, students and their parents can pursue other options to finance education. As a general guideline, develop a financial plan that has debt as the last option. Parents, relatives, and friends can start their own savings plans or consider the relative benefits of long-term saving in different forms in financial institutions.

Scholarships and grants are also available. They are particularly attractive because they do not have to be repaid. High school guidance offices and the internet are loaded with scholarship and grant lists. Make time to search for them. Each will have a specific set of instructions, eligibility requirements, and deadlines. Factor all of these options into your decision to invest in education and choose a path that makes sense for you given market considerations.

In addition to education, the purchase of a home is perhaps the most important investment decision each of us will confront during a lifetime. For most, a home purchase will be their largest investment, at least initially. Buying a home you can afford in a desirable location and keeping it well maintained can be a good investment. But there are potential pitfalls. Examination of the following factors will help you avoid the worst problems.

First, carefully consider the "own versus rent" option. Many people immediately conclude that purchasing is a better option than renting, because purchasing can build home

equity. They reason that their money is wasted on rent going into the landlord's pocket when it could be put to work creating equity, helping to build the homeowner's net worth as the mortgage is paid off and the market value of the property appreciates. However, during the first few years of a mortgage, almost all of the monthly payment is for interest and very little is actually building equity. In most cases, you will accumulate little or no equity during your first three years of ownership. You will simply pay the bank interest instead of paying rent to a landlord.

Second, buying and selling real estate is expensive, and therefore it is not a good idea to purchase a house unless you expect to live in it at least three years. You will need to pay **realtor commissions**<sup>(?)</sup> plus **VAT**<sup>(?)</sup> levied on commissions, which vary across countries (in Austria, 3 percent; Croatia, 3 percent; Italy, up to 7 percent).<sup>(158)</sup> Closing costs on a mortgage are typically several thousand dollars. If you sell the house within a few years after the initial purchase, the transaction costs are likely to be greater than your equity.

Third, do not buy a house until you have saved for a down payment. For example, in US if your down payment is less than 20 percent, you will have to pay mortgage insurance, which increases your monthly payment. (Mortgage insurance protects the lender from losses that occur when a person defaults on payments.) It is common in countries including the United Kingdom, Denmark, and Australia. Different countries have different rules about this, so be sure you know what you might have to pay.<sup>(159)</sup> Also, do not use a mortgage with a low "teaser interest rate" to purchase your home. These rates are followed by sharply escalating interest rates, which will substantially increase your monthly mortgage payment after the initial period has expired. As previously mentioned in Element 4.4, avoid borrowing in a currency different from your income. If the value of your income currency decreases, you could end up owing significantly more money than you initially anticipated.

Fourth, just because you can afford a mortgage payment doesn't mean you can afford the house. The mortgage is the first and most obvious payment made each month. However, home ownership requires other regular payments and obligations that you need to consider. If they are not included in the mortgage as escrow, property and/or land taxes must be paid. Homeowner's insurance is required. The roof may leak one day, the hot-water heater, dishwasher, or clothes dryer may break down, the air-conditioning unit or plumbing system

may need repair, or any number of other items may result in maintenance costs. You may need a lawn mower and other equipment to maintain your yard. These are all regular expenses you can expect as a homeowner. You need to factor them into your monthly budget when examining whether home ownership makes sense for you.

Lastly, as you build up equity in your house, do not take out another mortgage or borrow against your equity in order to increase your current consumption. Housing prices go down as well as up. After the housing crisis of 2008–2009 in the US, many people were “upside down” or “under water” with their housing. That is, the appraised value of their home was less than the outstanding mortgage. Some people incurred huge losses when they sold their homes. Others simply couldn’t afford to sell at a loss and kept the home, hoping for a market rebound. Still others went through the painful process of foreclosure. Thus, safety dictates that it is important to maintain a sizable equity in your home.

Living by the guidelines presented above will encourage you to live within your means, economize on housing, and minimize the risks involved in housing decisions. Now let’s turn to other potential investments.

While education and housing are likely to be the largest investments you’ll make, other investment opportunities will emerge. There are precautions to take when considering which ones to seize. It is important to recognize that when making investments, you are vulnerable; you must think about whether your interests are aligned with the party offering the investment. Whenever you are offered something that seems to be an extremely attractive proposition, it pays to step back and carefully examine the incentives behind why this proposition is being presented to you. Borrowers looking for money to finance a project will initially turn to low-cost sources such as bank loans. Finding individual investors like you and promising a high rate of return makes no sense if financing is available from bank lenders and other investment specialists. High potential returns on any investment inevitably come with high risk, that is, there is a high probability of failure. If banks and professional investors are not interested in the investment, you should ask yourself, “Why should I be?”

The interests of those selling investment alternatives are often substantially different from yours. While you want to earn an attractive return, they are likely to be primarily interested in the commission on the sale or earnings derived from management fees or a high

salary related to the business venture. Put bluntly, their primary interest is served by getting their hands on your money. They do not necessarily seek to defraud you; they may well believe that the investment is a genuine opportunity with substantial earning potential. But, no matter how nice they are, how well you know them, or how much it appears that they want to help you, their interests are different from yours. Moreover, once they have your money, you will be in a weak position to alter the situation.

Today, Bitcoin and other cryptocurrencies are assets that use blockchain technology to facilitate peer-to-peer transactions in a virtual world without borders. Everything is tracked and recorded from inception forward, without fees or requiring financial intermediaries. Data on transaction history and the entities involved in crypto exchanges are difficult to change once recorded, authenticated, and validated in a decentralized public ledger. This makes counterfeiting and double counting cryptos nearly impossible. On the flip side, governments don't offer market oversight and leave the users of cryptocurrencies to protect themselves from any losses. Plus, their risks are too new to price and insure privately. They are speculative assets. They are relatively new and are not recognized by governments as legal tender. Proceed with caution if you introduce them into your investment portfolio.

How can you tell beforehand whether an investment is a wise one? There is no "silver bullet" that can assure positive results from all investment decisions. But there are things you can do that will help you avoid investment disasters costing you tens of thousands of dollars. The following six guidelines are particularly important.

1. If it looks too good to be true, it probably is. This is an old cliché, but a valid one. Some investment marketers may be willing to do just about anything to obtain your money, because once they do, they are in charge and you are vulnerable.
2. Deal only with parties that have reputations to protect. Established companies with solid reputations will be reluctant to direct their clients into unsound investments.
3. Never purchase an investment solicited by telephone, email, or social media. Such marketing is a technique used by those looking to prey on individuals who are easy targets. Do not let yourself be a victim of scams. Never share personal information with people you do not explicitly trust. Your social security number, credit card number, date

of birth, cell phone number, and postal address should be carefully guarded.

4. Do not allow yourself to be forced into a quick decision. Take time to develop an investment strategy. Never let yourself be pressured into a hasty decision.
5. Do not allow friendship to influence an investment decision. Numerous people have been directed into bad investments by their friends. If you want to keep a person as your friend, invest your money with an objective third party.
6. If high-pressure marketing is involved, keep your money and run. Attractive investments are sold without the use of high-pressure marketing techniques. If you already have a substantial portfolio, there may be a place in it for high-risk investments, including “**junk**” **bonds**<sup>(?)</sup> and precious metals. But those investments must come from funds that you can afford to lose. If you are looking for a sound way to build wealth, most of your funds should be in more routine lower-risk investments, helping you establish a well-diversified portfolio.

**Video:**

**How to Recognize Investment Fraud**

## 12. Use Insurance to Manage Unavoidable Risks

*“It Wasn’t Raining When Noah  
Built the Ark”*

— Anonymous

Life involves risks. These may range from small and financially insignificant, like receiving poor service at a restaurant, to large and financially devastating, such as a severe illness or having your home destroyed by a flood or tornado (or even war). While you cannot eliminate risk, you can take steps to reduce and manage it.

You can make choices that will reduce risks. Not texting while driving reduces the chance of being involved in an accident. Wearing a seat belt lowers the chance of injury if you are involved in a collision. Installing smoke detectors and a security system decreases the likelihood of your residence burning down or getting burglarized. Cutting down brush near your home reduces the chances of it being destroyed in a forest fire. Decreasing sugar consumption and eating low-cholesterol foods reduce the chance of illness and disease. While your choices can reduce risk, they can never eliminate it entirely.

How can you manage risk and protect yourself from the most adverse consequences? Insurance can reduce the monetary loss resulting from damage to possessions (such as your home or car), an illness, loss of income, or other harmful events. Insurance provides a way for



a group of people to pool payments and share risk to offset the losses of members damaged by an adverse event. The insurance company is an intermediary, or middleman, in the risk-sharing process. The company collects premiums from each member of the group (its policyholders), then disburses payments when a loss that is covered occurs. The principle of sharing risk is often forgotten because the individuals who pay premiums to an insurance company have no interaction with the other group members.

To understand how risk-sharing works, imagine the following situation: You and four associates go to a restaurant for lunch and expect that the total bill will be €200. The five of you agree to tell the server to randomly assign the check to one of you at the end of the meal, and that person will pay the entire amount. You and the other group members can then choose between two options: (1) take a chance, and hope you are not selected to pay the €200 bill; or (2) pay a premium of €40 to an insurer, who will pay the €200 bill if you are selected. Many people will prefer the second option because it is less risky. While you must pay the €40 premium, you protect yourself against the 20 percent possibility of having to pay the entire €200 bill.

Of course, insurers providing the risk-sharing service incur costs. They will have to assess risks, formalize agreements, collect premiums, examine and validate claims, and process payments. These handling and processing costs will have to be covered, in addition to the costs of the risk. Thus, the insurance premiums will need to be higher than the expected costs of the loss. For example, if an insurance company were going to provide members of our lunch group with protection against the 20 percent chance that they might end up with the €200 bill, it would have to charge each a little more than €40, perhaps €44, to have an incentive to offer the service.

Insurance reduces risk because it spreads the burden of unfortunate events that a few people experience over a larger group. In the lunch situation, the €200 bill comes with certainty. The uncertainty comes from not knowing which member of the group will receive it. A larger group will increase the amount of the potential loss but will also reduce the chance of any individual member receiving the bill.

When it comes to large sums, most of us are risk averse, which means we are willing to pay a premium to reduce the adverse consequences of various events. Buying insurance is one

way to reduce exposure to risks. Let us say you own a house worth €200,000, and you are worried about the risk of it getting damaged by fire. You could buy home insurance for €1,500 a year. Without insurance, if a fire were to occur and damage your house, you would be responsible for paying the full €200,000 to repair or replace it. But with insurance, if a fire happens, you would only need to pay a deductible (let us say €1,000), and the insurance company would cover the rest of the cost. So, by paying the premium of €1,500 a year, you are reducing your risk exposure from the full €200,000 to just the deductible amount. In this way, you are willing to pay a premium (the insurance cost) to reduce the adverse consequences (the monetary loss) of a potential event (fire damage to your house).

Insurance, however, is not always cost-effective. You should think carefully about whether it makes sense for you to insure against a risk. Yes, you should insure against events that, if they occur, will impose severe financial hardship. A grave illness that prevents you from working for an extended period, a car accident, or a flood that damages your home are examples. Insuring against relatively small adverse events, such as a breakdown of an appliance or television, however, is generally not cost-effective because providing the risk-sharing service will be expensive relative to the potential harm. Thus, it will be more economical to accept these risks and use an emergency fund (see Element 4.6) to plan for and cover the cost of these risks. In contrast, automobile, housing, and healthcare insurance are usually cost-effective. In these cases, the cost of spreading the risks over a group of people is low relative to the potential damage of an adverse event. We now turn to these topics.

Most countries require car owners to maintain some level of automobile insurance. For example, when you register a car in any EU country, you are required to insure it for third-party liability. This mandatory insurance is recognized across all other EU countries. It protects you in case of an accident resulting in damage to property or injury to anyone other than the driver. However, it does not cover additional costs such as repairs to your vehicle. Optionally, you can also buy additional insurance known as first-party liability, which covers a broader range of risks. This extended coverage includes injuries to the driver, damage to your vehicle, theft of your vehicle or its contents, vandalism, and legal assistance. Customers will pay a premium based on several factors. These include the driver's record, characteristics of the driver, the type of automobile, and the specific coverage limits and deductibles of the policy. A

deductible is the amount the customer must pay first before any insurance coverage applies. For example, a €500 deductible means the customer must pay €500 before the insurance policy will pay for a loss. The higher the deductible, the lower the premium. Coverage is the maximum amount the policy will pay in the event of a loss.

An auto policy is typically structured to cover several types of loss. Collision coverage pays for damage to your car in the event of an accident. Comprehensive coverage pays for non-collision damage, such as theft, vandalism, and acts of nature, like a tree branch falling on your car. Liability coverage comes in two forms. First, it pays other people for damage to their person or vehicle caused by the operation of your automobile. Second, it covers damage to you and your passengers for medical expenses and death benefits. For example, liability coverage of €500,000 means the most the insurance will pay in the event of a loss is €500,000, even if the actual loss is greater. When purchasing insurance, you should carefully consider the size of your coverage limits and deductible levels. For example, when choosing the size of your deduction, you will want to consider the degree of hardship imposed on you by payment of the deductible amount if an adverse event should occur.

As just discussed in Element 4.11, housing is often people's largest investment. It makes sense to insure against the loss of your biggest asset. Like auto policies, housing insurance will have deductibles and coverage limits. Housing insurance typically has three basic kinds of coverage. The first pays for damage to the house and other structures, such as a detached garage or shed. The second pays for damage to the homeowner's personal property—that is, the items inside the house. The third pays for liability and covers other people who may get injured at your home. As in the case of auto insurance, if you choose a higher deductible, your premiums will generally be lower. You should carefully analyze how much risk you want yourself to bear.

Healthcare insurance can be a complicated issue because of the variety of plans and financing and payment methods available to customers. Some people obtain their insurance through their employers, while others buy directly from insurance companies. Some people pay their total premiums, while others have third parties pay (for example, the government or employer). Plans vary, depending on who pays and what is covered. For example, many EU countries have publicly funded national health systems where healthcare is provided to citizens

and legal residents through taxation. In these systems, individuals typically do not need to purchase private health insurance separately, as they are covered by the national health insurance scheme. EU citizens can also benefit from the European Health Insurance Card (EHIC). This card allows citizens of one EU country to receive necessary healthcare services when temporarily visiting another EU country under the same conditions and at the same cost as citizens of that country. In Georgia, for example, the Universal Healthcare Program ensures that all citizens and legally registered residents have access to essential healthcare services. Eligible individuals receive a basic package of healthcare services free of charge, including outpatient care, hospital treatment, emergency services, and some prescription drugs. Additionally, citizens and residents have the option to purchase private health insurance packages from private insurance companies, offering various levels of coverage and additional benefits. The complexities surrounding healthcare insurance and international comparison of systems are beyond the scope of this book, but we want to make a few principles clear.

The payments made for healthcare insurance come in four forms. First, premiums (or taxes) are paid to obtain the coverage offered by the plan. Second, a deductible may apply. Third, there is the copay, which is a fee for a particular service, such as a doctor's office visit or prescription. Fourth, coinsurance is the percentage of the medical bill the customer must pay. For example, a plan may require the customer to pay 20 percent of the bill for a hospital stay or medical procedure.

Competition in healthcare insurance is generally more restricted than for other forms of insurance, which means consumers will have fewer options available. Also, unlike most other insurance, consumers typically can make changes to their plan only once a year. This makes it more difficult to put together a plan that meets your needs. You may be forced to take some coverage for a period that you do not want or cannot use. Even with these restrictions, you will have to make some choices about how much risk to assume yourself and how much you can share with others.

There are circumstances in which having insurance protection can actually increase the likelihood of a harmful event. This is known as **moral hazard**<sup>(?)</sup>. A classic example of moral hazard is when individuals become less cautious after obtaining insurance coverage because they know they will be protected financially in case of loss or damage. Consider the following

scenarios. Nina trades in her 12-year-old car and buys the most recent model, which has all the latest technology and safety devices. Since Nina feels safer in the new car, she might drive a little less carefully knowing that her chance of being injured in a collision is lower because of the safety devices. Dom's mother insists he wear a helmet, knee and elbow pads, and long pants when he rides his skateboard. Emboldened with a sense of security and protection, Dom might attempt more dangerous jumps and maneuvers on his skateboard knowing that an injury is less likely. Ivana has not skied for several years and is not sure how much she remembers. With full health insurance to cover her broken bones, she might dare to challenge the Black Diamond slopes. Without insurance, she might decide to stick with the Blue runs. Under all these scenarios, the risk increases because of the change in behavior from feeling safer.

Moral hazard is not the only complicated issue raised by insurance. Suppose you were lying in a hospital bed with a serious disease and your doctor came to you and said, "There is an operation we could try. If we do it there is a 10 percent chance you will live another six months, but it will cost you €1,000,000." Let us assume you have that €1,000,000 in the bank so you could pay if you wanted. But, as someone who has learned all about opportunity cost, you might say to yourself, "I have lived a long life and if I do not have that operation the money saved would be enough to allow all four of my grandchildren to go to the college of their choice." You might rationally decide not to have the operation. Now suppose, instead, the doctor said to you, "Do not worry about the cost. The €1,000,000 will be paid by others in the insurance pool who you do not even know (possible taxpayers who live thousands of kilometers away). It will not cost you a single cent." Now what would your choice be? But what if everyone thought like you? It is easy to see why countries with generous health insurance systems spend a far greater share of national income on medical treatment at the expense of other priorities. The dilemma of how generous health insurance "ought" to be starkly raises two of the most critical insights of economics: "Incentives Matter" and "There is No Such Thing as a Free Lunch."

Other types of insurance to consider, but not covered here, include life, disability, and long-term care. After evaluating your personal choices that determine the level of risk in your life, carefully analyze the risks you cannot avoid but can reduce through the effective use of insurance. It makes sense to insure against risks with large potential adverse effects, but when

the potential financial damages are small, it is best to either absorb their cost in your monthly budget or cover them from your emergency fund. The most important objective of an insurance strategy is to prevent devastating financial losses.

## Part 4 Final Thoughts

Smart financial management may seem complex, but the principles outlined above should start you thinking in the right direction. It's not really that complex. Save and spend wisely. Think before you act. Do act—it is easy to ignore thinking about your finances when there always seem to be more pressing issues of work, family and fun. Set aside a regular time to review your situation with your partner, if you have one, as well as your family and others who care about you (and understand the financial world). There are books going into the ideas we have discussed but in more detail on our list of suggested readings. Most of all, remember the advice of Mr. Micawber, from Charles Dickens' novel *David Copperfield*: “Annual income twenty pounds, annual expenditure nineteen and six, result happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and six, result misery.”

# Concluding Thoughts

Besides being economists and educators, all of the authors are also parents, aunts, and uncles. In addition to leaving a legacy of knowledge to our students and other readers of this book, we wish to positively influence the lives of future generations. We are sure that you feel the same way.

We accomplish this goal in many different ways. At the local, national, and global level we can work to ensure that public policies create an environment where individuals can achieve their potential. At a personal level we can seek to ingrain habits of success by serving as role models and guiding our children to make sound choices.

As we have seen in this section of *Common Sense Economics*, financial security tends to elevate general well-being by making necessities attainable and eliminating worry about fulfilling basic needs. Those who develop the habits of working diligently, setting goals and achieving them, and avoiding the temptations of instant gratification by considering the future consequences of current choices are typically more successful in all walks of life than those who do not.

One of the most important ways to teach young people responsibility is by helping them understand that money is earned; it is not manna from heaven. Children can, even at an early age, be empowered by setting tasks that enable them to earn the money to meet their desires. These tasks can involve incentives to meet specific educational goals or help out around the home such as walking the dog or peeling the potatoes for dinner. Money is not just a means of getting more of what you want, it is also a measure of your contribution in helping others get more of what *they* want. The best way to earn more money is by serving others and finding ways to make them better off. This entrepreneurial lesson will pay important dividends during a child's career, no matter what that career turns out to be.

Even when paying for a child's purchases, it is possible to provide them with an understanding of the costs and trade-offs that are inherent in all expenditures. Throughout their lives, all of our children will have to decide how they are going to spend a limited income. If they spend more on one item, they will have to spend less on others. We all have to make

trade-offs. Beginning at an early age, we need to teach our children about this reality and provide them with experiences that will help them learn to choose wisely. Many parents (even those who give their children allowances without requiring anything in return) encourage their children to set aside a portion of the money they receive to donate to a charity. These parents also often take the time to discuss with them where to direct their funds and why thinking about other people's well-being contributes to their own worth and the welfare of the society in which they live.

To a large degree success in life is about setting goals, working hard to achieve them, figuring out how to make your services useful to others, saving for a specific purpose, and spending money wisely. These are the key ingredients for success. Economics provides the recipe for how to live a more fulfilling life.

We are now at the end of a journey. Throughout this book, our goal has been to provide you with information and tools that will help you live a more successful life. It is our hope that your mind has been opened to new ways of thinking and that you will use the insights gained to improve your life and the lives of those around you.

# Acknowledgments

The authors would like to express their appreciation to several key people who contributed to this project. We are incredibly pleased to welcome Jane Shaw Stroup to the author team. She was helpful with earlier editions of the book and played a more prominent role in this edition. Numerous comments from fellow teachers, college instructors, and economic educators are incorporated into the text. John Kessler, Kelly Markson, and Michelle Vachris were particularly helpful for the insights they gave us on how to improve this edition. Special thanks are extended to John Morton, Scott Niederjohn, Mark Schug, William Wood, Joe Connors, and Pam Cooper for their contributions to the development of new supplementary materials. And we want to express our appreciation to Kevin Reilly, Meryl Levavi, Gabriel Guma, Olya Kirilyuk, Diane Dilluvio, Lizz Blaise, Kiffin Steurer, and copy editor Kate Davis, and proofreaders Marinda Valenti and Sue McGrath of St. Martin's Press for their helpful comments and handling of the editorial responsibilities.

For the revision focusing on post-communist countries, we especially want to thank Barbara Forbes who contributed to the project in so many ways, especially keeping us motivated when the process appeared overwhelming. Additional content was provided by Lasha Labadze, Maya Grigolia, Marta Cota and Ante Šterc. Leslie McCall offered major assistance with Section 4. Finally, a special debt of gratitude is owed by us and our readers to the anonymous donor who has supported the project both financially and intellectually since its inception and enabled the book and EFI's ancillary materials to be provided free of charge. Literally millions of people will have their lives improved by his dedication to economic and political freedom.

Through the years, the authors have had approximately 75,000 students in their classes. Numerous discussions with students, both in and outside of class have provided us with meaningful insights, presented us with challenging questions, and provided the foundation for this project. We cherish these interactions, and with this book we express our gratitude to these students, who have enriched our lives and continue to do so.

# Footnotes

1. While the tendency to develop markets can be said to be almost a universal part of human nature, it is possible, if a society tries hard enough, to remove them from normal human action. Consider the early days of post-communist transition (or even of the Roman Catholic Church) when citizens were taught that items had an intrinsic value and would often refuse to sell for less than that supposed “value” even if hunger resulted. ↩
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5. <https://armstat.am> and <https://tradingeconomics.com>. ↩
6. World Bank Group and World Trade Organization, “The Role of Trade in Ending Poverty” (Geneva: World Trade Organization, 2015). ↩
7. For example, if a corporation invests USD 100 million in buildings and equipment to produce a product, say shirts, it is forgoing what it could have earned if these funds had been invested in other ways, such as producing motorcycles. The corporation could have simply put the USD 100 million in the bank and let it draw interest at, say, a 5 percent rate. In a year’s time, the interest earnings would sum to USD 5 million. This USD 5 million in forgone interest is an opportunity cost of the activities of the corporation, but it will not be reflected on the firm’s accounting statement. Because of this omission, accounting costs understate the opportunity costs of the resources utilized. Therefore, net income overstates profit. ↩
8. Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, vol. II, Glasgow Edition (Indianapolis: Liberty Fund [1776] 1981), 660. Also available at: [www.econlib.org](http://www.econlib.org). ↩
9. F. A. Hayek, “The Use of Knowledge in Society,” *American Economic Review* 35 (September 1945): 519–530. ↩
10. Henry Hazlitt, *Economics in One Lesson* (New Rochelle: Arlington House, 1979), 103. ↩
11. William Nordhaus, “Schumpeterian Profits in the American Economy: Theory and Measurement” (National Bureau of Economic Research Working Paper 10433, April 2004), [www.nber.org](http://www.nber.org). ↩
12. Smith, *Wealth of Nations*, 454. ↩
13. T. Gayer and E. Parker, *Cash for Clunkers: An Evaluation* (Washington, DC: Brookings Institution, March 9, 2022), [www.brookings.edu](http://www.brookings.edu). ↩
14. World Bank Publication: Detox Development: Repurposing Environmentally Harmful Subsidies, 2023. [World Bank: Transforming Trillions: Repurposing Subsidies for Climate Action and Economic Health](https://www.worldbank.org/en/publication/detox-development-repurposing-environmentally-harmful-subsidies). ↩
15. See Parable of the broken window, Wikipedia (last edited June 2019): [wikipedia.org](https://en.wikipedia.org/wiki/Parable_of_the_broken_window). ↩

16. Wilson, James Q., and George L. Kelling. "Broken windows." *Atlantic monthly* 249, no. 3 (1982): 29-38. ↩
17. See Robert E. Lucas Jr., "On the Mechanics of Economic Development," *Journal of Monetary Economics* 22, No. 1 (1988): 3–42. ↩
18. The twenty-one high-income countries are Australia, Austria, Belgium, Canada, Switzerland, Germany, Denmark, Spain, Finland, France, United Kingdom, Ireland, Iceland, Italy, Japan, Luxembourg, Netherlands, Norway, New Zealand, Sweden, and the United States. They are commonly lumped together as "the West." ↩
19. Malthus must be responsible for economics being known as the "dismal science." He wrote "The power of population is so superior to the power of the earth to produce subsistence for man, that premature death must in some shape or other visit the human race. The vices of mankind are active and able ministers of depopulation. They are the precursors in the great army of destruction, and often finish the dreadful work themselves. But should they fail in this war of extermination, sickly seasons, epidemics, pestilence, and plague advance in terrific array, and sweep off their thousands and tens of thousands. Should success be still incomplete, gigantic inevitable famine stalks in the rear, and with one mighty blow levels the population with the food of the world. —*Malthus T.R. 1798. An Essay on the Principle of Population. Chapter VII* ↩
20. The improvement in quality of life was probably much greater. It is hard to account for price changes over long periods of time when new goods are introduced and quality improves. Consumers in 1950 had televisions and refrigerators that were unheard of in 1800. ↩
21. Although ethnic wars and corrupt regimes mean that only some sub-Saharan countries have managed sustained growth. ↩
22. Source: World Bank Open Data. ([worldbank.org](http://worldbank.org)). ↩
23. Tom Bethell, *The Noblest Triumph* (New York: St. Martin's Press, 1998): 10. ↩
24. To learn more about the private sector's impressive contribution to total agricultural production in the Soviet Union, see J. W. Pauw, "The Private Sector in Soviet Agriculture," *Slavic Review* 28, no. 1 (1969): 63–71, at [doi.org](https://doi.org/). ↩
25. For additional information, see John McMillan, *Reinventing the Bazaar: A Natural History of Markets* (New York: W. W. Norton, 2002): 94–101. As McMillan points out, real privatization would have been preferred. Nonetheless, the movement toward private ownership was still "the biggest antipoverty program the world has ever seen." ↩
- 26.
- o Amess, K., & Roberts, B. M. (2007). The productivity effects of privatization: The case of Polish cooperatives. *International Review of Financial Analysis*, 16(4), 354-366.
  - o Rondinelli, D. A., & Yurkiewicz, J.(1996). Privatization and Economic Restructuring in Poland: An Assessment of Transition Policies. *The American Journal of Economics and Sociology*, 55(2), 145–160. [www.jstor.org](http://www.jstor.org)

. ↩

27. Predictions cited in Charles Maurice and Charles W. Smithson, *The Doomsday Myth: 10,000 Years of Economic Crises* (Stanford, CA: Hoover Institution Press, 1984), 12. ↩

28. Robinson, W. C. (1973). *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*. ↩

29. See Byamugisha F. and N. Dubosse (2023), “The Investment Case for Land Tenure in Sub-Saharan Africa,” *Journal of Cost Benefit Analysis*, 13(S1). ↩

30. Clair Wilcox, *Competition and Monopoly in American Industry*, monograph no. 21, Temporary National Economic Committee, Investigation of Concentration of Economic Power, 76th Cong., 3d sess. (Washington, DC: U.S. Government Printing Office, 1940). ↩

31. Indeed, the development of the cellphone is much more remarkable. One of the authors of this book bought a “portable” (weighing 12 kilos) computer in 1986 that had 1 MB of RAM a 20MB hard drive and a 1.2MB floppy drive and paid over \$14,000 in 2024 prices for it. Now your phone, in addition to enabling you to call anywhere in the world is an infinitely more powerful computer. ↩

32. Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, vol. I, Glasgow Edition (Indianapolis: Liberty Fund, Inc., [1776] 1981): 18. Also available at [www.adamsmithworks.org](http://www.adamsmithworks.org). ↩

33. Hernando de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (New York: Basic Books, 2006); Hernando de Soto, *The Other Path: The Economic Answer to Terrorism* (New York: Basic Books, 2002). ↩

34. [archive.doingbusiness.org](http://archive.doingbusiness.org). ↩

35. World Bank, Doing Business Project, 2015. Available at: [www.worldbank.org](http://www.worldbank.org) The World Bank Group ended the Doing Business Project in 2020, with the latest report covering 2019 data. ↩

36. EuroStat. [ec.europa.eu/eurostat](http://ec.europa.eu/eurostat). ↩

37. See David Neumark and William Wascher, *Minimum Wages* (Cambridge, MA: MIT Press, 2008). Also, see David Neumark, “The Econometrics and Economics of the Employment Effects of Minimum Wages: Getting from Known Unknowns to Known Knowns,” *German Economic Review* 20 (August 2019): 293–329. ↩

38. Richard B. McKenzie, “On the Minimum Wage, Both Sides Have Their Economics Wrong,” *Regulation*, Summer 2021, [www.cato.org](http://www.cato.org). ↩

39. Knabe, A., & Schöb, R. (2011). Minimum wages and their alternatives: A critical assessment. *German Politics*, 20(4), 506-526. ↩

40. Dolado, J., Kramarz, F., Machin, S., Manning, A., Margolis, D., & Teulings, C. (1996). The economic impact of minimum wages in Europe. *Economic policy*, 11(23), 317-372. ↩

41. Muravyev, A., Oshchepkov, A. (2016) “The effect of doubling the minimum wage on employment: evidence from Russia.” *IZA J Labor Develop* 5, 6. ↩
42. The employer cannot recover their costs by paying the worker less than the value of what they produce after being trained because another employer who spent nothing on the training could hire the worker away at the full value of their output. ↩
43. Access to the labour market for admitted migrant workers in Asia and related corridors. [www.ilo.org](http://www.ilo.org) ↩
44. For evidence on this point, see Edward Bierhanzl and James Gwartney, “Regulation, Unions, and Labor Markets,” *Regulation*, Summer 1998, 40–53. To compare unemployment rates across countries, see [data.worldbank.org](http://data.worldbank.org). ↩
45. Burdens from Occupational Licensing, ([Arlington, VA]: Institute for Justice, Nov 2022). Available at: <https://ij.org>. ↩
46. Maria Koumenta and Mario Pagliero, 2018. “Occupational Licensing in the European Union: Coverage and Wage Effects,” CEPR Discussion Paper 12577, *CEPR Discussion Papers Series*. ↩
47. See the Department of Treasury, Office of Economic Policy, *Occupational Licensing: A Framework for Policymakers*, 2015; Morris M. Kleiner, “Why License a Florist?” *New York Times*, May 28, 2014; Jacob Goldstein, “So You Think You Can Be a Hair Braider?” *New York Times*, June 12, 2012; and Dick M. Carpenter II, Lisa Knepper, Angela C. Erickson, and John K. Ross, *License to Work: A National Study of Burdens from Occupational Licensing*, Institute for Justice, May 2012. ↩
48. Kaule, S., Bock, A., Dierke, A., Siewert, S., Schmitz, K. P., Stiehm, M., & Grabow, N. (2020). Medical Device Regulation and current challenges for the implementation of new technologies. *Current Directions in Biomedical Engineering*, 6(3), 334–337. Available at: [www.degruyter.com](http://www.degruyter.com). ↩
49. Van Norman, G. A. (2016). Drugs and devices: comparison of European and US approval processes. *JACC: Basic to Translational Science*, 1(5), 399–412. Available at: [www.jacc.org](http://www.jacc.org). ↩
50. Stewart DJ, Stewart AA, Wheatley-Price P, et al: Impact of time to drug approval on potential years of life lost: The compelling need for improved trial and regulatory efficiency. 16th World Conference on Lung Cancer. Abstract ORAL12.05. Presented September 7, 2015. ↩
51. The sharp-eyed among you may have noted that the earliest picture in this sequence comes from 1990, after the fall of the Soviet Union. In part this is because aerial photographs from Soviet airspace were not easy to take. More critically, the shrinking after 1990 is still largely a legacy of Soviet policies. Once a regional economy is built around schemes to force illogical production activities, it is very hard to change the infrastructure and worker skills involved. What will Caspian Sea fishermen do if all of a sudden they are told, “No more fishing, find another job?” ↩
52. See Peter Nyberg (2011) *Report of the Commission of Investigation into the Banking Sector in Ireland* (Dublin) [merriionstreet.ie](http://merriionstreet.ie), and Ron Wright *Strengthening the Capacity of the Department of Finance* (Dublin) [web.archive.org](http://web.archive.org). ↩
53. Since credit cards are a popular means to make payments, students often wonder why credit-card balances are not included in the money supply. The outstanding balance on your credit card is a liability that must be repaid. In contrast, money is an asset. Thus, credit-card balances are not money. ↩

54. Of course, as economists like to say, “correlation does not mean causation.” Maybe countries facing high inflation simply print more money to try and keep up. Sophisticated data analysis, however, strongly supports the conclusion that it is excess printing of money (usually to pay for government spending without raising taxes) that causes inflation. As Milton Friedman famously said: “inflation is always and everywhere a monetary phenomenon.” ↩

55. [www.centralbanknews.info](http://www.centralbanknews.info). ↩

56. The definition includes assets that are easily accessible such as savings accounts, small time deposits and money market mutual funds. ↩

57. Franklin D. Roosevelt, *Campaign Address on the Federal Budget at Pittsburgh, Pennsylvania, October 19, 1932*. The American Presidency Project, managed by Gerhard Peters and John T. Woolley, [presidency.ucsb.edu](http://presidency.ucsb.edu). ↩

58. [taxsummaries.pwc.com](http://taxsummaries.pwc.com) Retrieved March 17, 2024. ↩

59. For more information read more in The Washington Post article: Britain’s new ‘winter of discontent’ is about more than just wages [www.washingtonpost.com](http://www.washingtonpost.com). ↩

60. For additional information on taxes and other dimensions of economic policy during the Great Depression era, see the supplementary reading “Lessons from the Great Depression,” available on the CSE website: [commonsenseeconomics.com](http://commonsenseeconomics.com). ↩

61. See [www.doingbusiness.org](http://www.doingbusiness.org). ↩

62. [archive.doingbusiness.org](http://archive.doingbusiness.org). ↩

63. Henry George, *Protection or Free Trade* (New York: Robert Schalkenbach Foundation, 1980). ↩

64. Ministry of Economy and Sustainable Development of Georgia. [www.economy.ge](http://www.economy.ge). ↩

65. Many of the “job savers” act as if foreigners are willing to supply us with goods without ever using their acquired dollars to purchase things from us. But this is not the case. People in other countries who export products to us don’t want our money; they want what the money can buy. Otherwise, we could just print the dollars we send them to get their goods as cheaply as possible, without fear of inflation, because the dollars would not come back to buy things in our market. But most of the dollars do come back in the form of foreign purchases. Thus, our purchases from foreigners—our imports—generate the demand for our exports. ↩

66. The same logic applies to “outsourcing,” undertaking certain activities abroad to reduce cost. If an activity can be handled at a lower cost abroad, doing so will release domestic resources that can be employed in more-productive activities. As a result, output will be larger and income levels higher. ↩

67. An abridged version of Frédéric Bastiat’s “Competition with the Sun” is available on the CSE website: [commonsenseeconomics.com](http://commonsenseeconomics.com). ↩

68. While Bastiat is often credited with this statement, it cannot be found in his published writings. The nineteenth-century writer Otto T. Mallery made the following similar statement in his *Economic Union and Enduring Peace*: “If soldiers are not

to cross international boundaries, goods must do so. Unless the Shackles can be dropped from trade, bombs will be dropped from the sky.” For additional details, see Nicholas Snow, “If Goods Don’t Cross Borders . . . ,” Foundation for Economic Education, October 26, 2010, [fee.org](#). ↩

69. A Carthaginian peace is **the imposition of a very brutal peace intended to permanently cripple the losing side**. The term derives from the peace terms imposed on the Carthaginian Empire by the Roman Republic following the Punic Wars. ↩

70. As quoted in Frank Whitson Fetter, “Congressional Tariff Theory,” *American Economic Review* 23 (September 1933): 413–27. ↩

71. Douglas A. Irwin, “GATT’s contribution to economic recovery in post-war Western Europe” in: *Europe’s Postwar Recovery*, ed. B. Eichengreen (Cambridge: Cambridge University Press, 1995): 127–150. See text in Irwin for references in charts. ↩

72. These conversions are always, to an extent arbitrary and depend on the basket of goods and services used to make the comparison. Should it be based on the purchasing patterns of Uzbeks or Americans? ↩

73. Mueller, Haynes and Julia Tobias (2016), “The Costs of violence: Estimating the Economic Impact of Conflict,” International Growth Center. ↩

74. James Buchanan was awarded the 1986 Nobel Prize in Economics for his role in the development of public-choice economics. For a clear and comprehensive presentation of public-choice analysis, see Randy Simmons, *Beyond Politics: The Roots of Government Failure* (Oakland, CA: Independent Institute, 2011). ↩

75. First Inaugural Address, March 4, 1801. ↩

76. JM Keynes, (1926) “The End of Laissez-Faire,” Hogarth Press. ↩

77. The Wealth of Nations, Book 1, Chapter 11, Part 1. ↩

78. For an easy to follow book on game theory in everyday life see: Avinash K. Dixit and Barry J. Nalebuff (1991) “Thinking Strategically, the Competitive Edge in Business, Politics, and Everyday Life”, Norton. ↩

79. Case M.8677 - SIEMENS/ALSTOM. [ec.europa.eu](#). ↩

80. Peter Davis, “Theories of Water Pollution Litigation,” *Wisconsin Law Review* 3 (1971): 738–816, at 777–80. ↩

81. Acid Rain. Science and policy interactions over 50 years. [www.diva-portal.org](#). ↩

82. Ronald Coase (1960) “The Problem of Social Cost” *Journal of Law and Economics*, pp: 1-44. ↩

83. A. C. Pigou, whom many consider to be the father of welfare economics, makes this same point. In his 1932 classic *The Economics of Welfare* (pt. II, chap. 20, sec. 4), Pigou stated, “It is not sufficient to contrast the imperfect adjustments of unfettered private enterprise with the best adjustment that economists in their studies can imagine. For we cannot expect that any public authority will attain, or will even wholeheartedly seek, that ideal. Such authorities are liable alike to ignorance, to sectional pressure and to personal corruption by private interest. A loud-voiced part of their constituents, if organised for votes, may easily outweigh the whole.” ↩

84. Thomas Sowell, BrainyQuote.com, retrieved January 14, 2023, from [BrainyQuote.com](https://www.brainyquote.com). ↩
85. Voltaire took a somewhat more cynical view, writing; “The best government if a benevolent tyranny tempered by an occasional assassination.” ↩
86. See Jared Meyer and Preston Cooper, “Sugar Subsidies Are a Bitter Deal for American Consumers,” *Economic Policies for the 21st Century at the Manhattan Institute*, Manhattan Institute, June 23, 2014, [manhattan.institute](https://www.manhattaninstitute.org). ↩
87. [ourworldindata.org](https://ourworldindata.org). ↩
88. [www.dw.com](https://www.dw.com), [www.euronews.com](https://www.euronews.com). ↩
89. Jeffrey Frankel, “The arguments against food and energy subsidies,” World Economic Forum, August 18, 2014. [www.weforum.org](https://www.weforum.org). ↩
90. See Holman W. Jenkins Jr., “How Uber Won the Big Apple,” *Wall Street Journal*, July 24, 2015, [www.wsj.com](https://www.wsj.com). ↩
91. James Buchanan, *The Deficit and American Democracy* (Memphis, TN: P. K. Steidman Foundation, 1984). ↩
92. Eichengreen, B., El-Ganainy, A., Esteves, R., & Mitchener, K. J. (2019). Public debt through the ages (No. W25494). National Bureau of Economic Research. ↩
93. John Maynard Keynes (1936) **Essays in Biography**, Cambridge: MacMillan, pp: 383–384. ↩
94. [www.imf.org](https://www.imf.org). ↩
95. We are indebted to E. C. Pasour Jr., emeritus professor of economics at North Carolina State University, for this example. ↩
96. [www.imf.org](https://www.imf.org). ↩
97. Eurostat, Statistics Explained, “Government expenditure on social protection.” [ec.europa.eu](https://ec.europa.eu). ↩
98. Eurostat, Statistics Explained, “Population structure and ageing.” [ec.europa.eu](https://ec.europa.eu). ↩
99. James R. Schlesinger, “Systems Analysis and the Political Process,” *Journal of Law & Economics*, October 1968, 285. ↩
100. [data.worldbank.org](https://data.worldbank.org). ↩
101. [ec.europa.eu](https://ec.europa.eu). ↩
102. Others attribute this statement to Lord Thomas Macaulay. The author cannot be verified with certainty. For additional information on this topic, see Loren Collins, “The Truth About Tytler,” at [www.lorencollins.net](https://www.lorencollins.net). ↩
103. See James Gwartney and Richard Stroup, “Transfers, Equality, and the Limits of Public Policy,” *Cato Journal*, Spring/Summer 1986, for a detailed analysis of this issue. ↩
104. See Lucca, David O., Nadauld, Taylor, & Shen, Karen. (2017). Credit Supply and the Rise in College Tuition: Evidence from the Expansion in Federal Student Aid Programs (Federal Reserve Bank of New York Staff Reports, no. 733). ↩

105. The issue of whether these tuition cost increases also increased the quality of education thought things such as smaller classes or more library books or merely provided amenities such as rock climbing walls or increased pay to administrators remains open and controversial. ↩

106. See, for example, Anna Kiersztyn, “Stuck in a mismatch? The persistence of overeducation during twenty years of the post-communist transition in Poland,” *Economics of Education Review*, 32:1 (2013), p. 78–91. ↩

107. Fred A. Shannon, “The Homestead Act and the Labor Surplus,” *American Historical Review* 41 (July 1936): 637–51. ↩

108.

- For evidence on this point, see Lawrence Katz and Bruce Meyer, “The Impact of the Potential Duration of Unemployment Benefits on the Duration of Unemployment,” *Journal of Public Economics* 41, No. 1 (February 1990): 45–72. Also see Daniel Aaronson, Bhashkar Mazumder, and Shani Schechter, “What Is Behind the Rise in Long-Term Unemployment?” Federal Reserve Bank of Chicago, *Economic Perspectives* (Second Quarter 2010): 28–51.
- The article on Sweden also suggests that more generous unemployment benefits can lead to higher unemployment rates. Fredriksson, P., & Söderström, M. (2008). Do Unemployment Benefits Increase Unemployment?: New Evidence on an Old Question. Inst. for Labour Market Policy Evaluation.

↩

109. OECD Data (2019), “Financial disincentive to return to work” (indicator). [doi.org](https://doi.org/). ↩

110. Seymore Drescher, translator (London: Civitas, 1997): 27–28. ↩

111. Ron Haskins and Isabel V. Sawhill, *Opportunity Society* (Washington, DC: Brookings Institution Press, 2009). ↩

112. Adam Smith, *The Theory of Moral Sentiments*, Glasgow ed. (Indianapolis: Liberty Fund [1759], 1976): 233–34. Also available at [www.econlib.org](http://www.econlib.org). ↩

113. Li, W., & Yang, D. T. (2005). The great leap forward: Anatomy of a central planning disaster. *Journal of Political Economy*, 113(4), 840–877. ↩

114. F. A. Hayek, “Pretence of Knowledge,” Nobel Prize Lecture in Economics, Stockholm, Sweden, December 11, 1974. ↩

115. M. Czaika and C.R. Parsons, “The Gravity of High-Skilled Migration Policies,” *Demography*, 54 (2017): 603. ↩

116. Milton Friedman, *Capitalism and Freedom* (Chicago: University of Chicago Press, 2002). ↩

117. Stefan Voigt, Stefan, Jerg Gutmann, and Lars P. Feld (2015) “Economic growth and judicial independence, a dozen years on: Cross-country evidence using an updated Set of indicators,” *European Journal of Political Economy* 38 p: 197–211. ↩

118. For a discussion of how the possibility of EU membership contributed to more successful reform in the post-communist countries, see Chapter 6 of Oleh Havrylyshyn, *Present at the Transition* (Cambridge: Cambridge University Press, 2020). ↩

119. Hard but not impossible, at least in the short run. It will be interesting to see if China can maintain rapid economic growth in the context of recent rapidly increasing limits on personal and political freedom. ↩

120. This quotation was provided in correspondence with the authors. John Morton was a legendary economics instructor at Homewood-Flossmoor High School in the Chicago area. He was also the founder and president of the Arizona Council on Economic Education and vice president for program development for the Council for Economic Education. Literally tens of thousands of students have used his *Advanced Placement Economics* book in their preparation for the AP exams in economics. ↩

121. See Janae Ernst, “Are You Emotionally Intelligent (EQ)? Here’s How To Tell,” *Performance Magazine*, February 12, 2021, [www.performancemagazine.org](http://www.performancemagazine.org). ↩

122. Adidas AG, Financial Publications: [www.adidas-group.com](http://www.adidas-group.com). ↩

123. Michael Jarrett and Quy Nguyen Huy, “IKEA’s Success Can’t Be Attributed to One Charismatic Leader,” *Harvard Business Review* (hbr.org), February 2, 2018. <https://hbr.org/>. ↩

124. Self-employed people are 4 times wealthier than workers, on average: [www.businessinsider.com](http://www.businessinsider.com). ↩

125. Thomas J. Stanley, *The Millionaire Mind* (Kansas City, MO: Andrews McMeel Publishing, 2000). ↩

126. Harvard professor Arthur C. Brooks wrote several articles and columns on this topic. A good summary can be found on an American Enterprise Institute video, December 14, 2013, [www.youtube.com](http://www.youtube.com). ↩

127. Ayn Rand, *Atlas Shrugged* (New York: Random House, 1957), 411. ↩

128.

- o “A common rule of thumb is the 50-30-20 rule,” says [Kerrie Saephanh](#), founder and certified budget coach at Mindful Budgets. “The idea is that you divide your net income into three categories, spending 50% on needs, 30% on wants and 20% on savings. [mindfulbudgets.com](http://mindfulbudgets.com).
- o [money.usnews.com](http://money.usnews.com). The link has a lot of good information embedded in it, along with clickable articles on how to set up a budget, wants vs. needs, and how to deal with them.
- o Free for the basic version. Could be a good place to start. [goodbudget.com](http://goodbudget.com).
- o There are very few free budgeting apps. [time.com](http://time.com).

↩

129. Thomas Stanley and William D. Danko point out in their bestseller *The Millionaire Next Door* (Atlanta: Longstreet Press, 1996) that the most common characteristic of millionaires is that they have lived beneath their means for a long time. Over half of them never received any inheritance, and fewer than 20 percent received 10 percent or more of their wealth from inheritance (p. 16). ↩

130. See Dave Ramsey, Brainyquote.com, [www.brainyquote.com](http://www.brainyquote.com). ↩

131.

- Some may need creative methods of controlling impulse purchases with a credit card. If this is the case, economist and financial advisor William C. Wood suggests that you freeze your credit card inside a block of ice in your refrigerator. By the time the ice thaws, your impulse to buy may have cooled. For an excellent book on personal finance written from a Christian perspective, see William C. Wood, *Getting a Grip on Your Money* (Downers Grove, IL: Inter-Varsity Press, 2002).
- Many Islamic scholars go so far as to regard credit cards as haram even if paid back on time because they may be a contract requiring interest if unforeseen circumstances require delaying payment.

↩

132. [data.ecb.europa.eu](http://data.ecb.europa.eu). ↩

133. One word of warning. For used cars it is important to buy from a trusted source who will back the car if there are problems with it. There is always a danger that the previous owner knew about invisible problems with the car and was anxious to get rid of it. See: Akerlof, George A. (1970). "[The Market for 'Lemons': Quality Uncertainty and the Market Mechanism](#)". *Quarterly Journal of Economics*, 84 (3). The MIT Press: 488–500. [doi.org](https://doi.org/). ↩

134. Professor William C. Wood calls such items “SIT expenditures.” Wood indicates that “SIT stands for two things: (1) sit down when you get an unexpected bill; and (2) surprises, insurance and taxes.” ↩

135. Mignon McLaughlin, BrainyQuote.com, supposedly quoting Albert Einstein, [www.brainyquote.com](http://www.brainyquote.com). There is some controversy about whether this statement was actually made by Albert Einstein, but he clearly made similar statements highlighting the power of compound interest. ↩

136. Retirement ages vary among countries and may also differ based on gender. [www.weforum.org](http://www.weforum.org). ↩

137. A life that is likely to be much longer without all those beers and cigarettes! ↩

138. The 0.1 is to allow for girls who never reach reproductive age. ↩

139. The derivation of the terms “stock” and “share” is interesting. The first businesses organized as joint-stock companies were trading missions during sailing days. Sending a ship from England or the Netherlands to faraway places such as Asia was too much risk for any one merchant, so merchants banded together to combine their “stock” of goods to trade, each taking a “share” of the profit (or assuming a share of the loss). ↩

140. Once major players in their respective industries, these companies eventually encountered significant challenges, including technological disruptions, shifting consumer preferences, and competitive pressures. These difficulties led to substantial declines in their stock prices over time as they struggled to adapt to changing market conditions. ↩

141. As we saw in the previous section a 7 percent real rate with dividends reinvested is about the average rate in large, developed markets. Of course, some stocks for some period, do much better while others do much worse. The trick is nobody can consistently tell which ones will do so in advance! Anyone who does, does so by pure chance. 7 percent compounded rate of return means that the value of your savings will double every ten years. In contrast, it will take thirty-five years to double your money at a 2 percent interest rate, the approximate after-tax return earned historically by savings accounts and money-market mutual funds. Note: You can approximate the number of years it will take to double your funds at alternative interest rates by simply dividing the yield (the average annual return on your money) into seventy. This is sometimes referred to as the Rule of 70. ↩

142. Krystyna Krzyzak, “CEE: A System In Flux,” Investment & Pensions Europe, January 2018 (Magazine). [www.ipe.com](http://www.ipe.com). ↩

143. Christopher Jarvis, “The Rise and Fall of Albania’s Pyramid Schemes,” Finance & Development, a quarterly magazine of the IMF, March 2000, Volume 37, Number 1. [www.imf.org](http://www.imf.org). ↩

144. Any mention of specific funds does not mean that we think that they are preferable to any alternative. You should engage in careful research yourself before you buy an investment. Remember, the future you are investing in is yours. ↩

145. Dimitar Boyadzhiev et al., *Morningstar* Manager Research EMEA, “Morningstar’s European Active/Passive Barometer,” February 2019. [www.morningstar.com](http://www.morningstar.com). ↩

146. See Jeremy J. Siegel, *Stocks for the Long Run*, 3rd ed. (New York: McGraw Hill, 2002), 342–43. ↩

147. See Burton Malkiel, *A Random Walk Down Wall Street: The Time-Tested Strategy for Successful Investing* (New York: W. W. Norton, 2015), 177–78. For additional evidence that a mutual fund yielding a high rate of return during one period cannot be counted on to continue to do so in the future, see Mark M. Carhart, “On Persistence in Mutual Fund Performance,” *Journal of Finance* 52, no. 1 (March 1997), 57–82. ↩

148. See Malkiel, *A Random Walk* (2020), 173. ↩

149. Malkiel, *A Random Walk* (2015), 177–78. ↩

150. Abraham Okusanya, “Lessons from 118 years of asset class returns data,” *FinalytiQ*, March 28, 2018. [finalytiq.co.uk](http://finalytiq.co.uk). ↩

151. Even those investing in index funds should obtain some advice from experts. There are tax and legal considerations, such as taking advantage of tax-deferred possibilities, establishing wills and trusts, making wise insurance choices, and so on, which do require input from specialists. ↩

152. See Liqun Liu, Andrew J. Rettenmaier, and Zijun Wang, *Social Security and Market Risk* (National Center for Policy Analysis Working Paper No. 244, July 2001). The stock market changes of recent years do not alter the data of Exhibit 27. ↩

153. In most countries here are two types of financial advisers: “fee based” who charge you a set price per hour to give you advice, and “portfolio based” who charge you a percentage of your money to invest it for you. Since, as we have already seen,

“professional” managers on average do no better than monkeys or cats in picking winning stocks, the advice paying for is from fee-based advisers who can inform you about general policies (as we have done) with steering you to specific investments.

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154. OECD, Directorate for Employment, Labour and Social Affairs: Pension systems: “Ukraine: Pension system profile.”

[www.oecd.org](http://www.oecd.org). ↩

155. OECD Project on Financial Incentives and Retirement Savings, Policy Brief N°1, “The tax treatment of retirement savings in private pension plans,” December 2018. [www.oecd.org](http://www.oecd.org). ↩

156. [www.goingmerry.com](http://www.goingmerry.com). ↩

157. Indeed, if the Chicago student came from better high schools or had other advantages from rich parents, San Diego may have even provided MORE education for these lower costs. ↩

158. Tranio, “Real estate agency commission rates in different countries,” September 18, 2017. [tranio.com](http://tranio.com). ↩

159. Bank for International Settlements, Joint Forum, “Mortgage insurance: market structure, underwriting cycle and policy implications,” August 2013. [www.bis.org](http://www.bis.org). ↩

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# The Power of Incentives

*By Dwight Lee*

**Question for thought:** As you read through this document, think about what incentives are and why they matter.

The surest way to get people to behave in desirable ways is to reward them for doing so—in other words provide them with incentives. This is so obvious that you might think it hardly deserves mention. But it does.

You might say that people shouldn't have to be rewarded (or bribed) to do desirable things. Even when you acknowledge that incentives are necessary, it is not obvious how to establish the ones that motivate desirable action.

I recently encountered the emotional resistance some people have to using incentives to accomplish good things. I was pointing out that the elephant populations in Zimbabwe and South Africa were expanding because policies there allow people to profit from maintaining elephant herds. A student who had stressed his environmental sensitivity responded that he would rather not see the elephant saved if the only way to do so was by relying on people's greed. In other words, he was willing to stand on principle as long as only the elephants suffered the consequences. His principle, one that I suspect was shared by others "with similar convictions", was that good things should be motivated by compassion and concern, not self-interest. I couldn't resist telling him that I would be impressed with his moral stance if, when he required delicate surgery to save his life, he refused to go to a surgeon and let his mother perform the operation instead.

Convincing people that incentives are appropriate is not nearly as difficult as determining the appropriate incentives. Of course, we want incentives that motivate people to behave in desirable ways, but what is desirable? In some situations, the answer is rather obvious. But not always.

Every time you do a good thing, you necessarily reduce your ability to do something else good. This is an unavoidable implication of scarcity and is captured in the concept of opportunity cost. There are always tradeoffs, and we often need information from many sources to know the best course of action. So the two important functions of incentives are: (1) to communicate information on the best things to do and (2) to motivate people to do them.

## Incentives and the Treatment of Prisoners

In some cases the desirable course of action is clear, and these cases let us concentrate on the power of incentives to motivate people. The British government's practice of contracting with ship captains to transport prisoners to Australia in the 1860s provides a good example. The survival rate of the prisoners shipped to Australia was only 40 percent, which everyone knew was much too low. Humanitarian groups, the church, and governmental agencies appealed to the captains on moral grounds to improve the survival rate with more decent treatment. Despite these appeals, the survival rate remained at 40 percent.

Finally, an economist named Edwin Chadwick recommended a change in incentives. Instead of paying the captains a fee for each prisoner who walked onto the ship in England, Chadwick suggested paying them for each prisoner who walked off the ship in Australia. The improvement was immediate and dramatic. The survival rate increased to over 98 percent, as the captains now faced a strong incentive to protect the health of prisoners by reducing the number crowded into each ship and providing them with better food and hygiene in passage.<sup>(1)</sup>

## Creating Incentives Directly and Indirectly

Desirable incentives can sometimes be created directly, as in the case of shipping prisoners. You know what you want done, so you create a reward (say, a cash payment) for doing it. Unfortunately, in most cases the type of behavior we desire requires subtly balancing competing objectives. In such cases, creating a direct incentive to do one thing can be *too* effective because it causes people to ignore other things.

The former Soviet Union was full of the perversities that can result from the direct application of incentives. Managers responded to incentives to increase the production of shoes, for example, by making only a few sizes, hardly caring which sizes best fit consumers. Such incentives affected people's behavior, but they failed to promote the social cooperation necessary for a productive economy.

When the objective is to motivate people to cooperate, desirable results can rarely be realized by directly establishing incentives. Instead, incentives have to be established indirectly through a set of general rules that allow them to emerge from social interaction.

Traffic demonstrates the importance of general rules in motivating cooperation. As aggravating as rush-hour traffic is, traffic flows reflect an amazing amount of spontaneous social cooperation. Without that cooperation, tens of thousands of commuters in every large city would get caught in a hopeless tangle of traffic.

The basic rules that allow motorists to so effectively cooperate with one another are simple: (1) drive on the right side of the road; (2) go on green, either speed up or prepare to stop on yellow, and stop on red; (3) don't exceed the posted speed limit by more than ten miles per hour; and (4) don't touch. These rules convert our incentive to get to our destinations safely and conveniently into a pattern of accommodating behavior that serves the interests of all.<sup>(2)</sup>

The market economy is the ultimate example of how a set of rules can create a setting in which private incentives motivate social cooperation. Market economies do not create incentives directly. Indeed, in a literal sense, markets don't create incentives at all. The most important incentives come from the subjective desires of individuals: the incentive to find love, to earn respect, to make the world a better place, to provide for their families. Markets are the rules of conduct that harmonize these various incentives by making it possible for people to communicate their desires to others. The prices, profits, and losses commonly referred to as market incentives, are created by people's interacting with one another. These incentives, which can be communicated only through markets, contain information that promotes social cooperation.

**Concluding questions:** Now, can you explain why private incentives are able to promote social cooperation through markets? Do you think private incentives make the world a better place? Why or why not?

## **Return to Element 1.1**

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1. For more on this example, see Robert B. Ekelund, Jr., and Richard Ault, *Intermediate Microeconomics: Theory and Applications* (Lexington, Mass.: D.C. Heath and Company, 1995), pp. 21–22. ↩

2. The example of traffic flow comes from Paul Heyne, *The Economic Way of Thinking*, 8th ed. (Upper Saddle River, N.J.: Prentice-Hall, Inc.), chapter 1. ↩

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# The Road Not Taken

*By Robert Frost*

**Question for thought:** At a crossroad, traveling one path entails not traveling another. This condition forces the traveler to make a choice. While reading through this poem, identify the cost of traveling the road taken.

Two roads diverged in a yellow wood,  
And sorry I could not travel both  
And be one traveler, long I stood  
And looked down one as far as I could  
To where it bent in the undergrowth;

Then took the other, as just as fair,  
And having perhaps the better claim,  
Because it was grassy and wanted wear;  
Though as for that the passing there  
Had worn them really about the same,

And both that morning equally lay  
In leaves no step had trodden black.

Oh, I kept the first for another day!  
Yet knowing how way leads on to way,  
I doubted if I should ever come back.

I shall be telling this with a sigh  
Somewhere ages and ages hence:  
Two roads diverged in a wood, and I—  
I took the one less traveled by,  
And that has made all the difference.

**Concluding question:** Faced with the same crossroads in life, why do people make different choices? Explain in terms of subjective costs and benefits.

[Return to Element 1.2](#)

# Opportunities and Costs

*By Dwight Lee*

**Question for thought:** As you read through this document, think about why scarcity forces us to make choices.

Markets work by facilitating social cooperation. They provide people with the information and motivation to pursue their own advantages in ways that best create opportunities for others. My emphasis is on the forest rather than the individual trees of economic understanding. Now I shall begin looking at some of the key concepts essential to applying economic reasoning to all human activity. I begin with opportunity cost.

## Limits and Opportunities

Economics has been called the dismal science because it studies the most fundamental of all problems, scarcity. Because of scarcity we all face the dismal reality that there are limits to what we can do. No matter how productive we become, we can never accomplish and enjoy as much as we would like. The only thing we can do without limit is desire more. Because of scarcity, every time we do one thing we necessarily have to forgo doing something else desirable. So there is an opportunity cost to everything we do, and that cost is expressed in terms of the most valuable alternative that is sacrificed.

But the pervasiveness of costs suggests that the dismal reality of limits is only one side of a coin with a brighter side. The limits of scarcity create costs only when there are opportunities. Eliminate the opportunity to choose among alternatives and there are no costs. If, for example, I am forced to live in a particular house, take a particular job, marry a particular woman, and consume a set bundle of goods, I incur no costs when I do those things. So the bright side of costs is the opportunities that create them. Expand our opportunities and

the costs of everything we do increase.

Although we commonly see cost as something to avoid, in fact we are better off living in an economy where we are forced to confront the cost of everything we do. I personally might be better off if I could consume products without having to consider their costs because I could shift them to others. But any advantage I could realize would be more than offset if others could ignore the costs of their activities and shift them to me. As a result, we would all lack the information and motivation to choose wisely. Only when the costs of choices are imposed on those who make those choices can we best use the opportunities available.

This is one way of explaining the advantage of market prices. The prices people pay in the marketplace reflect the opportunity costs of their choices. You cannot generally purchase a good or service in a free market for less than others are willing to pay for it, or for less than the amount spent to make it available, which is an important part of the social cooperation that emerges out of market transactions.

## **Special Interests Don't Want Costs Considered**

Unfortunately, many economic decisions are made not in a market setting in response to market prices, but by government in response to political considerations. This creates opportunities for the politically influential to acquire benefits *paid for by* the general public. Invariably, those seeking political benefits downplay the costs in the hope of justifying larger expenditures; they commonly argue that some things are so important that costs shouldn't even be considered.

Educators argue that education is too important to be considered in terms of costs; environmentalists argue that saving the earth is so imperative that environmental programs should be implemented regardless of the costs; recipients of medical research grants argue that human health trumps any crass consideration of costs; and people supported by the National Endowment for the Arts claim that the value of “art goes to the very soul of what it means to be human” and is “contaminated when compared with dollars and cents.” (That’s a close paraphrase of a statement on arts funding that I heard on National Public Radio.)

All these statements are best understood as attempts by organized groups to capture more public money. To consider costs has nothing to do with exaggerating the importance of money. Money provides a convenient way of expressing costs, but money is not the cost of anything. When I put down a ten-dollar bill to pay for a meal, the money may appear to be the cost, but the real cost is the opportunity cost—the subjective value I forgo by spending the money on the meal rather than spending it on the most valuable alternative.

## Silly Claims

To claim that we shouldn't consider the cost of doing some things is equivalent to claiming that we should do those things without considering the alternatives. That such a transparently silly claim continues to be used in special-interest pleading illustrates the power of deception over logic in political debate. Not considering the alternatives to doing something would make sense only if it were always more valuable than anything else. But this means that we should devote all of our resources to this one thing. If it were really true that fine orchestral music, for example, was so valuable that costs shouldn't be considered, then everyone should go homeless and hungry and spend all of their time listening to orchestras in the nude. This is obviously silly, but not one bit sillier than claiming that something is so important that it is inappropriate to consider its cost.

As soon as two or more groups claim that their program should be funded without considering costs, the relevance of costs should be obvious. Educating our youth and curing our sick cannot both be too important to consider cost, not in a world of scarcity. The cost of doing more to educate our youth is doing less to cure our sick, and vice versa. To ignore the cost of one is to treat the other as unworthy in comparison.

Of course, the realities of scarcity, and the opportunity costs that result, intrude into the political process despite the special-interest rhetoric disparaging considerations of cost. Comparisons have to be made among competing alternatives, so opportunity costs are considered in the political process. Unfortunately, imperfections and biases in the political process prevent the opportunity cost of government action from being adequately considered.

The result is what one should expect when alternatives are poorly considered. Waste occurs as decisions direct resources out of more valuable and into less valuable activities, and often into activities counterproductive to the stated objectives.

Market prices do not perfectly reflect opportunity costs, but one can appreciate how close they get by considering the perversities that arise because political decisions often ignore most of the costs of a policy.

**Concluding question:** Now, what disadvantages are associated with having our government ignore opportunity costs while trying to educate our youth, provide medical benefits to our sick and retirement to our senior population?

**[Return to Element 1.2](#)**

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# Markets and Marginalism

*By Dwight Lee*

**Question for thought:** As you read through this document, determine how firms maximize output and value by equating at the margin?

To do your best in your personal activities, you have to “equate at the margin,” which means allocating your time over different activities so that the marginal value of time in every activity is the same. The importance of equating at the margin extends beyond individuals doing as well as possible personally; it is also crucial to the success of the general economy. And because of the information and incentives transmitted through market prices, people and businesses, responding to their private concerns, are led to cooperate in ways that are constantly moving margins toward equality throughout the economy. A discussion of this process provides additional insight into the advantages we all realize from the communication and cooperation motivated by market prices.

There are a large number of firms in the economy, each concerned primarily with increasing profits. But the decisions *these* firms make affect *all* the others. For example, the more that one firm produces, the more scarce resources it has to use and the less other firms can produce. Ideally, each firm will produce whatever amount it chooses in a way that minimizes the sacrificed value elsewhere in the economy. Achieving this ideal requires an enormous amount of information on such things as weather conditions, resource discoveries, hostilities between countries, productive technologies, and the particular circumstances and subjective preferences of millions of workers, resource owners, and consumers.

No government agency could ever acquire and constantly update all this information and use it properly. Fortunately, this information is communicated through market prices, with the input prices that firms pay reflecting the marginal value of those inputs in their best alternative uses. So with each firm motivated to choose the input combination that minimizes

its cost of producing a given amount of output (which requires equating the marginal productivity per dollar cost of all inputs<sup>(1)</sup>), it also chooses the input combination that produces that output at a minimum sacrifice of value elsewhere in the economy. This equating at the margin reflects an impressive amount of coordination, with each firm responsive to the value of inputs to others.

## Outputs and Marginal Adjustments

But it is not enough that each firm minimize the value lost (the cost) from producing its output to make the best use of our limited resources. Each firm could be producing its output at the lowest cost, with the *combination* of all firms' outputs being too costly. For example, we could produce dozens of disposable diapers daily for every American with the least-cost combination of inputs. This is obviously too many disposable diapers because the marginal costs (even though as low as possible) of diapers would be far greater than their marginal value—the value sacrificed to produce one more diaper is greater than the diaper is worth. Producing the combination of all goods that creates the greatest value for the resources used requires not only that each good be produced at least cost, but that each good be produced only up to the point where its marginal value equals its marginal cost.

Again, equating at the margin generates the most valuable combination of products over all firms. And by simply responding to market prices, each firm has access to all the necessary information. The price of a firm's product reflects its marginal value, and input prices determine the firm's marginal production costs. This information, when used by firms trying to make as much profit as possible, results in that combination of outputs that creates the most value. Each firm increases its profits by expanding output as long as the price it receives for its product is greater than its marginal cost (the value sacrificed by reducing the amount produced by other firms).<sup>(2)</sup> So when all firms produce the amount where price equals marginal cost, each firm is maximizing its own profit and the value of the combination of goods produced is maximized. Because market prices coordinate production decisions, these decisions are equated at the margin over all firms, and it is impossible to increase the value of

the combination of goods produced by expanding the output of some firms and reducing the output of others.

## The Big Advantage Is Liberty

I have discussed a level of “perfection” never reached in the real world. The relevant margins never reach complete equality because the countless number of preferences, circumstances, and technologies affecting the value of inputs and outputs constantly changes. But market prices constantly change to provide information on new conditions and to reward behavior that pushes the margins toward equality. That reduces the cost and increases the value of what is being produced. These market adjustments do a far better job maximizing the value of economic decisions by keeping all decision-makers responsive to others than any group of government planners could ever do.

But the greatest advantage of the market is the liberty it allows. People can pursue their individual values and concerns instead of being herded into broad categories by remote authorities and told how to behave to promote some vision of the general good. For example, a business may not maximize profits because the owner wishes to employ disadvantaged youth or take time off for volunteer work. Or a worker may choose not to take the highest-paying job because he doesn't want to move away from a sick parent. People make these types of decisions every day, and the values they reflect can never be communicated through the political process and properly responded to by political authorities. But people can communicate their values and concerns through the effect their decisions have on market prices. And when people do so, they can be confident that others will consider those concerns in their own decisions. The result is a pattern of mutual adjustment and coordination that creates far more wealth and opportunity than could ever be achieved by central direction.

**Concluding Question:** Now, do governments or firms do a better job of maximizing output and value? Explain.

### **Return to Element 1.3**

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1. For example, if the marginal productivity for \$1 of input X is 2 while the marginal productivity for \$1 of input Y is only 1, then the firm could expand its use of input X by \$1 (increasing output by 2 units), reduce its use of input Y by \$2 (reducing output by 2 units), therefore maintaining the same output at a cost of \$1 less. ↩

2. This statement has to be qualified if the firm is a monopolist because price and marginal revenue diverge, as explained in every microeconomics text. But unless perpetuated by government, this monopoly “distortion” is rather benign when considered over time. Indeed, dynamic economy efficiency is increased when firms can strive for, and temporarily achieve, “monopoly” power. ↩

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# Specialization and Wealth

*By Dwight R. Lee*

**Question for thought:** As you read through this document, determine how specialization, voluntary exchange and cooperation can lead to wealth accumulation.

A remarkable degree of social cooperation emerges through market communication. Now, let's consider some of the advantages we realize from that cooperation. At a general level these advantages are obvious. It simply makes sense that we can produce more if our actions are in harmony than if we are working at cross-purposes. But to really understand economics, we must consider the link between cooperation and productivity in detail.

Wealth seldom comes as manna from heaven. It has to be produced by applying human effort, intelligence, and patience to natural endowments that yield their bounty reluctantly. This should be obvious. But one measure of the success of the marketplace at improving our productive powers is that it has become all too easy for people to assume that wealth is part of the natural order of things. Academics and policy wonks consider the *distribution* of wealth to be the primary issue, while dismissing any concern that their policy prescriptions could hamper its production. They drone on and on about the causes of poverty (or the “improper” distribution of wealth), apparently unaware that determining the causes of wealth is the serious challenge. The success of capitalism has blinded a remarkable number of otherwise intelligent people to the simple truth that distribution comes *before* production only in the dictionary.

## Specialization's Special Role

When economics emerged as a separate academic discipline in the late eighteenth century, it was obvious what the economic problem was. Adam Smith titled his economics book *An Inquiry into the Nature and Causes of the Wealth of Nations*, and his concern with

explaining wealth is apparent from the very first page.

Smith begins by observing: “The greatest improvement in the productive powers of labour . . . seem[s] to be the effects of the division of labour.” He illustrates the importance of specialization, or the division of labor, by considering the advantage of having each worker in a pin factory concentrate on a particular step in production rather than producing a pin from beginning to end. Through specialization workers can become more skillful, use machinery that increases their productive powers, and avoid the loss of time from constantly changing activities. These advantages are rather obvious, but the increase in productivity is far greater than one would expect. According to Smith, ten pin-makers, by specializing in different tasks, can produce about forty-eight thousand pins a day. But if each attempted to perform every task in pin production, Smith doubted that they could each make twenty pins a day, or two hundred among them.

But it takes more than extra output to create a real increase in productivity. A specialist produces much more of a product, or part of a product, than he wishes to consume himself. Producing lots of output is not productive unless it ends up in the hands of those who value it. So the advantage of specialization can be realized only to the degree that people can cooperate, with each specializing in the production of something that others want in order to be able to acquire what he wants from the specialized production of others. The only way for this cooperation to occur, and thus the only way to realize the productivity of specialization, is through exchange.

Adam Smith recognized the crucial connection between exchange and productivity when he observed that “the extent of this division [of labor] must always be limited by . . . the extent of the market.” If you can exchange only with those in a small village, your ability to specialize productively is extremely limited. For example, how many could afford to pursue careers writing novels, painting landscapes, or mastering musical instruments, no matter how great their talents, with only a few people to appreciate and reward their accomplishments? In such settings, most people tend to become “a jack-of-all trades, but master of none.” The more limited the market, the more limited the productive potential of specialization.

## Expanding the Market

The link between specialization and the size of the market provides another explanation of the importance of market cooperation based on private property and voluntary exchange. Cooperation is possible without markets, at least without markets as we normally think of them. Family members cooperate on the basis of intimate knowledge and shared concerns. Members of small firms can work cooperatively in response to a common objective and peer pressures. The same can be said for churches, clubs, and other relatively small social organizations. The cooperation within families, firms, and social organizations can be explained as the result of exchange relationships. (Gary Becker's writings on the family and the depiction of the firm as a "nexus of contracts" are good examples of such explanations.) But such relationships, because they depend on personal association and common objectives, are limited to relatively small groups.

A key to the productivity of the market is that it greatly extends the range of cooperation, and therefore greatly increases our ability to specialize productively.

Obviously the expansion of markets has depended on improvements in transportation and communication networks. But without the information communicated through market prices, and the cooperation motivated by these prices, improvements in transportation and verbal and written communication would be insufficient to realize much of the advantage of specialization. Brazilians could communicate their desire for more denim clothing with a steady barrage of faxes, e-mails, and telephone calls to clothing manufacturers in every country in the world, with it being possible to ship the clothing to them overnight from anywhere on the globe. But without the information communicated by changes in relative market prices, Brazilians would be unable to motivate cotton growers, agricultural chemical producers, dye manufacturers, textile workers, truck drivers, airline pilots, merchants, and countless others to coordinate their specialized efforts to make sure that the denim clothing was made available in Brazil in the desired quantities and preferred styles.

# The Impersonal Market

The market is often criticized as impersonal. It can be, but that's why it so greatly extends the range of cooperative specialization. People don't have to know, or care for, those they are cooperating with, or those whom their cooperative efforts are serving, when they respond to market prices.

The market does far more to foster multicultural cooperation and global harmony than can ever be achieved by the personal efforts of government diplomats. It is the cooperation and harmony of the marketplace, and the specialization that it allows, that explain the creation of wealth.

**Concluding question:** Now, can you explain why cooperation and voluntary exchange lead to the real increase in productivity resulting from specialization?

[Return to Element 1.4](#)

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# Sacrificing Lives for Profits

*By Dwight R. Lee*

**Questions for thought:** Do automakers sacrifice lives for profit? Why can there be conflict between value on life and profit?

Despite what people commonly say about how human life being priceless, they put a price on their lives every day with their actions. People take chances that shorten their life expectancies to do things that are fun, and for the convenience and savings of not taking every precaution possible. When people willingly accept risks to acquire things they value, they are putting a price on their lives—telling us with their actions that the marginal value of their lives is less than the often quite low value they realize from overeating, not exercising, driving too fast, and so on.

Unfortunately, when people take chances they sometimes have regrettable accidents. Nothing is more natural than feeling sorry for those who have suffered serious injury or death because they exposed themselves to risk. But our sympathy for them should not blind us to the fact that we would not be doing adults a favor by interfering with their ability to take risks that, given their preferences and circumstances, make sense to them. Yet such policies are condoned and encouraged every day by well-meaning people who (1) fail to recognize that, at the margin, human life is not priceless and (2) don't understand how prices and profits empower people to communicate effectively their desires to business firms. These are people who are quick to express moral outrage when they hear the charge that corporations sacrifice lives to increase their profits by making unsafe products.

People are accidentally injured and killed every day because products are not as safe as they could be. More than ever before, the prevailing legal environment encourages those harmed in these accidents to sue manufacturers of “unsafe” products to compensate for their pain and suffering. An obvious inducement for these suits is that the payoff to plaintiffs and

their lawyers can be high, occasionally outrageously high. For example, in 1999 a \$4.9 billion judgment against General Motors was awarded to six people severely burned when their 1979 Malibu caught fire after being hit by a drunk driver going between 50 and 70 miles per hour.<sup>(1)</sup>

The charge that sways juries and offends public sensitivities, and helps explain the large awards, is that greedy corporations sacrifice human lives to increase their profits.

Is this charge true? Of course it is. But this isn't a criticism of corporations; rather it is a reflection of the proper functioning of a market economy. Corporations routinely sacrifice the lives of some of their customers to increase profits, and we are all better off because they do. That's right, we are lucky to live in an economy that allows corporations to increase profits by intentionally selling products less safe than could be produced. The desirability of sacrificing lives for profits may not be as comforting as milk, cookies, and a bedtime story, but it follows directly from a reality we cannot wish away.

The reality is scarcity. There are limits to the desirable things that can be produced. If we want more of one thing, we have to do with less of other things. Those expressing outrage that safety is sacrificed for profit ignore this obvious point. For example, traffic fatalities could be reduced if cars were built like Sherman tanks. But the extra safety would come at the sacrifice of gas mileage, comfort, speed, and parking convenience, not to mention all the things you couldn't buy after paying the extraordinarily high price of a Tankmobile. Long before we increased automotive safety to that of a Tankmobile, the marginal value of the additional life expectancy would be far less than the marginal value of what would be given up. It simply makes no sense to reduce traffic deaths as much as possible by making automobiles as safe as possible.

## **Communicating with Profits**

But how much safety is the right amount? The answer varies among individuals. Some people get so much enjoyment out of riding motorcycles, for example, that they do so even though the chances of surviving an accident are 17 times greater in a car. People typically purchase more safety as their incomes increase and when more people are dependent on them.

When I was in graduate school, I drove a battered Volkswagen Bug with a door that wouldn't close completely. I chose more education at the cost of less safety. Now that I have a family and more income, I am willing to pay for more safety, so I drive a Suburban—not quite a Sherman tank, but close.

How do people communicate their demand for safety to automobile manufacturers? Through the prices they are willing to pay for different types of cars and the profits generated by these prices. There would be no profit in making a car as safe as a Sherman tank because nobody would buy it. Car companies make more profit as they get closer to incorporating the inevitable tradeoffs in automobile designs to the liking of consumers. So when car manufacturers compromise on safety to increase profits, they are doing what we want them to do—responding to our preferences.

This is not to say that mistakes aren't made. Prices and profits don't allow consumers to communicate every aspect of their preferences for cars with surgical precision. But the advantage of profits in motivating auto safety is that when a car company doesn't give consumers what they want, profit opportunities increase for car companies that do. And although this market process doesn't work perfectly, it works better than any other process.

Unfortunately, with any reasonable level of product safety, people will be killed and injured in accidents. The cost and carnage of these accidents are easily seen, as is the fact that the damage would have been less if only more safety had been built into the product being used. Not as easily seen are the advantages millions of people realize from not having to pay for more safety than they want—advantages like more money to spend on education, medicine, clothing, and housing. And more education, better medicines, and improvements in the clothing and housing available are all associated with longer life expectancies. Those whose lives are cut short by accidents are obviously identifiable, while we will never know who avoided a premature death because of the prosperity generated by an economic system guided by market prices and profits. But there can be no doubt that the latter far outnumber the former.

**Concluding Question:** Now, how do prices and profits empower you and other consumers to communicate your preferences to businesses?

## **Return to Element 1.6**

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1. The actual settlement will be less, though still much higher than justified by how much people value the marginal safety involved in the case. As of March 2000 the plaintiffs have offered to settle for \$400 million, but General Motors has refused so it can continue appealing the case. ↩

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# I, Pencil, My Family Tree

*By Leonard E. Read*

**Question for thought:** While reading through this document, explain how markets form a network that encourages and directs millions of people to cooperate with each other.

I am a lead pencil—the ordinary wooden pencil familiar to all boys and girls and adults who can read and write.

Writing is both my vocation and my avocation; that's all I do.

You may wonder why I should write a genealogy. Well, to begin with, my story is interesting. And, next, I am a mystery—more so than a tree or a sunset or even a flash of lightning. But, sadly, I am taken for granted by those who use me, as if I were a mere incident and without background. This supercilious attitude relegates me to the level of the commonplace. This is a species of the grievous error in which mankind cannot too long persist without peril. For, the wise G. K. Chesterton observed, "We are perishing for want of wonder, not for want of wonders."

I, Pencil, simple though I appear to be, merit your wonder and awe, a claim I shall attempt to prove. In fact, if you can understand me—no, that's too much to ask of anyone—if you can become aware of the miraculousness which I symbolize, you can help save the freedom mankind is so unhappily losing. I have a profound lesson to teach. And I can teach this lesson better than can an automobile or an airplane or a mechanical dishwasher because—well, because I am seemingly so simple.

Simple? Yet, not a single person on the face of this earth knows how to make me. This sounds fantastic, doesn't it? Especially when it is realized that there are about one and one-half billion of my kind produced in the U.S.A. each year.

Pick me up and look me over. What do you see? Not much meets the eye—there's some wood, lacquer, the printed labeling, graphite lead, a bit of metal, and an eraser.

# Innumerable Antecedents

Just as you cannot trace your family tree back very far, so is it impossible for me to name and explain all my antecedents. But I would like to suggest enough of them to impress upon you the richness and complexity of my background.

My family tree begins with what in fact is a tree, a cedar of straight grain that grows in Northern California and Oregon. Now contemplate all the saws and trucks and rope and the countless other gear used in harvesting and carting the cedar logs to the railroad siding. Think of all the persons and the numberless skills that went into their fabrication: the mining of ore, the making of steel and its refinement into saws, axes, motors; the growing of hemp and bringing it through all the stages to heavy and strong rope; the logging camps with their beds and mess halls, the cookery and the raising of all the foods. Why, untold thousands of persons had a hand in every cup of coffee the loggers drink!

The logs are shipped to a mill in San Leandro, California. Can you imagine the individuals who make flat cars and rails and railroad engines and who construct and install the communication systems incidental thereto? These legions are among my antecedents.

Consider the millwork in San Leandro. The cedar logs are cut into small, pencil-length slats less than one-fourth of an inch in thickness. These are kiln dried and then tinted for the same reason women put rouge on their faces. People prefer that I look pretty, not a pallid white. The slats are waxed and kiln dried again. How many skills went into the making of the tint and the kilns, into supplying the heat, the light and power, the belts, motors, and all the other things a mill requires? Sweepers in the mill among my ancestors? Yes, and included are the men who poured the concrete for the dam of a Pacific Gas & Electric Company hydroplant which supplies the mill's power!

Don't overlook the ancestors present and distant who have a hand in transporting sixty carloads of slats across the nation.

Once in the pencil factory—\$4,000,000 in machinery and building, all capital accumulated by thrifty and saving parents of mine—each slat is given eight grooves by a complex machine, after which another machine lays leads in every other slat, applies glue, and places another slat atop—a lead sandwich, so to speak. Seven brothers and I are mechanically

carved from this "wood-clinched" sandwich.

My "lead" itself—it contains no lead at all—is complex. The graphite is mined in Ceylon. Consider these miners and those who make their many tools and the makers of the paper sacks in which the graphite is shipped and those who make the string that ties the sacks and those who put them aboard ships and those who make the ships. Even the lighthouse keepers along the way assisted in my birth—and the harbor pilots.

The graphite is mixed with clay from Mississippi in which ammonium hydroxide is used in the refining process. Then wetting agents are added such as sulfonated tallow—animal fats chemically reacted with sulfuric acid. After passing through numerous machines, the mixture finally appears as endless extrusions—as from a sausage grinder-cut to size, dried, and baked for several hours at 1,850 degrees Fahrenheit. To increase their strength and smoothness the leads are then treated with a hot mixture which includes candelilla wax from Mexico, paraffin wax, and hydrogenated natural fats.

My cedar receives six coats of lacquer. Do you know all the ingredients of lacquer? Who would think that the growers of castor beans and the refiners of castor oil are a part of it? They are. Why, even the processes by which the lacquer is made a beautiful yellow involve the skills of more persons than one can enumerate!

Observe the labeling. That's a film formed by applying heat to carbon black mixed with resins. How do you make resins and what, pray, is carbon black?

My bit of metal—the ferrule—is brass. Think of all the persons who mine zinc and copper and those who have the skills to make shiny sheet brass from these products of nature. Those black rings on my ferrule are black nickel. What is black nickel and how is it applied? The complete story of why the center of my ferrule has no black nickel on it would take pages to explain.

Then there's my crowning glory, inelegantly referred to in the trade as "the plug," the part man uses to erase the errors he makes with me. An ingredient called "factice" is what does the erasing. It is a rubber-like product made by reacting rape-seed oil from the Dutch East Indies with sulfur chloride. Rubber, contrary to the common notion, is only for binding purposes. Then, too, there are numerous vulcanizing and accelerating agents. The pumice comes from Italy; and the pigment which gives "the plug" its color is cadmium sulfide.

## No One Knows

Does anyone wish to challenge my earlier assertion that no single person on the face of this earth knows how to make me?

Actually, millions of human beings have had a hand in my creation, no one of whom even knows more than a very few of the others. Now, you may say that I go too far in relating the picker of a coffee berry in far off Brazil and food growers elsewhere to my creation; that this is an extreme position. I shall stand by my claim. There isn't a single person in all these millions, including the president of the pencil company, who contributes more than a tiny, infinitesimal bit of know-how. From the standpoint of know-how the only difference between the miner of graphite in Ceylon and the logger in Oregon is in the type of know-how. Neither the miner nor the logger can be dispensed with, any more than can the chemist at the factory or the worker in the oil field—paraffin being a by-product of petroleum.

Here is an astounding fact: Neither the worker in the oil field nor the chemist nor the digger of graphite or clay nor any who mans or makes the ships or trains or trucks nor the one who runs the machine that does the knurling on my bit of metal nor the president of the company performs his singular task because he wants me. Each one wants me less, perhaps, than does a child in the first grade. Indeed, there are some among this vast multitude who never saw a pencil nor would they know how to use one. Their motivation is other than me. Perhaps it is something like this: Each of these millions sees that he can thus exchange his tiny know-how for the goods and services he needs or wants. I may or may not be among these items.

## No Master Mind

There is a fact still more astounding: the absence of a master mind, of anyone dictating or forcibly directing these countless actions which bring me into being. No trace of such a person can be found. Instead, we find the Invisible Hand at work. This is the mystery to which I earlier referred.

It has been said that "only God can make a tree." Why do we agree with this? Isn't it

because we realize that we ourselves could not make one? Indeed, can we even describe a tree? We cannot, except in superficial terms. We can say, for instance, that a certain molecular configuration manifests itself as a tree. But what mind is there among men that could even record, let alone direct, the constant changes in molecules that transpire in the life span of a tree? Such a feat is utterly unthinkable!

I, Pencil, am a complex combination of miracles: a tree, zinc, copper, graphite, and so on. But to these miracles which manifest themselves in Nature an even more extraordinary miracle has been added: the configuration of creative human energies—millions of tiny know-hows configuring naturally and spontaneously in response to human necessity and desire and in the absence of any human master- minding! Since only God can make a tree, I insist that only God could make me. Man can no more direct these millions of know-hows to bring me into being than he can put molecules together to create a tree.

The above is what I meant when writing, "If you can become aware of the miraculousness which I symbolize, you can help save the freedom mankind is so unhappily losing." For, if one is aware that these know-hows will naturally, yes, automatically, arrange themselves into creative and productive patterns in response to human necessity and demand—that is, in the absence of governmental or any other coercive masterminding—then one will possess an absolutely essential ingredient for freedom: a faith in free people. Freedom is impossible without this faith.

Once government has had a monopoly of a creative activity such, for instance, as the delivery of the mails, most individuals will believe that the mails could not be efficiently delivered by men acting freely. And here is the reason: Each one acknowledges that he himself doesn't know how to do all the things incident to mail delivery. He also recognizes that no other individual could do it. These assumptions are correct. No individual possesses enough know-how to perform a nation's mail delivery any more than any individual possesses enough know-how to make a pencil. Now, in the absence of faith in free people—in the unawareness that millions of tiny know-hows would naturally and miraculously form and cooperate to satisfy this necessity—the individual cannot help but reach the erroneous conclusion that mail can be delivered only by governmental "master- minding."

# Testimony Galore

If I, Pencil, were the only item that could offer testimony on what men and women can accomplish when free to try, then those with little faith would have a fair case. However, there is testimony galore; it's all about us and on every hand. Mail delivery is exceedingly simple when compared, for instance, to the making of an automobile or a calculating machine or a grain combine or a milling machine or to tens of thousands of other things. Delivery? Why, in this area where men have been left free to try, they deliver the human voice around the world in less than one second; they deliver an event visually and in motion to any person's home when it is happening; they deliver 150 passengers from Seattle to Baltimore in less than four hours; they deliver gas from Texas to one's range or furnace in New York at unbelievably low rates and without subsidy; they deliver each four pounds of oil from the Persian Gulf to our Eastern Seaboard— halfway around the world—for less money than the government charges for delivering a one-ounce letter across the street!

The lesson I have to teach is this: Leave all creative energies uninhibited. Merely organize society to act in harmony with this lesson. Let society's legal apparatus remove all obstacles the best it can. Permit these creative know-hows freely to flow. Have faith that free men and women will respond to the Invisible Hand. This faith will be confirmed. I, Pencil, seemingly simple though I am, offer the miracle of my creation as testimony that this is a practical faith, as practical as the sun, the rain, a cedar tree, the good earth.

**Concluding Question:** How does a cooperative network vastly enlarge a country's productive potential and consequently provide the foundation for our modern living standards?

**[Return to Element 1.10](#)**

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# Creating Jobs vs. Creating Wealth

*By Dwight R. Lee*

**Question for thought:** Should the government build military bases and construct highways to create jobs?

Government policies are commonly evaluated in terms of how many jobs they create. Restricting imports is seen as a way to protect and create domestic jobs. Tax preferences and loopholes are commonly justified as ways of increasing employment in the favored activity. Presidents point with pride to the number of jobs created in the economy during their administrations. Supposedly the more jobs created the more successful the administration. There probably has never been a government spending program whose advocates failed to mention that it creates jobs. Even wars are seen as coming with the silver lining of job creation.

Now there is nothing wrong with job creation. Working in jobs is an important way people create wealth. So the emphasis on job creation is an understandable one. But it is easy for people to forget that creating more wealth is what we really want to accomplish, and jobs are merely a means to that end. When that elementary fact is forgotten, people are easily duped by arguments that elevate creation of jobs to an end in itself. While these arguments may sound plausible, they are used to support policies that destroy wealth rather than create it. I shall consider a few of the depressingly many examples.

## Creating Jobs Is Not the Problem

The purpose of all economic activity is to produce as much value as possible with the scarce resources (including human effort) available. But no matter how far we push back the limits of scarcity, those limits are never vanquished. Scarcity will forever prevent us from

securing all the things we desire. There will always be jobs to do far more than can ever be done. So creating jobs is not the problem. The problem is creating jobs in which people produce the most value. This is the point of the apocryphal story of an engineer who, while visiting China, came across a large crew of men building a dam with picks and shovels. When the engineer pointed out to the supervisor that the job could be completed in a few days, rather than many months, if the men were given motorized earthmoving equipment, the supervisor said that such equipment would destroy many jobs. “Oh,” the engineer responded, “I thought you were interested in building a dam. If it’s more jobs you want, why don’t you have your men use spoons instead of shovels.”

As I tell my students at the University of Georgia, I will employ every person in our college town of Athens if they’ll only work for me cheaply enough, say a nickel a month. Lower the wage a bit more and I’ll hire everyone in the entire state of Georgia. If I hired workers at those wages, I could make a profit having them build dams with spoons. Of course, the students recognize that my offer is silly since they can make far more working for other employers, which reflects the more important reason my offer is silly concentrating on the number of jobs ignores the value being created, or not created. More value will be produced in the higher-paying jobs my students can get than in the ones I am offering. A big advantage realized from the wages that emerge in open labor markets is that they attract people into not just any employment, but into their highest-valued employment.

Another advantage of market wages is that they force employers to consider the opportunity cost of hiring workers their value in alternative jobs and to remain constantly alert for ways to eliminate jobs by creating the same value with fewer workers. All economic progress results from being able to provide the same, or improved, goods and services with fewer workers, thus eliminating some jobs and freeing up labor to increase production in new, more productive jobs. The failure to understand this source of increasing prosperity explains the widespread sympathy with destructive public policies.

# Dynamiting Our Way to More Jobs

In the 1840s a French politician seriously advocated blowing up the tracks at Bordeaux on the railroad from Paris to Spain to create more jobs in Bordeaux. Freight would have to be moved from one train to another and passengers would require hotels, all of which would mean more jobs. (This proposal was discussed and demolished by the nineteenth-century economist and essayist Frederic Bastiat in *Economic Sophisms*, pp. 94-95, available from Foundation for Economic Education.)

This proposal is even more absurd than my offer to hire people for a nickel a month. At least I would employ workers to produce something of value, rather than to partially undo damage that is inflicted needlessly. Unfortunately, absurdity does not prevent economically destructive policies from being proposed and implemented. Using the jobs-creation justification, politicians commonly enact legislation that increases the effort required to produce a given amount of value.

One of the arguments for restricting imports is that it will create (or protect) domestic jobs. True, it will create some domestic jobs, just as destroying a section of a rail line will create domestic jobs. But also like a break in a rail line, import restrictions make it more costly to obtain valuable products. The only reason a country imports products is that it is the cheapest way to acquire them; it takes fewer workers to obtain the imported products through foreign trade than by producing them directly. In this way trade is like a technological advance, freeing up workers and allowing them to increase the production of goods and services available for consumption. Import restrictions create jobs in the same way dynamiting our railroads, bombing our factories, and requiring that workers use shovels instead of modern earth-moving equipment would create jobs.

Always keep in mind that creating jobs is a means to the ultimate end of economic activity, which is creating wealth.

## Creating Government Jobs

Because people tend to think of jobs as ends rather than means, they are easily fooled

into supporting government programs on grounds that jobs will be created. We have all heard people argue in favor of military bases, highway construction, and environmental regulations on business on these grounds. To justify spending, government agencies commonly perform benefit/cost studies in which the jobs created are counted as benefits. This is like counting the hours you work to earn enough money to buy a car as one of the car's benefits. The jobs created by a government project represent a cost of the project: the opportunity cost. The workers employed in government activities could be producing value doing something else. The relevant question is not whether a government project creates jobs, but whether the workers in those jobs will create more wealth than they would in other jobs. This is a question advocates of government programs don't want asked. If it were, there would be far fewer low-productivity government jobs and far more high-productivity private-sector jobs.

**Concluding question:** If we want to achieve a high standard of living, which is more important the creation of jobs or the creation of wealth? What is the difference?

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# What Is Seen and What Is Not Seen

*By Frederic Bastiat (Abridged version)*

*The following article is a condensed version of Frederic Bastiat's "What Is Seen and What Is Not Seen."<sup>(1)</sup> Bastiat was an economist who was also a member of the French parliament in the middle of the nineteenth century. Interestingly, the issues he raises are as valid today as they were over 150 years ago.*

In the economic sphere an act, a habit, an institution, a law produces not only one effect, but a series of effects. Of these effects, the first alone is immediate; it appears simultaneously with its cause; it is seen. The other effects emerge only subsequently; they are not seen; we are fortunate if we foresee them.

There is only one difference between a bad economist and a good one: the bad economist confines himself to the visible effect; the good economist takes into account both the effect that can be seen and those effects that must be foreseen.

Yet this difference is tremendous; for it almost always happens that when the immediate consequence is favorable, the later consequences are disastrous, and vice versa. Whence it follows that the bad economist pursues a small present good that will be followed by a great evil to come, while the good economist pursues a great good to come, at the risk of a small present evil.

## The Broken Window

Have you ever been witness to the fury of that solid citizen, James Goodfellow, when his incorrigible son has happened to break a pane of glass? If you have been present at this spectacle, certainly you must also have observed that the onlookers, even if there are as many as thirty of them, seem with one accord to offer the unfortunate owner the selfsame

consolation: "It's an ill wind that blows nobody some good. Such accidents keep industry going. Everybody has to make a living. What would become of the glaziers if no one ever broke a window?"

Now, this formula of condolence contains a whole theory that it is a good idea for us to expose, *flagrante delicto*, in this very simple case, since it is exactly the same as that which, unfortunately, underlies most of our economic institutions.

Suppose that it will cost six francs to repair the damage. If you mean that the accident gives six francs' worth of encouragement to the aforesaid industry, I agree. I do not contest it in any way; your reasoning is correct. The glazier will come, do his job, receive six francs, congratulate himself, and bless in his heart the careless child. That is what is seen.

But if, by way of deduction, you conclude, as happens only too often, that it is good to break windows, that it helps to circulate money, that it results in encouraging industry in general, I am obliged to cry out: That will never do! Your theory stops at what is seen. It does not take account of what is not seen.

It is not seen that, since our citizen has spent six francs for one thing, he will not be able to spend them for another. It is not seen that if he had not had a windowpane to replace, he would have replaced, for example, his worn-out shoes or added another book to his library. In brief, he would have put his six francs to some use or other for which he will not now have them.

Let us next consider industry in general. The window having been broken, the glass industry gets six francs' worth of encouragement; that is what is seen.

If the window had not been broken, the shoe industry (or some other) would have received six francs' worth of encouragement; that is what is not seen.

And if we were to take into consideration what is not seen, because it is a negative factor, as well as what is seen, because it is a positive factor, we should understand that there is no benefit to industry in general or to national employment as a whole, whether windows are broken or not broken.

Now let us consider James Goodfellow.

On the first hypothesis, that of the broken window, he spends six francs and has, neither more nor less than before, the enjoyment of one window.

On the second, that in which the accident did not happen, he would have spent six francs for new shoes and would have had the enjoyment of a pair of shoes as well as of a window.

Now, if James Goodfellow is part of society, we must conclude that society, considering its labors and its enjoyments, has lost the value of the broken window.

From which, by generalizing, we arrive at this unexpected conclusion: "Society loses the value of objects unnecessarily destroyed," "To break, to destroy, to dissipate is not to encourage national employment," or more briefly: "Destruction is not profitable."

The reader must apply himself to observe that there are not only two people, but three, in the little drama that I have presented. The one, James Goodfellow, represents the consumer, reduced by destruction to one enjoyment instead of two. The other, under the figure of the glazier, shows us the producer whose industry the accident encourages. The third is the shoemaker (or any other manufacturer) whose industry is correspondingly discouraged by the same cause. It is this third person who is always in the shadow, and who, personifying what is not seen, is an essential element of the problem. It is he who makes us understand how absurd it is to see a profit in destruction.

## Theaters and Fine Arts

Should the state subsidize the arts? There is certainly a great deal to say on this subject pro and con.

In favor of the system of subsidies, one can say that the arts broaden, elevate, and poetize the soul of a nation; that they draw it away from material preoccupations, giving it a feeling for the beautiful, and thus react favorably on its manners, its customs, its morals, and even on its industry. One can ask where music would be in France without the Théâtre-Italien and the Conservatory; dramatic art without the Théâtre-Français; painting and sculpture without our collections and our museums. One can go further and ask whether, without the centralization and consequently the subsidizing of the fine arts, there would have developed that exquisite taste which is the noble endowment of French labor and sends its products out

over the whole world. In the presence of such results would it not be the height of imprudence to renounce this moderate assessment on all the citizens, which, in the last analysis, is what has achieved for them their pre-eminence and their glory in the eyes of Europe?

To these reasons and many others, whose power I do not contest, one can oppose many no less cogent. There is, first of all, one could say, a question of distributive justice. Do the rights of the legislator go so far as to allow him to dip into the wages of the artisan in order to supplement the profits of the artist? M. de Lamartine<sup>(2)</sup> said: "If you take away the subsidy of a theater, where are you going to stop on this path, and will you not be logically required to do away with your university faculties, your museums, your institutes, your libraries?" One could reply: If you wish to subsidize all that is good and useful, where are you going to stop on that path, and will you not logically be required to set up a civil list for agriculture, industry, commerce, welfare, and education? Furthermore, is it certain that subsidies favor the progress of the arts? It is a question that is far from being resolved, and we see with our own eyes that the theaters that prosper are those that live on their own profits. Finally, proceeding to higher considerations, one may observe that needs and desires give rise to one another and keep soaring into regions more and more rarefied<sup>(3)</sup> in proportion as the national wealth permits their satisfaction; that the government must not meddle in this process, since, whatever may be currently the amount of the national wealth, it cannot stimulate luxury industries by taxation without harming essential industries, thus reversing the natural advance of civilization. One may also point out that this artificial dislocation of wants, tastes, labor, and population places nations in a precarious and dangerous situation, leaving them without a solid base.

These are some of the reasons alleged by the adversaries of state intervention concerning the order in which citizens believe they should satisfy their needs and their desires, and thus direct their activity. I confess that I am one of those who think that the choice, the impulse, should come from below, not from above, from the citizens, not from the legislator; and the contrary doctrine seems to me to lead to the annihilation of liberty and of human dignity.

But, by an inference as false as it is unjust, do you know what the economists are now accused of? When we oppose subsidies, we are charged with opposing the very thing that it was proposed to subsidize and of being the enemies of all kinds of activity, because we want

these activities to be voluntary and to seek their proper reward in themselves. Thus, if we ask that the state not intervene, by taxation, in religious matters, we are atheists. If we ask that the state not intervene, by taxation, in education, then we hate enlightenment. If we say that the state should not give, by taxation, an artificial value to land or to some branch of industry, then we are the enemies of property and of labor. If we think that the state should not subsidize artists, we are barbarians who judge the arts useless.

I protest with all my power against these inferences. Far from entertaining the absurd thought of abolishing religion, education, property, labor, and the arts when we ask the state to protect the free development of all these types of human activity without keeping them on the payroll at one another's expense, we believe, on the contrary, that all these vital forces of society should develop harmoniously under the influence of liberty and that none of them should become, as we see has happened today, a source of trouble, abuses, tyranny, and disorder.

Our adversaries believe that an activity that is neither subsidized nor regulated is abolished. We believe the contrary. Their faith is in the legislator, not in mankind. Ours is in mankind, not in the legislator. Thus, M. de Lamartine said: "On the basis of this principle, we should have to abolish the public expositions that bring wealth and honor to this country."

I reply to M. de Lamartine: From your point of view, not to subsidize is to abolish, because, proceeding from the premise that nothing exists except by the will of the state, you conclude that nothing lives that taxes do not keep alive. But I turn against you the example that you have chosen, and I point out to you that the greatest, the noblest, of all expositions, the one based on the most liberal, the most universal conception, and I can even use the word "humanitarian," which is not here exaggerated, is the exposition now being prepared in London,<sup>(4)</sup> the only one in which no government meddles and which no tax supports.

Returning to the fine arts, one can, I repeat, allege weighty reasons for and against the system of subsidization. The reader understands that, in accordance with the special purpose of this essay, I have no need either to set forth these reasons or to decide between them.

But M. de Lamartine has advanced one argument that I cannot pass over in silence, for it falls within the very carefully defined limits of this economic study.

He has said:

The economic question in the matter of theaters can be summed up in one word: employment. The nature of the employment matters little; it is of a kind just as productive and fertile as any other kind. The theaters, as you know, support by wages no less than eighty thousand workers of all kinds—painters, masons, decorators, costumers, architects, etc., who are the very life and industry of many quarters of this capital, and they should have this claim upon your sympathies!

Your sympathies? Translate: your subsidies. And further on:

The pleasures of Paris provide employment and consumers' goods for the provincial departments, and the luxuries of the rich are the wages and the bread of two hundred thousand workers of all kinds, living on the complex industry of the theaters throughout the Republic, and receiving from these noble pleasures, which make France illustrious, their own livelihood and the means of providing the necessities of life for their families and their children. It is to them that you give these sixty thousand francs. [Very good! Very good! Much applause.]

For my part, I am forced to say: Very bad! Very bad! confining, of course, the burden of this judgment to the economic argument which we are here concerned with.

Yes, it is, at least in part, to the workers in the theaters that the sixty thousand francs in question will go. A few scraps might well get lost on the way. If one scrutinized the matter closely, one might even discover that most of the pie will find its way elsewhere. The workers will be fortunate if there are a few crumbs left for them! But I should like to assume that the entire subsidy will go to the painters, decorators, costumers, hairdressers, etc. That is what is seen.

But where does it come from? This is the other side of the coin, just as important to examine as its face. What is the source of these 60,000 francs? And where would they have gone if a legislative vote had not first directed them to the rue de Rivoli and from there to the rue de Grenelle?<sup>(5)</sup> That is what is not seen.

Surely, no one will dare maintain that the legislative vote has caused this sum to hatch out from the ballot box; that it is a pure addition to the national wealth; that, without this miraculous vote, these sixty thousand francs would have remained invisible and impalpable. It must be admitted that all that the majority can do is to decide that they will be taken from somewhere to be sent somewhere else, and that they will have one destination only by being

deflected from another.

This being the case, it is clear that the taxpayer who will have been taxed one franc will no longer have this franc at his disposal. It is clear that he will be deprived of a satisfaction to the tune of one franc, and that the worker, whoever he is, who would have procured this satisfaction for him, will be deprived of wages in the same amount.

Let us not, then, yield to the childish illusion of believing that the vote of May 16 adds anything whatever to national well-being and employment. It reallocates possessions, it reallocates wages, and that is all.

Will it be said that for one kind of satisfaction and for one kind of job it substitutes satisfactions and jobs more urgent, more moral, more rational? I could do battle on this ground. I could say: In taking sixty thousand francs from the taxpayers, you reduce the wages of plowmen, ditchdiggers, carpenters, and blacksmiths, and you increase by the same amount the wages of singers, hairdressers, decorators, and costumers. Nothing proves that this latter class is more important than the other. M. de Lamartine does not make this allegation. He says himself that the work of the theaters is just as productive as, just as fruitful as, and not more so than, any other work, which might still be contested; for the best proof that theatrical work is not as productive as other work is that the latter is called upon to subsidize the former.

But this comparison of the intrinsic value and merit of the different kinds of work forms no part of my present subject. All that I have to do here is to show that, if M. de Lamartine and those who have applauded his argument have seen on the one hand the wages earned by those who supply the needs of the actors, they should see on the other the earnings lost by those who supply the needs of the taxpayers; if they do not, they are open to ridicule for mistaking a reallocation for a gain. If they were logical in their doctrine, they would ask for infinite subsidies; for what is true of one franc and of sixty thousand francs is true, in identical circumstances, of a billion francs.

When it is a question of taxes, gentlemen, prove their usefulness by reasons with some foundation, but not with that lamentable assertion: "Public spending keeps the working class alive." It makes the mistake of covering up a fact that it is essential to know: namely, that public spending is always a substitute for private spending, and that consequently it may well support one worker in place of another but adds nothing to the lot of the working class taken as

a whole.

## Questions for thought

1. The proponents of government spending on sports stadiums often argue that this spending expands employment. Evaluate this view.
2. The U.S. federal government spends billions of dollars subsidizing agriculture. Do these subsidies increase employment and output? Explain.

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1. This pamphlet, published in July, 1850, is the last that Bastiat wrote. It had been promised to the public for more than a year. Its publication had been delayed because the author had lost the manuscript when he moved his household from the rue de Choiseul to the rue d'Algen. After a long and fruitless search, he decided to rewrite his work entirely, and chose as the principal basis of his demonstrations some speeches recently delivered in the National Assembly. When this task was finished, he reproached himself with having been too serious, threw the second manuscript into the fire, and wrote the one which we reprint.—Editor. ↩

2. Alphonse Marie Louis de Lamartine (1790-1869), one of the great poets of French romanticism and subsequently a distinguished statesman. First elected Deputy in 1834, he attained his greatest glory at the time of the Revolution of 1848, when he was a prime mover in the establishment of the Republic. By his eloquence he calmed the Paris mobs that threatened to destroy it and became the head of the provisional government. More an idealist and orator than a practical politician, however, he soon lost influence and retired to private life in 1851.—Translator. ↩

3. See chap. 3 of *Economic Harmonies*.—Editor. ↩

4. This refers to the Great Exhibition, in Hyde Park, London, in 1851, sponsored by the London Society of Arts, an association devoted to the development of arts and industries. The first in a series of great international exhibitions, or "world fairs," it was famous for the Crystal Palace, a remarkable architectural structure, in which the exhibitions were displayed. Albert, Queen Victoria's Prince Consort, presided over the exhibition.—Translator. ↩

5. i.e., from City Hall to the theatrical suppliers on the Left Bank.—Translator. ↩

# Gross Domestic Product (GDP)

## *What Is It and How Is It Measured?*

Gross Domestic Product (GDP) is the market value of all final user goods and services produced domestically during a time period (a year or quarter). GDP is a measure of production – it is designed to measure the output of goods and services produced in an economy. The definition of GDP tells us a lot about what it measures. It measures the “market value” of the goods and services produced. The market prices paid for various items determine how much they will add to GDP. For example, if a new automobile is sold for \$20,000 compared to \$1,000 for a new television set, the auto will add 20 times as much to GDP as the television set.

Goods and services are counted only when purchased by their final users. Many goods go through several intermediate stages of production. Purchases of raw materials and goods as they go through these intermediate production stages are not counted because their value will be reflected in the purchase price paid by the final user of the good or service. Therefore, double counting would result if the raw materials and intermediate goods were counted as well as the purchase prices paid by their ultimate users.

GDP is a measure of “domestic production”: the output produced within the geographic borders of the country regardless of whether it reflects the productive efforts of citizens or foreigners. Production outside of a country’s geographic borders by its nationals is excluded. For example, the income generated by an American business consultant working in Mexico would add to the GDP of Mexico, but not that of the United States. Correspondingly, the income of a Japanese chemical engineer working in the U.S. would be included in the GDP of the United States, but not that of Japan.

Only goods and services produced during the current period are included in this year’s GDP. The purchase and sale of used items are omitted because they do not reflect current

production. Their value was previously counted during the earlier period when they were produced. For example, the sale of a 2007 automobile in 2010 would not be included in the 2010 GDP because it was not produced in 2010. It was already included in GDP in 2007 when it was manufactured and including it again when the used item was re-sold would involve double counting. In contrast, the services of a person helping to arrange for the transaction of used items, real and financial assets, and other goods does reflect current production. Thus, sales commissions and other payment for sales services rendered during the year are counted when they are provided. Financial transactions and income transfers are excluded because they do not involve production.

The buying and selling of stocks and other financial instruments like bonds, mutual funds, and certificates of deposit represent a transfer of ownership from one person or organization to another. Likewise, social security benefits, disability payments, gifts, and other income transfers are merely movements of income and ownership rights from one party to another. They do not involve current production, and therefore these transfers are not included in GDP.

GDP is a measure of production through markets. Non-market productive activities are omitted. For example, production within the household such as food preparation and childcare services do not involve market transactions and therefore they are not included in GDP. Further, GDP also omits the activities of the underground economy -- unrecorded transactions such as those involving illegal activities like drug trade, prostitution, and income that is unreported in order to evade taxes.

GDP measures the output of goods and services produced in both the private and government sectors. The domestic output of the business sector is included, regardless of whether the firms are owned by nationals or foreigners. As we discussed above, governmental income transfers are omitted. But purchase and/or provision of goods and services by local, state, and federal governments are included in GDP because they reflect current production.

# GDP Comparisons Across Time

When making GDP comparisons across time, it is important to adjust for changes in the general level of prices. There are two reasons why nominal GDP may be higher in one period than another: (1) an increase in the general level of prices and (2) an increase in the quantity of goods and services produced. Only the latter will improve living standards. Therefore, as nominal GDP changes across time, it is important to distinguish between GDP increases that merely reflect higher prices from those that result from an expansion in the quantity of goods and services produced.

Economists use a price index, the GDP deflator, to adjust the nominal GDP data for the impact of increases in the general level of prices through time. The GDP deflator is a measure of the general level of prices relative to a base year, which is assigned a value of 100. As prices rise relative to the base year, the GDP deflator will increase proportionally. The GDP deflator can be used along with nominal GDP to derive real GDP, which is GDP measured in dollars of constant purchasing power. Real GDP nets out the increase in nominal GDP that merely reflects an increase in the general level of prices. Real GDP in this time period ( $t$ ) measured in terms of the price level of the base year, is equal to:

$$\text{Real GDP}_t = \frac{(\text{Nominal GDP}_t) * 100}{(\text{Deflator}_t)}$$

If prices are higher now than during the earlier base year, the ratio on the right will be less than one and it will adjust the current nominal GDP figure for the higher current level of prices compared to the earlier base year. Consider the GDP figures for the United States in 2005 and 2009. In 2009, the nominal GDP of the United States was \$14,256 billion compared to only 12,638 billion in 2005. Thus nominal GDP was 12.8 percent higher in 2009 than 2005. However, a large portion of this increase in nominal GDP reflected inflation rather than an increase in real output. The GDP deflator, the price index that measures changes in the cost of all goods included in GDP, increased from 100.0 during the 2005 base year to 109.7702 in 2009. This indicates that prices rose by about 9.8 percent between 2005 and 2009 (109.7702

-100, expressed as a percentage). In order to derive the 2009 real GDP, the 2009 nominal GDP must be deflated for the higher general level of prices compared to 2005. Using the equation above, the 2009 nominal GDP of \$14,256.3 billion is first multiplied by 100 and then divided by the GDP deflator of 109.7702. This yields a real GDP of \$12.987.4 billion  $[(\$14,256.3 * 100) / 109.7702]$ , only 2.8 percent more than in 2005. Thus, while nominal GDP expanded by 12.8 percent, real GDP increased by only 2.8 percent.

When comparing GDP across time, using real GDP rather than nominal GDP is vitally important. The real GDP figures factor out the changes in the general level of prices, leaving only changes in the actual output of goods and services produced. This makes real GDP comparisons more meaningful.

Furthermore, when considering living standards across time, one would want to use per capita GDP, that is, GDP per person. Increases in per capita GDP indicate that a larger quantity of goods and services per person is being produced over time. Without increases in output per person, improvements in living standards are unlikely.

In the United States, the Department of Commerce's Bureau of Economic Analysis (BEA) calculates GDP and uses these calculations to offer an overview of the U.S. economy. The BEA produces economic statistics that influence decisions of government officials, business people, and private individuals. The statistics provided at <http://www.bea.gov/index.htm> offer a comprehensive, up-to-date picture of the U.S. economy.

**[Return to Part 2 Introduction](#)**

This article is courtesy of [Common Sense Economics](#).

# Private Property and Opportunity Costs

*By Dwight Lee*

**Questions for thought:** What is the economic link between private property rights and opportunity costs?

Markets promote the general interest by revealing costs while governments commonly favor special interest by concealing those costs. Here, I shall discuss opportunity costs by introducing the critical role of private property. Private property lies at the foundation of market economies because without private property, and the exchange it fosters, people would be unable to consider the full costs of their decisions.

## Too Costly to Drive

Assume you win a Rolls Royce Silver Shadow, with insurance, maintenance, gas, and taxes paid. While this isn't quite as nice as winning the state lottery, the going price for a Silver Shadow is around \$250,000. That's the good news. The bad news is that you're probably not wealthy enough to drive this car. Your first reaction is likely: What do you mean I can't afford to drive it? Everything is paid for by someone else.

True, but I still predict that you will find the car too costly to drive. Regardless of how you got the Rolls Royce, the cost of driving it is the price someone else is willing to pay for it. And because the car is your private property, you can't ignore that cost. As the owner you can sell it at a price that reflects the highest value someone else places on it. So you will continue driving your Rolls only if you value it by at least as much as, or more than, what you could buy with the approximately \$250,000 that some Rolls Royce aficionado is willing to pay you for it. Most likely you will sell the Rolls, buy a perfectly nice and serviceable car for \$20,000, and have \$230,000 left over to save or spend on other things.

This story is fanciful, or course, since you are not likely to win a Rolls Royce. But it illustrates a real and important point—private property prompts people to consider the opportunity cost (the value forgone) of their decisions. Because of private property, this consideration is the hallmark of market action and explains the market cooperation that directs resources and products into the hands of those who value them most.

## Cooperation Between Bird Watchers and Hot Rodders

Members of the Audubon Society are interested in protecting fragile habitat for birds and other animals. It is easy to predict how it would come down on a choice between protecting wildlife habitat and increasing the availability of gasoline for high-powered cars, or any other cars for that matter. For example, the Audubon Society strongly opposes offshore drilling for oil. Oil companies promise to, and in fact do, take extraordinary precautions to prevent oil spills, but the Audubon Society is not convinced. Regardless of precautions, its position is: No offshore drilling—*none!*

How can hot rodders possibly communicate their desire for cheaper gas to the Audubon Society so as to convince it to accommodate them by risking wildlife habitat? In fact, they have succeeded at doing just that. Hot rodders, along with all other gasoline consumers, have convinced the Audubon Society that the *value* they place on gas is an opportunity cost of protecting habitat that the Society shouldn't ignore. They have done so through market communication based on private property.

The Audubon Society owns a wilderness area in Louisiana known as the Rainey Preserve. It is an ideal habitat for birds and other wildlife, but it also contains commercial quantities of petroleum and natural gas that oil companies are eager to recover. One might conclude that since the Audubon Society owns the land and can easily prevent oil companies from drilling on it, they would do so. Wrong! The Audubon Society allows oil companies to drill there.

Of course, it requires the companies to take strong precautions against oil leaks, but not

as strong as it claims to be necessary with offshore drilling. Why the difference? Because the Audubon Society owns the Rainey Preserve, the money others are willing to pay for the oil represents an opportunity that would be sacrificed if it refused to allow drilling. But the Society doesn't face an opportunity cost on offshore sites because it doesn't own them. It thus has no motivation to take the interest of others in offshore oil into consideration.

Private property not only motivates the Audubon Society to cooperate with hot rodders, it also motivates hot rodders to cooperate with the Audubon Society. Their purchase of gas allows the Audubon Society to obtain and protect wildlife habitat that it believes is more valuable than what it sacrifices in the Rainey Preserve because of oil drilling. Members of the Audubon Society may despise hot rodders and hot rodders may laugh at bird watchers, but because of private property, each takes the concerns (and opportunity costs) of the other into consideration and acts to promote the other's interests.

## **The Opportunity Cost of Prisoners of War**

European wars during the Middle Ages were often rather peaceful affairs, with prisoners typically well treated. It was not uncommon for opposing armies to count the number of soldiers on each side, before the smaller army surrendered. Such nonviolent "combat" occurred because at that time soldiers had a property right in the prisoners they captured. That legal right included the power to sell prisoners back to their families, creating an opportunity cost for the victors if they killed their prisoners. Private organizations, some of them religious orders, began specializing as middlemen between those who had prisoners to sell and those who wanted to purchase them.

Unfortunately for prisoners of war, when long-range weapons became available and hand-to-hand combat became uncommon, it was less likely that individual soldiers would capture prisoners. Wars then became more brutal, not only because the technology of slaughter improved, but also because the ownership of prisoners shifted to the state. Because opportunity costs to individuals diminish when property belongs to the state, it became far more common to kill or mutilate prisoners. Human beings obviously should not be treated as private property.

But because of the phenomenon of opportunity cost, captured soldiers are far better off as “private property” than “public property.”

Private property is essential to the cooperation that emerges from market interaction, because it ensures that people consider the opportunity cost of their actions. It is both sad and ironic that so many people blame private property for problems that exist because of the lack of private property.

**Concluding Questions:** Why do markets reveal costs differently than governments? How does this difference impact market exchange and productive behavior?

**[Return to Element 2.1](#)**

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# Running Out of Agricultural Land

*By Dwight Lee*

**Question for thought:** Does private ownership of property provide owners with incentives to maintain and conserve resources? Explain.

Fear that we are running out of important resources is perpetual. Oil is a favorite thing to worry about; landfill space is another, and trees yet another. I could continue listing things (coal, copper, iron ore, even tin) that people have worried would soon be exhausted. In most cases the fear is baseless—fueled by organized interests hoping to capture advantages by scaring the public, by sloppy journalism, and by a general lack of basic economic understanding. Where concern is appropriate, the problem is invariably the lack of private property rights in the threatened resource.

To see the role of property rights in preventing the depletion of resources, consider the following question: have we ever run out of a nonrenewable resource? I have asked dozens of audiences this question and have never found anyone who can name one. But aren't nonrenewable resources the ones we are most likely to run out of? After all, they are nonrenewable. More puzzling, we have run out of—driven to extinction—a number of animals, which are renewable. Aren't these the resources we should be least likely to run out of? The puzzle is resolved by recognizing that nonrenewable resources just sit there; they don't run around, so it is easy to establish private property rights over them. People conserve on resources they own by taking their future value into account. Many animals, because of their fugitive nature, are difficult to own as private property, and so people have little motivation to consider their future value. So despite their renewability, some of these animals have been extinguished.

Creating scares that we are running out of nonrenewable resources would be far more difficult if people understood the power of private property to motivate the proper

consideration of our resources' future value. But here I consider another reason people mistakenly fear we are running out of, or dangerously depleting, resources—failure to distinguish marginal value from total value.

## Disappearing Farmland

I had just begun my first teaching job at the University of Colorado when I was asked to participate in a debate on the “problem” of disappearing farmland.

Despite my compelling arguments (several in attendance who agreed with me before the debate still agreed with me afterward) that decreasing farmland was the result of market forces working properly, concern over lost farmland has continued. For example, Lester Brown of Worldwatch Institute puts out an annual report predicting that food supplies will fall behind population growth, a problem he sees caused partly by the loss of farmland to development.

While it is true that globally fewer acres are used for agriculture today than in the past, but this “loss” of farm land is not a crisis or even a cause for concern. Instead, it is good news. In Poland, for example, the share of land devoted to agriculture has fallen by 28% since the late 1960s, yet food output has risen by almost 70%. When less land is used for farming, more land can revert to open space and forest.

You won't hear this from the crisis crowd, but there is more forest land in the United States now than 80 years ago.<sup>(1)</sup> Second, farmland has been paved over for shopping centers and highways, converted into suburban housing tracts, covered with amusement parks, developed into golf courses, and otherwise converted because consumers have communicated through market prices that development is more valuable than the food that could have been grown on the land.

## Food or Golf

Why would consumers willingly sacrifice food for golf courses, shopping centers, and parking lots? Isn't food more valuable than golfing or parking? Of course—in total value. If

the choice is between eating and no golf or playing golf but no eating, even the most avid golfer would choose eating. But economic choices are not all-or-none choices. Instead, we make decisions at the margin, deciding if a little more of one option is worth sacrificing a little bit of another. And at the margin it isn't clear that food is more valuable than golf or many other things we can live without. Golfers are communicating through greens fees that another golf course is at least as valuable as the additional food sacrificed.

At the margin, golf is certainly more valuable than food would be if millions of acres of farmland had not been "lost" to development. In 1900 most of the horsepower used on the farm was really horse power, or mule power, and tens of millions of acres were needed to grow the food for these animals. Trucks, tractors, harvesters, and other gasoline-powered farm machinery have efficiently substituted for these animals and the acres needed to feed them. Also, much less land is needed now to feed the same number of people because improvements in fertilizers, pesticides, irrigation, seeds, and weather forecasting allow more food to be grown per acre, and improvements in harvesting, packaging, storage, and transportation allow more of what is grown to get to the dinner table. If we still devoted as much land to farming as we did in 1900, with today's technology we would be knee-deep in cantaloupe. In this situation, how valuable would another few acres of cantaloupe be compared to another golf course that could be constructed on those acres?

We don't have nearly as much farmland as we did in 1900 because as food production increases, its marginal value decreases relative to that of houses, shopping centers, golf courses, and more. Consumers communicate this change in relative value with purchases that cause food prices to decline relative to the prices for other uses of farmland. This motivates a decrease in farmland that continues as long as the marginal value of land is greater in nonfarm uses than in agricultural production.

But don't expect the farmland "crisis" to disappear. Public agencies hoping for bigger budgets, and private organizations hoping for more research funding or larger subsidies, are always anxious to identify crises to scare the public. Crisis creation wouldn't be so easy if more people understood the difference between total value and marginal value.

**Concluding Question:** Why do secure property rights promote economic progress? Why do common ownership and insecure property rights hinder economic progress?

## **Return to Element 2.2**

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1. Gregg Easterbrook, *A Moment on the Earth* (New York: Viking, 1995), pp. 10-13. ↩

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## Censoring Pleas for Help

*By Dwight R. Lee*

**Question for thought:** Why do people take so many different positions on the role of government in the economy?

Ask people if they favor government censorship and the response will be a nearly unanimous no! Yet if you ask the same people if they favor government price controls, the response will be much more mixed. Ask them if the government should control prices to prevent “price gouging” after natural disasters, and the response will be a nearly unanimous yes!

These responses reflect an unfortunate ignorance of how markets allow us to communicate with one another. Once market prices are recognized as a means of communication, we have another powerful way of understanding why government price controls are a particularly harmful form of censorship. And the harm is greatest in the times of natural disasters because the victims are desperate to communicate their need for help.

The communication permitted by market exchange and the resulting prices creates a remarkable degree of social cooperation. There are no better examples of the benefits of this communication and cooperation than natural disasters. The victims need not only the assistance of people outside the disaster area, but also the cooperation of one another if they are to recover as soon and completely as possible. Unfortunately, when natural disasters strike, governments are most likely to outlaw the price signals that make this cooperation possible—and to do so with the support of public opinion.

After a natural disaster, prices generally increase sharply for labor, construction materials, electric generators, and a host of other products needed for recovery and comfort. The common explanation for these price increases is that unscrupulous suppliers are profiteering at the victims’ expense. Suppliers may be profiting, but not at the expense of the

victims. Those whose homes are damaged and lives disrupted are victims of the natural disaster, not of those who supply them with needed goods and services afterward. High prices are better explained as the best way for victims to communicate their need for help to those who are most able to provide it. High prices also insure that pleas for help will be met with a quick and effective response.

## **Sending Lumber to Miami**

I heard an interesting example of such a response when I was giving a talk in Ohio in 1992, not long after Hurricane Andrew ripped through southern Florida. I had mentioned the storm and its aftermath to illustrate the importance of price communication, and a gentleman in the audience told a story about his son, a building contractor outside Cleveland who had started building the house he and his wife had dreamed of for years. The foundation had been laid and the lumber was being delivered as Andrew hit Miami. With the news of the disaster, he decided against using the lumber himself and (despite his wife's opposition) shipped it to Miami instead. Why? Because the news he found most compelling came in the form of high prices for lumber, informing him that the demand for his lumber was greater in Miami than in Cleveland.

Was the Cleveland contractor an unscrupulous profiteer? Hardly. He did far more good for the victims of Hurricane Andrew than those who sat around expressing contempt for price "gougers." True, a few people helped the hurricane victims by sending supplies to Miami for free. Certainly these people should be commended. But their help was insignificant compared to the help given by suppliers from all over the country (indeed, the world) who responded to higher prices by providing more of the things Andrew's victims indicated (through higher prices) they most desperately needed.

Those who express contempt for people who sell products to natural-disaster victims at high prices should look closer to home for someone to criticize. Their criticism (born of economic ignorance) and the public opinion they inflame frequently provoke price controls, which muzzle those crying out for help. The *Atlanta Journal-Constitution* pointed out last April that Georgia has a "price gouging" law that forbids suppliers from charging "one penny

more than they charged the day before the disaster struck.” This law was favorably mentioned, with no hint of irony, in an article reporting that building contractors and construction supplies from several states had poured into Atlanta immediately after it suffered massive tornado damage. Can anyone seriously believe that this help would have poured in from far away if the “price gouging” law had been perfectly enforced, or that the help was not reduced by the enforcement that had occurred? (Penalties for price gouging in Georgia range from one to ten years in prison and fines of \$5,000.)

## The Electric Shaver

Victims of natural disasters need to communicate with one another also. Market prices are the only practical method. Everyone in the stricken area will value the products being made available, but people will want those products to go to those they believe can put them to the best use. Price controls prevent this from happening by censoring communication among victims.

A friend of mine who lived in Charleston, South Carolina, when Hurricane Hugo hit in 1989 saw firsthand the harm done by this censorship. Electricity was out for several days in my friend’s area, and so lots of people were anxious to get gas- powered electric generators. Unfortunately, the local hardware store had only two and was unable to get more because of price controls. But there was another problem with the price controls—one that actually benefited my friend’s family, though at great cost to others. Because his father was a good friend of the local hardware-store owner, he got one of the electric generators at the controlled price. The store owner couldn’t legally sell the generator to anyone else at a higher price, so why not let his buddy have it? My friend’s father was delighted because he could continue to shave with his electric shaver. Unfortunately, grocery stores in town required electricity desperately to prevent thousands of dollars’ worth of food from spoiling. Without price controls, one of those stores would have offered a higher price for the generator, effectively communicating (on behalf of customers) that it had a more urgent use for it than my friend’s father had. One person would have had to suffer the inconvenience of lathering up to shave,

but hundreds of his neighbors would have persuaded him, through a high price for the generator, that their desire for fresh food should take precedence. Of course, without price controls, all the stores and my friend's father (had he still wanted one) would have quickly secured electric generators because they would have been able to communicate with suppliers outside the disaster area.

Natural disasters provide a particularly vivid example of the harm done by price controls. Unfortunately, governments do not need natural disasters to justify undermining social cooperation and destroying wealth by dictating prices. Governments have a long history of imposing price controls on a wide range of goods and services. And they will continue to do so until it becomes widely recognized that such controls are a particularly pernicious form of censorship.

**Concluding question:** Should government set price ceilings during natural disasters if it impedes the flow of goods, services and resources into the devastated areas?

**[Return to Element 2.3](#)**

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# Markets and Freedom

*By Dwight Lee*

**Question for thought:** How do freedom of exchange and wealth reinforce each other in market economies?

The social cooperation that emerges in free markets permits the specialization on which prosperity depends. We would be much poorer without the specialization that is possible only when large numbers of people can coordinate production and consumption through market exchange. But even more important than the material wealth we realize from the marketplace is the benefit of freedom. We would soon be deprived of most of our freedom without the accountability and discipline possible only in market economies.

Freedom is easy to take for granted, especially in the United States where we have enjoyed what people in many other countries can only dream about. Freedom is a lot like good health: people tend not to appreciate it until they lose it. Just as healthy people can destroy their health by yielding to short-run temptations, free people can destroy their freedom by opting for short-run political advantages that undermine the conditions on which freedom depends.

Also, as important as wealth is, it is secondary to both good health and freedom. Wealth is of limited value to those without the health or the freedom to enjoy it. Furthermore, good health and freedom are important elements in the production of wealth, with freedom being absolutely essential. Sick people can be productive, but without freedom the productive cooperation of the marketplace is impossible.

So I shall discuss two separate but related points here. First, the productive cooperation of the marketplace depends on freedom, and second, freedom depends on the productive cooperation of the marketplace. Economists typically have the unpleasant task of pointing to the tradeoffs that are the inevitable consequence of scarcity. But with wealth and freedom,

there is no tradeoff; they reinforce each other in market economies, with it generally impossible to have one without the other.<sup>(1)</sup> Attempts to increase wealth with political policies that reduce freedom invariably end up reducing both.

## **Markets Require Freedom**

Markets work their magic by allowing people to communicate the benefits they realize from the efforts of others and the costs of their efforts to benefit others. Ultimately, all benefits and costs are subjective, depending on people's preferences and circumstances, which only they can accurately evaluate. This is obvious in the case of benefits. Who but the person who consumes a good, or avails himself of a service, is in a better position to judge the value of the benefits realized? But if benefits are subjective, then so are costs, which are nothing more than the value of forgone benefits. And since they are subjective, people can accurately communicate costs and benefits to one another only by having the freedom to enter into, or exit, different markets as they see fit, and to buy and sell at any mutually agreeable price. Government price controls restrict our freedoms as both buyers and sellers, and destroy wealth by censoring our communication with one another.

Central planning fails because people don't have the freedom to act on the local information that only they possess. When the central direction of political authorities is substituted for the market choices of individual producers and consumers, economic decisions are necessarily made in an informational vacuum. A productive economy requires the use of information that is dispersed throughout the population, and that information cannot be used without individual freedom. Destroy freedom and you destroy the information flows that are the essence of market economies.

## **Freedom Requires Markets**

The connection between freedom and markets also runs the other way. Just as the market depends on freedom, so freedom depends on the market. Certainly private property,

which is fundamental to all market economies, protects individual freedom. If the state owns all of the auditoriums and printing presses, how much freedom do you have to speak out against government policy? If the state owns all the means of production, how much freedom do you have to launch your own business? Start eliminating private property, and undermining the market that depends on it, and you start eliminating freedom.

But the market also protects freedom by establishing the only setting in which it can be tolerated. Freedom without responsibility is mere license, indulgence, and privilege, and will not long be tolerated. Real freedom, and the only freedom that can survive, is exercised in ways accountable to the concerns of all. The only freedom that satisfies this requirement is that which is subject to the discipline of the marketplace. Eliminate markets, and you eliminate the accountability necessary for freedom to survive.

For example, pollution problems result directly from not having markets in the use of the environment as a dump. If such markets existed, polluters would have to pay prices that reflected the cost their emissions imposed on others. Polluters would be accountable to others, and we could tolerate the freedom to discharge waste products into the environment. But because we don't have pollution markets, we accept government restrictions on polluting activities that would be unacceptable in most areas of our lives.

## **Our Freedoms Are Vulnerable**

Freedoms are seldom taken away all at once. They are typically lost a little at a time, with people seldom noticing the loss. Even when freedom is reduced directly, as when government imposes occupational licensing in the name of protecting consumers, few people notice, and even if they do, they don't see the restrictions as affecting them. But as the great Austrian economist F. A. Hayek pointed out, "The benefits I derive from freedom are . . . largely the result of the uses of freedom by others."<sup>(2)</sup> For example, those who suffer the most when people lose their freedom to become barbers without having to pass state exams on the chemical composition of hair are not aspiring barbers, but people who need haircuts.

Also, there is an insidious dynamic to the loss of freedom. Direct restrictions always

reduce freedom by more than is apparent because every restriction imperceptibly undermines the accountability of the marketplace that makes freedom possible.

Thomas Jefferson was correct when he said, “Eternal vigilance is the price of liberty.” People are more likely to exercise vigilance in protection of their freedom when they understand the inextricable connection between it and the market.

**Concluding questions:** How do trade restrictions and taxes affect freedom of exchange? How do they effect wealth creation?

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1. I have qualified this statement to account for the situation where a country possesses great wealth because of natural resource endowments and has an autocratic political regime, suppressing the freedoms of its subjects. But even in this case, the lack of freedom prevents the country from realizing the full benefit from its resources, and undermines the productivity necessary to expand, or even maintain, its wealth. ↩

2. See F.A. Hayek, *The Constitution of Liberty* (Chicago: University of Chicago Press, 1960), p. 32. ↩

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# Unfair Competition with the Sun

*By Frederic Bastiat (A condensed version of 'The Petition of the Candlestick Makers')*

**Question for thought:** Politicians often argue that cheap imports are bad for the economy. Think about this view as you read through this document.

“Gentlemen,—You are on the right road. You reject abstract theories, and have little consideration for cheapness and plenty. Your chief care is the interest of the producer. You desire to protect him from foreign competition, and reserve the national market for national industry.

We are suffering from the intolerable competition of a foreign rival, placed, it would seem, in a condition so far superior to ours for the production of light that he absolutely inundates our national market with it at a price fabulously reduced. The moment he shows himself our trade leaves us—all consumers apply to him; and a branch of native industry, having countless ramifications, is all at once rendered completely stagnant. This rival, who is no other than the sun, wages war to the knife against us, and we suspect that he has been raised up by perfidious Albion (a good policy as times go); inasmuch as he displays towards that haughty island a circumspection with which he dispenses in our case.

What we pray for is, that it may please you to pass a law ordering the shutting up of all windows, skylights, dormer-windows, outside and inside shutters, curtains, blinds, bull’s- eyes, in a word, of all openings, holes, chinks, clefts, and fissures, by or through which the light of the sun has been in use to enter houses, to the prejudice of the meritorious manufactures with which we flatter ourselves we have accommodated our country—a country, which, in gratitude, ought not abandon us now to a strife so unequal.

We trust, Gentlemen, that you will not regard this our request as a satire, or refuse it without at least previously hearing the reasons which we have to urge in its support.

And, first, if you shut up as much as possible all access to natural light, and create a demand for artificial light, which of our French manufacturers will not be encouraged by it?

We foresee your objections, Gentlemen, but we know that you can oppose to us none but such as you have picked up from the effete works of the partisans of Free Trade. We defy you to utter a single word against us which will not instantly rebound against yourselves and your entire policy.

You will tell us that, if we gain by the protection which we seek, the country will lose by it, because the consumer must bear the loss.

We answer:

You have ceased to have any right to invoke the interest of the consumer for, whenever his interest is found opposed to that of the producer, you sacrifice the latter. You have done so for the purpose of encouraging workers and those who seek employment. For the same reason you should do so again.

You have yourselves obviated this objection. When you are told that the consumer is interested in the free importation of iron, coal, corn, textile fabrics—yes, you reply, but the producer is interested in their exclusion. Well, be it so; if consumers are interested in the free admission of natural light, the producers of artificial light are equally interested in its prohibition.

If you urge that the light of the sun is a gratuitous gift of nature, and that to reject such gifts is to reject wealth itself under pretense of encouraging the means of acquiring it, we would caution you against giving a death-blow to your own policy. Remember that hitherto you have always repelled foreign products, because they approximate more nearly than home products to the character of gratuitous gifts.

Nature and human labor co-operate in various proportions (depending on countries and climates) in the production of commodities. The part which nature executes is very gratuitous; it is the part executed by human labor which constitutes value, and is paid for.

If a Lisbon orange sells for half the price of a Paris orange, it is because natural, and consequently gratuitous, heat does for the one what artificial, and therefore expensive, heat must do for the other.

When an orange comes to us from Portugal we may conclude that it is furnished in part

gratuitously, in part for an onerous consideration; in other words, it comes to us at half- price as compared with those of Paris.

Now, it is precisely the gratuitous half (pardon the word) which we contend should be excluded. You say, how can national labour sustain competition with foreign labour, when the former has all the work to do, and the latter only does one-half, the sun supplying the remainder. But if this half, being gratuitous, determines you to exclude competition, how should the whole, being gratuitous, induce you to admit competition?

If you were consistent, you would, while excluding as hurtful to native industry what is half gratuitous, exclude a fortiori and with double zeal, that which is altogether gratuitous.

One more, when products such as coal, iron, corn, or textile fabrics are sent us from abroad, and we can acquire them with less labour than if we made them ourselves, the difference is a free gift conferred upon us. The gift is more or less considerable in proportion as the difference is more or less great. It amounts to a quarter, a half, or three-quarters of the value of the product, when the foreigner only asks us for three- fourths, a half or a quarter of the price we should otherwise pay. It is as perfect and complete as it can be, when the donor (like the sun is furnishing us with light) asks us for nothing. The question, and we ask it formally, is this: Do you desire for our country the benefit of gratuitous consumption, or the pretended advantages of onerous production?

Make your choice, but be logical; for as long as you exclude as you do, coal, iron, corn, foreign fabrics, in proportion as their price approximates to zero what inconsistency it would be to admit the light of the sun, the price of which is already at zero during the entire day!"

**Concluding questions:** Do trade restrictions such as tariffs and quotas increase domestic employment? Do the restrictions help Americans achieve higher income levels? Why or why not?

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# Not Yours To Give from the Life of Colonel David Crockett

*By Edward Ellis (Abridged)*

**Question for thought:** Is support for individuals and families in a distressed situation best channeled through government or given personally by individuals from their own money?

One day in the House of Representatives, a bill was taken up appropriating money for the benefit of a widow of a distinguished naval officer. Several beautiful speeches had been made in its support. The Speaker was just about to put the question when Crockett arose:

“Mr. Speaker—I have as much respect for the memory of the deceased, and as much sympathy for the sufferings of the living, if suffering there be, as any man in this House, but we must not permit our respect for the dead or our sympathy for a part of the living to lead us into an act of injustice to the balance of the living. I will not go into an argument to prove that Congress has no power to appropriate this money as an act of charity. Every member upon this floor knows it. We have the right, as individuals, to give away as much of our own money as we please in charity; but as members of Congress we have no right so to appropriate a dollar of the public money. Some eloquent appeals have been made to us upon the ground that it is a debt due the deceased. Mr. Speaker, the deceased lived long after the close of the war; he was in office to the day of his death, and I have never heard that the government was in arrears to him.

Every man in this House knows it is not a debt. We cannot, without the grossest corruption, appropriate this money as the payment of a debt. We have not the semblance of authority to appropriate it as a charity. Mr. Speaker, I have said we have the right to give as much money of our own as we please. I am the poorest man on this floor. I cannot vote for this bill, but I will give one week’s pay to the object, and if every member of Congress will do the same, it will amount to more than the bill asks.”

He took his seat. Nobody replied. The bill was put upon its passage, and, instead of passing unanimously, as was generally supposed, and as, no doubt, it would, but for that speech, it received but few votes, and, of course, was lost.

Later, when asked by a friend why he had opposed the appropriation, Crockett gave this explanation:

“Several years ago I was one evening standing on the steps of the Capitol with some other members of Congress, when our attention was attracted by a great light over in Georgetown . It was evidently a large fire. We jumped into a hack and drove over as fast as we could. In spite of all that could be done, many houses were burned and many families made homeless, and, besides, some of them had lost all but the clothes they had on. The weather was very cold, and when I saw so many women and children suffering, I felt that something ought to be done for them. The next morning a bill was introduced appropriating \$20,000 for their relief. We put aside all other business and rushed it through as soon as it could be done.”

“The next summer, when it began to be time to think about the election, I concluded I would take a scout around among the boys of my district. I had no opposition there, but, as the election was some time off, I did not know what might turn up. When riding one day in a part of my district in which I was more of a stranger than any other, I saw a man in a field plowing and coming toward the road. I gauged my gait so that we should meet as he came to the fence. As he came up, I spoke to the man. He replied politely, but, as I thought, rather coldly.”

“I began: “Well, friend, I am one of those unfortunate beings called candidates, and—”

““Yes, I know you; you are Colonel Crockett, I have seen you once before, and voted for you the last time you were elected. I suppose you are out electioneering now, but you had better not waste your time or mine. I shall not vote for you again.”

“This was a sockdolager . . . I begged him to tell me what was the matter.”

““Well, Colonel, it is hardly worth-while to waste time or words upon it. I do not see how it can be mended, but you gave a vote last winter which shows that either you have not capacity to understand the Constitution, or that you are wanting in the honesty and firmness to be guided by it. In either case you are not the man to represent me. But I beg your pardon for expressing it in that way. I did not intend to avail myself of the privilege of the constituent to speak plainly to a candidate for the purpose of insulting or wounding you. I intend by it only to

say that your understanding of the Constitution is very different from mine; and I will say to you what, but for my rudeness, I should not have said, that I believe you to be honest. . . . But an understanding of the Constitution different from mine I cannot overlook, because the Constitution, to be worth anything, must be held sacred, and rigidly observed in all its provisions. The man who wields power and misinterprets it is the more dangerous the more honest he is:

““I admit the truth of all you say, but there must be some mistake about it, for I do not remember that I gave any vote last winter upon any constitutional question.”

““No, Colonel, there’s no mistake. Though I live here in the backwoods and seldom go from home, I take the papers from Washington and read very carefully all the proceedings of Congress. My papers say that last winter you voted for a bill to appropriate \$20,000 to some sufferers by a fire in Georgetown . Is that true?”

““Well, my friend; I may as well own up. You have got me there. But certainly nobody will complain that a great and rich country like ours should give the insignificant sum of \$20,000 to relieve its suffering women and children, particularly with a full and overflowing Treasury, and I am sure, if you had been there, you would have done just as I did.”

““It is not the amount, Colonel, that I complain of; it is the principle. In the first place, the government ought to have in the Treasury no more than enough for its legitimate purposes. But that has nothing to do with the question. The power of collecting and disbursing money at pleasure is the most dangerous power that can be entrusted to man, particularly under our system of collecting revenue by a tariff, which reaches every man in the country, no matter how poor he may be, and the poorer he is the more he pays in proportion to his means. What is worse, it presses upon him without his knowledge where the weight centers, for there is not a man in the United States who can ever guess how much he pays to the government.

So you see, that while you are contributing to relieve one, you are drawing it from thousands who are even worse off than he. If you had the right to give anything, the amount was simply a matter of discretion with you, and you had as much right to give \$20,000,000 as \$20,000. If you have the right to give to one, you have the right to give to all; and, as the Constitution neither defines charity nor stipulates the amount, you are at liberty to give to any and everything which you may believe, or profess to believe, is a charity, and to any amount

you may think proper. You will very easily perceive what a wide door this would open for fraud and corruption and favoritism, on the one hand, and for robbing the people on the other.

No, Colonel, Congress has no right to give charity. Individual members may give as much of their own money as they please, but they have no right to touch a dollar of the public money for that purpose. If twice as many houses had been burned in this county as in Georgetown , neither you nor any other member of Congress would have thought of appropriating a dollar for our relief. There are about two hundred and forty members of Congress. If they had shown their sympathy for the sufferers by contributing each one week's pay, it would have made over \$13,000. There are plenty of wealthy men in and around Washington who could have given \$20,000 without depriving themselves of even a luxury of life. The congressmen chose to keep their own money, which, if reports be true, some of them spend not very creditably; and the people about Washington , no doubt, applauded you for relieving them from the necessity of giving by giving what was not yours to give. The people have delegated to Congress, by the Constitution, the power to do certain things. To do these, it is authorized to collect and pay moneys, and for nothing else. Everything beyond this is usurpation, and a violation of the Constitution.”

““So you see, Colonel, you have violated the Constitution in what I consider a vital point. It is a precedent fraught with danger to the country, for when Congress once begins to stretch its power beyond the limits of the Constitution, there is no limit to it, and no security for the people. I have no doubt you acted honestly, but that does not make it any better, except as far as you are personally concerned, and you see that I cannot vote for you.”

“I tell you I felt streaked. I saw if I should have opposition, and this man should go to talking, he would set others to talking, and in that district I was a gone fawn-skin. I could not answer him, and the fact is, I was so fully convinced that he was right, I did not want to. But I must satisfy him, and I said to him:

““Well, my friend, you hit the nail upon the head when you said I had not sense enough to understand the Constitution. I intended to be guided by it, and thought I had studied it fully. I have heard many speeches in Congress about the powers of Congress, but what you have said here at your plow has got more hard, sound sense in it than all the fine speeches I ever heard. If I had ever taken the view of it that you have, I would have put my head into the fire before I

would have given that vote; and if you will forgive me and vote for me again, if I ever vote for another unconstitutional law I wish I may be shot.”

“He laughingly replied: “Yes, Colonel, you have sworn to that once before, but I will trust you again upon one condition. You say that you are convinced that your vote was wrong. Your acknowledgment of it will do more good than beating you for it. If, as you go around the district, you will tell people about this vote, and that you are satisfied it was wrong, I will not only vote for you, but will do what I can to keep down opposition, and, perhaps, I may exert some little influence in that way.”

““If I don’t,” said I, “I wish I may be shot; and to convince you that I am in earnest in what I say I will come back this way in a week or ten days, and if you will get up a gathering of the people, I will make a speech to them. Get up a barbecue, and I will pay for it.”

““No, Colonel, we are not rich people in this section, but we have plenty of provisions to contribute for a barbecue, and some to spare for those who have none. The push of crops will be over in a few days, and we can then afford a day for a barbecue. This is Thursday; I will see to getting it up on Saturday week. Come to my house on Friday, and we will go together, and I promise you a very respectable crowd to see and hear you.”

““Well, I will be here. But one thing more before I say good-by. I must know your name.” ““My name is Bunce.” ““Not Horatio Bunce?” ““Yes.”

““Well, Mr. Bunce, I never saw you before, though you say you have seen me, but I know you very well. I am glad I have met you, and very proud that I may hope to have you for my friend.”

“It was one of the luckiest hits of my life that I met him. He mingled but little with the public, but was widely known for his remarkable intelligence and incorruptible integrity, and for a heart brimful and running over with kindness and benevolence, which showed themselves not only in words but in acts. He was the oracle of the whole country around him, and his fame had extended far beyond the circle of his immediate acquaintance. Though I had never met him before, I had heard much of him, and but for this meeting it is very likely I should have had opposition, and had been beaten. One thing is very certain, no man could now stand up in that district under such a vote.

“At the appointed time I was at his house, having told our conversation to every crowd

I had met, and to every man I stayed all night with, and I found that it gave the people an interest and a confidence in me stronger than I had every seen manifested before.

“Though I was considerably fatigued when I reached his house, and, under ordinary circumstances, should have gone early to bed, I kept him up until midnight, talking about the principles and affairs of government, and got more real, true knowledge of them than I had got all my life before.

“The next morning we went to the barbecue, and, to my surprise, found about a thousand men there. I met a good many whom I had not known before, and they and my friend introduced me around until I had got pretty well acquainted—at least, they all knew me.

“In due time notice was given that I would speak to them. They gathered up around a stand that had been erected. I opened my speech by saying:

““Fellow-citizens—I present myself before you today feeling like a new man. My eyes have lately been opened to truths which ignorance or prejudice, or both, had heretofore hidden from my view. I feel that I can today offer you the ability to render you more valuable service than I have ever been able to render before. I am here today more for the purpose of acknowledging my error than to seek your votes. That I should make this acknowledgment is due to myself as well as to you. Whether you will vote for me is a matter for your consideration only.”

“I went on to tell them about the fire and my vote for the appropriation and then told them why I was satisfied it was wrong. I closed by saying:

““And now, fellow-citizens, it remains only for me to tell you that the most of the speech you have listened to with so much interest was simply a repetition of the arguments by which your neighbor, Mr. Bunce, convinced me of my error.

““It is the best speech I ever made in my life, but he is entitled to the credit for it. And now I hope he is satisfied with his convert and that he will get up here and tell you so.”

“He came upon the stand and said:

““Fellow-citizens—It affords me great pleasure to comply with the request of Colonel Crockett. I have always considered him a thoroughly honest man, and I am satisfied that he will faithfully perform all that he has promised you today.”

“He went down, and there went up from that crowd such a shout for Davy Crockett as

his name never called forth before.

“I am not much given to tears, but I was taken with a choking then and felt some big drops rolling down my cheeks. And I tell you now that the remembrance of those few words spoken by such a man, and the honest, hearty shout they produced, is worth more to me than all the honors I have received and all the reputation I have ever made, or ever shall make, as a member of Congress.

“Now, sir,” concluded Crockett, “you know why I made that speech yesterday.

“There is one thing now to which I will call your attention. You remember that I proposed to give a week’s pay. There are in that House many very wealthy men—men who think nothing of spending a week’s pay, or a dozen of them, for a dinner or a wine party when they have something to accomplish by it. Some of those same men made beautiful speeches upon the great debt of gratitude which the country owed the deceased—a debt which could not be paid by money—and the insignificance and worthlessness of money, particularly so insignificant a sum as \$10,000, when weighted against the honor of the nation.

Yet not one of them responded to my proposition. Money with them is nothing but trash when it is to come out of the people. But it is the one great thing for which most of them are striving, and many of them sacrifice honor, integrity, and justice to obtain it.”

Holders of political office are but reflections of the dominant leadership—good or bad—among the electorate.

Horatio Bunce is a striking example of responsible citizenship. Were his kind to multiply, we would see many new faces in public office; or, as in the case of Davy Crockett, a new Crockett.

For either the new faces or the new Crocketts, we must look to the Horatio in ourselves!

**Concluding thoughts.** What do you think about Leonard E. Read’s comments on this reading?

Holders of political office are but reflections of the dominant leadership--good or bad--among the electorate.

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For either the new faces or the new Crocketts, we must look to the Horatio in ourselves!

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# Politics and Foreign Trade

*By Dwight Lee*

**Question for thought:** Why do governments tax and restrict trade?

The case for free trade is overwhelming, both theoretically and empirically, when one applies the concepts of opportunity costs and comparative advantage. Even if the people of a country have an absolute advantage in producing everything, they still gain from foreign trade because they cannot have a comparative advantage in producing everything.

Ample empirical evidence backs up the theoretical arguments in favor of free trade. The more that countries permit international trade to direct their productive efforts into their comparative advantages, the more they prosper relative to those that restrict trade. Despite this evidence, almost no country has followed a policy of free trade. With rare, and typically short-lived exceptions, governments reduce economic productivity and their citizens' prosperity by either taxing or imposing quotas on imports. Why? Answering that question is the purpose of this essay.

## Cooperation vs. Confiscation

Given the advantages of free trade, no government would erect barriers to imports if the political process allowed the same degree of social cooperation as the market process. When trade restrictions are eliminated consumers gain but some workers and investors lose, most temporarily but some permanently. Even those who would lose permanently from eliminating their industry's trade protections would still be better off living in an economy with completely free trade than in one where all domestic industries were protected. Even though individuals may benefit from their industry's protection, they would lose far more as consumers from the protections of everyone else.

Those in an industry subject to intense foreign competition will want government to protect them if they don't have to consider the costs it imposes on others. But protectionism would not occur if an industry had to pay these costs because the burden to consumers is always greater than the benefits to the protected industry.

Unfortunately, when people obtain benefits from government they do not have to pay prices reflecting their costs, as they do for benefits received in the marketplace. The cooperation of the marketplace comes from the market's ability to collect, aggregate, and communicate costs that are widely dispersed over many people so that they are taken into consideration by those responsible for them. In sharp contrast, when the costs from politically provided benefits are dispersed over many people, those costs are likely to be ignored. So government commonly becomes the means by which people can gain private advantage through confiscation rather than through cooperation.

## **Weakness of the Many**

A trade restriction concentrates benefits on the few in the protected industry at costs that are thinly dispersed over the entire consuming public. With the cost of a trade restriction spread over millions of consumers, few if any will be aware of the little extra they are paying for the protected product. After all, consumers buy hundreds of different products, and a little increase in the price of one product typically has little impact on the well-being of any one of them. Even if a consumer is aware of the extra cost, she will seldom know that it is caused by a trade restriction. And if by some chance she does know the reason for the extra cost, she has little motivation to respond politically. Even if she could eliminate the trade restriction, the effort might cost as much as or more than the restriction. While the total benefit from eliminating the restriction is huge, most of it would go to other consumers whether they took political action or not. But her political action is unlikely to do any good if she acts alone.

Of course, if a large percentage of the consumers act in unison they would surely have a decisive political influence. But because the number of consumers is so large, with each having such a small stake in the outcome, it is almost impossible to organize them for political

action. As is often the case, the larger the number of people harmed by a policy, the weaker their political influence.

## **Power of the Few**

On the other hand, because a relative few benefit from a trade restriction, they will be effective in lobbying for it. The benefit to each person will be significant, and each will be aware of both his own gain and the source of that gain. Also, because of the small number of beneficiaries, they are relatively easy to organize for political action. Indeed, they will generally be organized already through industry and occupational associations. So when a trade restriction is being considered, politicians will hear plenty from those favoring the restriction and little if any from those harmed by it. The result is a bias toward providing concentrated benefits and ignoring much larger, but dispersed costs. Therefore, it is often the case that the smaller the number of people benefiting from a policy, the more powerful their political influence in its favor.

With small, organized groups able to capture benefits at the expense of the general public through restrictions on trade (and many other special-interest policies), little social cooperation is achieved through the political process. For that reason, government is a constant threat to the social cooperation that comes from free-market activity.

## **Considering Some Costs**

The costs of trade restrictions are more difficult to identify than indicated above. Consider restrictions on steel imports. Few people buy steel directly. Rather they pay for it indirectly when they buy products made from steel. Also, when an import restriction increases steel prices, employment opportunities are reduced in industries relying on steel as an input. Those who don't get jobs because of a trade restriction will seldom know the reason. It has been estimated that limiting steel imports to 15 percent of the U.S. market would cost American consumers \$189,000 a year for each steel job saved, and that for every U.S. steel job

saved, over 3.5 U.S. jobs would be destroyed because of higher steel prices.<sup>(1)</sup>

**Concluding questions:** Which leads to more social cooperation? Markets or government action? Does the degree of social cooperation affect economic progress and the living standards of people? Explain your response.

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1. See Arthur Denzau, "American Steel: Responding to Foreign Competition," Center for the Study of American Business, Washington University, St. Louis, Mo., February 1985. [↩](#)

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# Energy Production versus Conservation

*By Dwight Lee*

**Question for thought:** Can governments determine how much energy production and conservation is appropriate and efficient? Explain.

One of the most important insights in economics was made by F.A. Hayek in a famous article titled “The Use of Knowledge in Society” (*American Economic Review*, September 1945). Hayek’s insight was simple, but powerful: the information necessary for making sensible economic choices is far too dispersed and difficult to articulate ever to be possessed by any one person or group of experts. Hayek emphasized in his article that only through market prices can people become sufficiently informed to direct resources into their most valuable uses. Eliminate market prices, or distort them with politically imposed ceilings or floors, and you systematically destroy the information that people need to avoid wasting resources.

Unfortunately, most people seem immune to Hayek’s point. This immunity is particularly strong among politicians and journalists. The prevailing view seems to be that when an economic problem arises, the solution lies in ignorance.

The most recent example of this view concerns the production-versus-conservation debate over energy policy. It is widely accepted that the decision on the right mix of production and conservation is best made by Congress after it has imposed “market-based” price caps on important energy prices. Consider an editorial comment in the May 28, 2001, *Business Week*: “No one, except for a handful of eco-extremists, believes that conservation is the only answer to the energy crisis. But few believe that conservation plays no role either. It is up to Congress to negotiate a balance in the weeks ahead.” (Emphasis added. I should point out that price controls were not recommended in this editorial.)

If politicians could only resist the urge to control energy prices, there would be no need for them to worry about “negotiating a balance” between energy production and conservation. But having yielded to the urge to control those prices, neither politicians nor anyone else can have the foggiest idea how much production and conservation is appropriate.

Every time we get worried about the availability of energy, a debate breaks out over conservation versus production. It happened in the 1970s and early '80s in response to the export restrictions of OPEC and then again earlier this year in response to less drastic OPEC cutbacks coupled with the politically induced electricity shortages in California. One side argues that we should drive smaller cars, make more use of mass transit, buy more energy-efficient appliances, do a better job insulating our homes and offices, and keep them warmer in the summer and cooler in the winter; the list of possibilities goes on. The other side argues that we can't conserve ourselves to prosperity, so we should produce more energy by drilling for more oil, mining more coal, building more electric generating plants, and bringing more nuclear plants on line.

Of course, on both sides of the debate reasonable people acknowledge that some mix of conservation and production is necessary. But all insist that their policy recommendations will result in the right mix, or that the other side's recommendation will result in the wrong mix.

Which side is right? What is the best combination of production and conservation? The answer is, no one knows. No one! No individual or group of experts in Washington, D.C., or anywhere else, has a clue about how much energy we should conserve or produce.

## **But We Can Find Out**

But the information necessary for determining the best balance between conservation and production does exist, partly in the form expert knowledge on the technical details of recovering energy resources, converting those resources into usable energy, and transporting it to users. This information is possessed by tens of thousands of people scattered all over the world, few of whom have direct contact with each other. Yet somehow, if energy decisions are to be sensible, it all has to be collected, given proper weight, and communicated to those who

can make the best use of it.

Equally important information has nothing to do with expert knowledge and is even more widely scattered: the information that millions of people have about their circumstances and preferences, and the tradeoffs they are willing to make. Some can easily take the bus to work, while others live in areas or have jobs that make taking the bus extremely difficult. Some wouldn't mind shifting to smaller cars, while others with growing families and special needs would. Some would suffer little discomfort from a wider range of inside temperatures, while those with certain health concerns would suffer more than discomfort. Some people are simply afraid of the dark and are willing to sacrifice other things to keep the lights on at night. This information is not only more fragmented and dispersed than the expert information, it is highly subjective and impossible to articulate precisely, if at all. This information may seem rather mundane, but it is just as essential to sound energy choices as is the scientific knowledge possessed by experts.

Fortunately there is no need to collect all this information in one place so it can be run through a computer to determine the right amount of conservation and production—even if all the information were collected, no computer could process it all—and even if it could, by the time the processing was done, the information would have changed. The only way that the information needed to make sensible energy decisions can be communicated by those who have it to those in the best position to respond appropriately to it, and communicated in a way that motivates appropriate responses, is through market prices—assuming these prices are not distorted by politically imposed caps.

Market prices allow consumers to inform producers, and one another, how much they value different energy uses, and allow producers to inform consumers how much it costs to provide different types of energy. In response consumers will decrease their energy use in ways that minimize their inconvenience when that inconvenience is less than the value of the energy saved. And producers will expand production of energy sources that provide the most value to consumers for the cost required, and will expand those sources as long as consumers value the additional energy by more than the value sacrificed to produce it. The result is a combination of conservation and production that best harmonizes the interests of us all.

Price communication doesn't work perfectly, and even without price caps it can be

argued that markets don't guarantee exactly the right amount of energy conservation and production. But energy decisions made in response to the information provided by market prices are far better than those that will be made by politicians and bureaucrats in the informational vacuum they create by imposing price caps.

**Concluding question:** Compare the efficiency of the energy decisions made by private individuals responding to price signals to the efficiency of the decisions made by government officials responding to political considerations.

**[Return to Element 3.7](#)**

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# Social Cooperation and the Marketplace

*By Dwight Lee*

**Question for thought:** As you read through this selection, think about the following: do free and open markets promote social cooperation?

The primary insights of economics come from explaining how individuals pursuing their own interests make choices that best enable others to pursue their interests as well. This social cooperation is not inevitable. It requires rules that motivate people to consider the concerns of others. The rules that accomplish this amazing feat define the free market economy.<sup>(1)</sup>

Free-market economies vary in their particulars owing to cultural variations. But the fundamental rules can be stated in terms of private property. Property is owned privately, and private owners have the right, within broad limits, to use their property as they see fit; rights to property are transferable on any mutually agreed-on terms. Before considering how these rules motivate social cooperation, let's see how remarkable that achievement is.<sup>(2)</sup>

## Sounds Impossible

Full social cooperation would require that every person have information about the preferences of everyone affected by his decisions and on the constantly changing conditions that alter the relative scarcity of resources. For example, everyone considering using cotton products would have to be informed if a fad has Brazilian teenagers increasing their desire for denim clothing, or if the supply of cotton needed to produce denim is reduced by poor weather in Mississippi, or if new evidence suggests that respiratory problems may result from working in cotton fields. People would have to know literally millions of things that affect the consumption and production of thousands upon thousands of products to know enough to

adjust their decisions in mutually accommodating ways. One might throw his hands up at this point and consider that requirement impossible to satisfy.

Transmitting information is only part of the problem. Even if it is communicated, people would still have to be motivated to act on it appropriately, to respond as though they were as concerned with everyone else's wellbeing as they were with their own.

But before concluding that social cooperation requires an information network far superior to anything even remotely available, and a level of compassion seldom practiced by ordinary mortals, consider that every day we benefit from exactly that type of social cooperation. Indeed, it is so common that most people take it for granted.

## How Does It Happen?

What harmonizes the pursuits of billions of individuals who have little direct information about, or interest in, one another's circumstances? The answer is found in the information and incentives that emerge when people pursue their objectives in accordance with the marketplace rules of private property and voluntary exchange.

When property is privately owned and transfers are voluntary, the prices that emerge from the interaction of buyers and sellers communicate a tremendous amount of information. The price you observe for a product reflects how much value other consumers place on an additional unit of it. If the value that Brazilian teenagers place on denim clothing increases, their additional purchases will communicate this information throughout the world in the form of slightly higher prices for cotton products. Everyone who is considering buying these products will be immediately aware of their increased value to others. Prices also indicate the relative availability of different products, and the cost of producing more of them.

Market prices motivate people to respond as if they are as concerned with the interests of others as they are with their own. Consumers will respond to the higher prices caused by Brazilian teenagers as if the consumers are thinking, "Teenagers in Brazil tell us they value additional cotton in denim clothing by a little bit more than we value it in the cotton products we use; so we will reduce our consumption so Brazilians can increase theirs." Or in the case of

evidence of health damage to cotton workers, consumers will respond to the higher prices as if they are thinking, "We will reduce our consumption of cotton products to reduce the number of people exposed to the risk in the cotton fields, and we will pay a little more to compensate those willing to take that risk."

Of course, it is primarily self-interest that motivates consumers to respond that way, rather than concern for people they will never meet. Indeed, higher prices tell consumers nothing about *why* cotton products have become more valuable. (Important information, of course, is also communicated through lower prices.) Market prices are efficient precisely because they do not overload consumers with irrelevant information.

Prices also motivate suppliers to respond to the interests of others. Obviously, higher prices tell suppliers that consumers want more of a product. Suppliers are strongly motivated to respond appropriately. But consumers also communicate information disagreeable to suppliers when they decide they want less of a product.

Consumers communicate to suppliers indirectly through the prices for labor, land, machinery, semi-finished goods, and raw materials (inputs). The prices textile producers, for example, pay for inputs reflect the value consumers place on other products that could be produced with those inputs. If those other products become more valuable to consumers, textile producers will receive this information through higher prices for their inputs, which are bid away by the other industries. Textile production will be reduced, and some textile manufacturers may go bankrupt. When a supplier reduces his output, or goes bankrupt, it is as though he is saying, "Consumers are telling me that the resources I am using are more valuable in other employments, so I will use fewer of them so others can put them to better use."

## **Blaming the Market for Its Success**

The social cooperation that results from the information and incentives communicated through the market is not perfect. But no other economic system comes remotely close to the market in allowing people to achieve their objectives in productive cooperation with each other. The market is criticized mostly for its success rather than for its failure. It is commonly

blamed for delivering news about scarcity. No one likes scarcity, but it is not caused by markets. Indeed, the wonder of markets is that they call to action those in the best position to respond. Blaming scarcity on markets makes no more sense than blaming fires on fire alarms.

The problem of scarcity will always be with us. But the social cooperation that is realized only through the marketplace permits us to push the limits of scarcity back farther than is possible under any other system.

**Concluding questions:** Do market prices encourage people to cooperate with each other? Does personal self-interest undermine the operation of the markets? Is social cooperation through markets important if we are going to get the most out of our resources? Explain.

**[Return to Element 3.8](#)**

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1. Adam Smith famously discussed social cooperation in terms of his "invisible hand." See *The Wealth of Nations* (New York, Modern Library, 1937 [1776]), p. 423. ↩

2. Readers are encouraged to reinforce the discussion in this section by reading F.A. Hayek, "The Use of Knowledge in Society," in his *Individualism and Economic Order* (Chicago: University of Chicago Press, 1980 [1948]). In my opinion, this is one of the most important economics articles ever written. ↩

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# A Case for Constitutional Reform in Ukraine

*April 13, 2016*

**Authors:** Roger Myerson, winner of the Nobel Prize in Economic Sciences (2007); Gerard Roland, UC Berkeley and E. Morris Cox professor; Tymofiy Mylovanov, VoxUkraine co-founder, KSE honorary president

## Ukraine's recurrent political crises

**On April 10, 2016 the prime minister of Ukraine Arseniy Yatsenyuk announced his resignation, hinting that he might have an ambition to run for president in the future.** Mr. Yatsenyuk endorsed the speaker of the parliament Volodymyr Groysman, considered to be loyal to the president of Ukraine, Petro Poroshenko, as his successor.

Recurrent political crises, short-lived governments, and pervasive corruption are a norm in Ukraine. Equally normal is political infighting between the president and the prime minister, except when the president consolidates most of the real authority. Strong presidents, however, tend to abuse their power and can be checked only by street protests, which culminate in Maidans that occasionally topple the president. Frustrated with the political infighting and the slow progress with reforms and eliminating corruption since the most recent Maidan, the Ukrainian public has been actively discussing what the best democratic system would be for Ukraine. There is good reason to believe that fundamental constitutional changes may be needed for Ukraine to escape from the systematic pattern of political crises and endemic corruption.

# Flaws in the Constitution?

Ukraine has a mixed parliamentary-presidential system in which both the prime minister and the president have control over various parts of the executive branch of government. The president is directly elected by the people, while the prime minister is appointed by the parliament. The president has authority over the heads of the local governments and over some parts of the national government, while the prime minister controls most of the national government. This mixture of presidential authority over local governments with national ministers who are accountable to the parliament is particularly unique to Ukraine.

This confounding of powers creates ample opportunities of political infighting and finger pointing. The President's power to appoint local administration heads is particularly dysfunctional. Appointed by the president, these officials have little incentive to do what voters want; instead they do what the president wants. At the same time, the prime minister controls most of the ministers of the national government. As the president and the prime minister compete to gain more power, the national and the local governments are caught in the crossfire with different level officials sabotaging each other's actions.

The other fundamental problem is that Ukraine greatly needs a national leader who will be dedicated to fighting corruption in government. The Constitution of Ukraine gives the president the power to appoint, subject to the approval by the parliament, the general prosecutor and the head of the security services. But for the President to fill the role of a leader committed to the fight against corruption it would be necessary to remove the president from responsibility for staffing the administration. Any leader would find it politically difficult to investigate charges of corruption by officials whom the leader has appointed.

The people of Ukraine could look to their president as someone willing to preside over anti-corruption investigations if the power of appointment over executive officials were fully transferred to the prime minister chosen by the Verkhovna Rada and to local governors chosen by local councils. This would also decrease the opportunities for political infighting and improve accountability in the government by making it impossible for the president and the prime minister to blame each other for failures of the executive branch.

# Comparing presidential and parliamentary systems

Democracies in the world are divided between presidential and parliamentary systems. Of course, there is no perfect democratic system. There are trade-offs between advantages and disadvantages of different democratic systems. In the next two sections, we offer a broad comparative discussion of presidential and parliamentary systems and their dependence on different kinds of voting rules for electing the legislature. (This discussion is summarized in a Table at the end of this article.)

In presidential democracies, the chief of the executive branch of government (the president) is elected independently of the legislative branch of government (the parliament). The Parliament thus does not have the power to vote down the president, except via impeachment, under exceptional circumstances.

In a parliamentary system, the executive (the prime minister) is voted in by the parliament, which also has the power to bring down the government via a failed vote of confidence. Thus there is no constitutional separation of executive and legislative power in parliamentary systems.

When a majority coalition controls the government in a parliamentary system, it can make decisions fast and efficiently. The prime minister's dependence on a legislative majority increases his incentive to maintain a reputation for reliably distributing benefits of power to the legislators who support him. The members of a governing parliamentary coalition can also be induced to support a bill by making it a confidence vote on which the continuation of the government would depend. As a result parliamentary parties tend to be more disciplined and cohesive than parties in a presidential system.

In a presidential system, the president is more likely to distribute patronage benefits to the contributors who can support his re-election. Then special-interest "pork barrel" provisions must be attached to legislation to win the support of legislators who feel less party discipline than in a parliamentary system.

In a parliamentary system, if no party has a majority in the legislature then government can be paralyzed until a collection of parties that together have a majority of seats can reach an

agreement to form a government. This often happens for a few weeks after an election, but a new governing coalition can usually be formed quickly. In a presidential system, however, such a paralysis of decision-making can continue throughout the entire term of a president if the president's party does not control the legislature, as has regularly occurred in the US in recent decades.

Parties in a parliamentary coalition can threaten to bring down the government if they do not get enough benefit from participating in the coalition. Such threats in a parliamentary system can create a risk of repeated government crises and prolonged periods without a working government. But the latter risk can be minimized by a constitutional rule called a "constructive vote of no-confidence," whereby a parliamentary government falls only when there is an alternative majority to replace it. This rule was first introduced in Germany and is now used in many countries.

There are some examples of well-functioning presidential regimes where the powers of the executive are limited, as the legislature has effectively checked the tendency of presidents to increase their power. Examples that come to mind are the US and Chile. But most presidential regimes in the world have had a tendency toward autocracy, as the presidents regularly push to extend the power of their office until it effectively controls all branches of government. This can lead to abuses of power by the incumbent president who feels his powers are unchecked. Russia, Turkey are recent examples. All former FSU countries adopted presidential regimes, except Moldova and the record of those countries is mostly not good compared to the parliamentary regimes of Central Europe and Western Europe. Ukraine's history in the last 25 years is part of that bad experience.

Some countries, including Ukraine, have used a mixed semi-presidential system in which power is shared between an elected president and a prime minister who is responsible to the legislature. Advocates of such semi-presidential systems hope to combine the best of presidential and parliamentary systems, but critics worry that they may be combining the worst of both systems instead. Certainly any semi-presidential system can create a basic conflict within the executive between the president and prime minister.

One of the first semi-presidential systems was in the German Weimar republic (1919-1933), which collapsed when the Nazis rose to power before World War II. France today is

often considered a semi-presidential system, but France may be better categorized as a parliamentary system, because (under the accepted norms of “cohabitation” in France) the prime minister effectively controls the government when the legislature is controlled by a party other than the president’s.

## **Dependence on the electoral system**

In some countries, legislators are elected by a system of proportional representation in which seat shares of the different parties are more or less proportional to the vote shares. In other countries, legislators are elected by a majoritarian electoral system in which there is only one seat per district and it goes to the candidate who gets the most votes.

A proportional representation system tends to generate more small parties in the legislature, which can increase the problem of forming a governing coalition after an election in a parliamentary system. Decisions are also generally slower and involve compromises that are often inefficient. Government stability is often lower as one or more of the parties can threaten to stop supporting the government.

But a majoritarian electoral system can leave substantial minority groups with little or no representation in the legislature if they are not sufficiently concentrated geographically to form a majority in some district. Furthermore, majoritarian electoral systems can increase the problem of geographical favoritism, against those districts whose representatives are not part of the governing coalition. This latter problem can be reduced by decentralizing substantial powers to local governments, so that people can be confident of local government services even when they are outside the geographical basis of the governing national coalition.

To avoid these problems of alienating underrepresented minorities, proportional representation is commonly preferred in parliamentary systems. A parliamentary system with proportional electoral rule tends to be more inclusive than one with majoritarian rule. Another advantage of proportional representation is that it will tend to favor universalistic over particularistic public goods, as electoral competition is over gaining votes in general, not just over gaining votes in particular pivotal districts. This is also good for protecting minorities.

In presidential systems, however, the fragmentation of parties under proportional representation can make the legislature less able to check the power of the president.

Given the common danger of an unchecked president making himself an autocrat, many believe that presidential democracy works better when the legislature is elected by a majoritarian electoral system, as in the US and Chile.

## **What can work best in Ukraine?**

In Ukraine's semi-presidential system, national ministers are accountable to Verkhovna Rada but local government heads are appointed by the president. This division of power has created severe problems for Ukraine in at least three ways. First, it has created the continuing potential for intra-governmental conflict between national ministers and local government heads. Second, the voters may understand that the President would be less concerned about corruption by his appointed local officials in regions where he gets fewer votes, and so it may become rational for virtually everybody to oppose the President in such regions that are outside his expected domain of support. Thus, this provision has subtly but systematically increased the regional polarization of presidential politics in Ukraine.

Third, presidential control of local administration has reduced the ability of the voters to find promising new national leaders in local governments. In most successful democracies, elected heads of local governments can prove their qualifications to strong competitive candidates for national leadership by providing better public service in local government. But when the President of Ukraine can appoint and dismiss heads of local government, he may use this power to eliminate any local leaders with any chance of becoming strong competitive candidates against him. Thus, Ukraine's semi-presidential system has tended to weaken democratic competition.

What Ukraine needs most today is a national leader who is truly dedicated to uncovering corruption everywhere. When the President and Prime Minister both appoint officials for large parts of the government, then both of them could be embarrassed by any major corruption scandal. If the people of Ukraine want to have a President who is fully

motivated to expose corruption everywhere, then the President should be fully separated from the appointment of government officials. This is a strong argument for moving toward a true parliamentary system, making national government officials fully accountable to the Verkhovna Rada, and making local government officials in the oblasts and rayons fully accountable to their respective oblast or rayon councils.

Austria may be a good example for Ukraine to consider. The President of Austria is directly elected by the people, but has only very limited power over the government. This separation from direct responsibility for government has enabled presidents of Austria to become honest articulate advocates of the broad public interest in the country. As a result, Austrian presidents tend to become very popular and are regularly re-elected with large majorities (even when the President's party does not do well in other elections).

The above arguments for reducing presidential powers and recentralizing local governments do not depend on any reform of Ukraine's electoral system. But some have argued for an electoral reform that would increase the seats allocated by proportional representation from 50% of the Verkhovna Rada to 100%. If the single-member districts were eliminated, then it would become more important to have open party lists that allow voters to designate which individuals they want seated first, among those nominated by the party for their region. If proportional representation was applied in large electoral districts with 20 or more representatives, then any coalition of parties that could form a governing majority in the Verkhovna Rada would be very likely to include at least some representatives from every electoral district. Thus, electoral reform could also help to reduce regional polarization in Ukraine.

The ultimate power to decide any question about constitutional reform in Ukraine must belong democratically to the citizens of Ukraine. As a general rule, however, current elected leaders can be expected to resist any changes that would reduce their powers of their own offices, and so constitutional reforms can rarely succeed without strong popular demand. Such resistance to constitutional reform is necessarily not a bad thing, because stability in government is important, and so constitutions should be changed only when there is great need. This essay is offered as testimony to the people of Ukraine that now may be a time when questions of constitutional reform are truly worth very serious consideration.

# Trade-offs between different democratic political institutions

## Presidential majoritarian elections

### Pros

- strong separation of powers possible

### Cons

- excessive concentration of powers in hands of president
- less party discipline, more pork barrel politics
- possible paralysis of government

## Parliamentary majoritarian elections

### Pros

- fast and efficient decision-making
- strong party discipline

### Cons

- no separation of powers between executive and legislature
- minorities can be durably excluded from government
- some minorities and localities may be too favored

## Presidential proportional elections

### Pros

- strong separation of powers possible

## Cons

- excessive concentration of powers in hands of president
- less party discipline, more pork barrel politics
- possible paralysis of government
- more fragmentation gives more power to the president and makes clientelism even worse

## Parliamentary proportional elections

### Pros

- inclusive majorities
- strong party discipline
- universalistic public goods

### Cons

- no separation of powers between executive and legislature
- slower and less efficient decision-making
- excess power to minority government partners
- less government stability

**[Return to Part 3 Final Thoughts](#)**

This article is courtesy of [VoxUkraine](#).

# Suggested Additional Readings

We hope that reading *Common Sense Economics* has convinced you that economics is important, interesting and a great deal of fun. If you want to learn more, there are several introductory textbooks available (including one where the authors overlap with those from the current work). These present the ideas we have discussed in greater detail, although with a lot more graphs. Below, is a list of many books, some classical and some recent, that will increase your economic insight and that should be understandable even for those not mathematically inclined. Unfortunately, we cannot easily track which ones have been translated into the languages where we have provided *Common Sense Economics*. If you come across versions in your language, please let EFI or our local partner in your country know.

Please let us know at [suggestions@econfun.org](mailto:suggestions@econfun.org) which titles you enjoy and others you think should be added. Also feel free to share your reactions on social media. We will update this list from time to time as new books are released, so feel free to consult our website at <https://econfun.org>. In the meantime, you can assume that any newly released books by any of these authors are worth looking at. Happy exploring!

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# Glossary

**absolute advantage:** The superior production capabilities of an entity, while comparative advantage is based on the analysis of opportunity cost. ↩

**annuity:** A fixed amount of money paid to someone every year, usually until their death. ↩

**balanced budget:** The state of government finances when current government revenue from taxes, fees, and other sources is just equal to current government expenditures. ↩

**bankruptcy:** When a court judges that a debtor is unable to make the payments owed to a creditor. ↩

**bond:** A promise to repay the principal (amount borrowed) plus interest at a specified time in the future. Organizations such as corporations and governments issue bonds as a method of borrowing from bondholders. ↩

**broken window hypothesis:** Theory that suggests that visible signs of disorder and neglect in an environment can lead to an increase in both petty and serious crime. ↩

**budget:** Estimated income and itemized planned expenditures for a time period. ↩

**budget deficit:** The amount by which total government spending exceeds total government revenue during a specific time period, usually one year. ↩

**budget surplus:** The amount by which total government spending falls below total government revenue during a specific time period, usually one year. ↩

**capital formation:** The production of buildings, machinery, tools, and other equipment that

will enhance future productivity. The term can also be applied to efforts to upgrade the knowledge and skill of workers (human capital) and thereby increase their ability to produce in the future. ↩

**capital investment:** Expenditures on the buildings, machinery, tools, and other equipment that will enhance future productivity. ↩

**capital market:** The broad term for the various marketplaces where investments such as stocks and bonds are bought and sold. ↩

**capitalism:** An economic, political, and social system in which property, business, and industry are privately owned, directed toward making the greatest possible profits for successful organizations and people. ↩

**certificates of deposit (CD):** A Savings certificate with a fixed maturity date and specified fixed interest rate, which can be issued in any denomination aside from minimum investment requirements. Such instruments restrict access to the funds until the maturity date of the investment. Certificate of Deposit is the term used in the United States. Similar instruments exist in most countries although the name may differ. In the EU these are known as “Fixed Rate” or “Fixed Deposit” accounts. ↩

**certification:** Confirms the education, training, and other qualifications of an individual. Unlike licensing, certification does not prohibit noncertified individuals from competing in the market. ↩

**Coase theorem:** A theory that bargaining between individuals or groups over property rights will lead to an optimal and efficient outcome. ↩

**collateral:** Something pledged as security for repayment of a loan, to be forfeited in the event of a default. ↩

**collusion:** A secret or illegal cooperation or conspiracy, especially in order to cheat or deceive others. A group of firms engaged in collusion is often called a cartel. ↩

**competition:** A dynamic process of rivalry among parties such as producers or input suppliers, each of whom seeks to deliver a better deal to buyers when quality, price, and product information are all considered. Competition implies open entry into the market. Potential suppliers do not have to obtain permission from the government in order to enter the market. ↩

**compound interest:** Interest that is earned not only on the principal but also on the interest previously earned. ↩

**constitution:** A body of fundamental principles or established precedents according to which a state or other organization is acknowledged to be governed. ↩

**consumer price index:** An index that tracks changes in the cost of a basket of goods and services over time, serving as a key indicator of inflation and cost of living. It compares the price of this basket in a specific period to a base year, helping to understand how prices are changing and affecting consumer purchasing power. ↩

**creative destruction:** The replacement of old products and production methods by innovative new ones that consumers judge to be more valuable. The process generates economic growth and higher living standards. ↩

**crony capitalism:** An economy in which success in business depends on close relationships between business people and government officials. It may be exhibited by favoritism in the distribution of legal permits, government grants, special tax breaks, or other forms of state interventionism. ↩

**dead end job:** A job where there is little or no chance of career development and advancement

into a better position. ↩

**decentralization (of government):** The transfer of authority from central to local government.

↩

**depreciation:** Loss in value of an asset as it is used. ↩

**dirigisme:** State control of economic and social matters. ↩

**discouraged worker:** Someone who has given up looking for work and has left the labor market. ↩

**diversification:** The strategy of investing in a number of diverse firms, industries, and instruments such as stocks, bonds, and real estate in order to minimize the risk accompanying investments. ↩

**dividend:** (A part of) the profit of a company which is paid to the people who own shares in it.

↩

**economic efficiency:** A situation that occurs when (1) all activities generating more benefit than cost are undertaken; and (2) no activities are undertaken for which the cost exceeds the benefit. ↩

**economic institutions:** The legal, regulatory, and monetary rules, laws, and customs that affect the security of property rights, enforcement of contracts, and the volume of exchange. They exert a major impact on transaction costs between parties, particularly when the trading partners do not know each other. ↩

**economic prosperity:** Persistent increases in per capita income and improvements in the standard of living. ↩

**economies of scale:** Reductions in the firm's per-unit costs that occur when large plants are used to produce large volumes of output. ↩

**embargo:** A government-imposed restriction on trade or other commercial activity with a particular country. ↩

**entrepreneur:** A profit-seeking decision-maker who assumes the risk of developing innovative approaches and products with the expectation of realizing profits. A successful entrepreneur's actions will increase the value of resources. ↩

**equilibrium:** A state in which the conflicting forces of supply and demand are in balance. When a market is in equilibrium, the decisions of consumers and producers are brought into harmony and the quantity demanded will equal the quantity supplied at the market clearing price. ↩

**equities:** Refers to the ownership interests or shares of stock issued by companies. ↩

**equity mutual fund:** An entity that pools the funds of investors and uses them to purchase a bundle of stocks. Mutual funds make it possible for even small investors to hold a diverse bundle of stocks. ↩

**exchange rate:** The domestic price of one unit of a foreign currency. For example, if it takes \$0.035 to purchase one Ukrainian hryvnia, the dollar-hryvnia exchange rate is 0.035. ↩

**Exchange traded funds (ETFs):** Investment funds that are traded on stock exchanges, much like individual stocks. They are designed to track the performance of a particular index, commodity, sector, or asset class. ETFs offer investors exposure to a diversified portfolio of assets, similar to mutual funds, but they trade throughout the day on stock exchanges at market-determined prices. ↩

**Experian Credit Score:** It is a numerical representation of an individual's creditworthiness based on their credit history and financial behavior, as assessed by Experian's proprietary credit scoring model. ↩

**exports:** Goods and services produced domestically but sold to foreign purchasers. ↩

**externality:** Spillover effect of an activity that influences the well-being of nonconsenting external parties. If the spillover effects are positive, they are also called external benefits. If the spillover effects adversely impact external parties, they are also called external costs. ↩

**extreme poverty rate:** The extreme poverty rate is a measure used to indicate the proportion of a population living below the international poverty line, which is defined by the World Bank as earning less than \$2.15 per day at 2017 purchasing power adjusted prices. ↩

**FICO score:** This score is used by lenders to help make accurate, reliable, and fast credit risk decisions across the customer lifecycle. The credit score rank-orders consumers by how likely they are to pay their credit obligations as agreed. ↩

**foreclosure rate:** The percentage of home mortgages on which the lender has started the process of taking ownership of the property because the borrower has failed to make the monthly payments. ↩

**foreign exchange:** Often abbreviated as forex or FX, refers to the global marketplace where currencies are traded. For example, when a tourist from the United States visits France and needs to exchange their US dollars (USD) for euros (EUR) to pay for goods and services there. They participate in foreign exchange by selling USD and buying EUR. ↩

**free rider:** Someone who benefits from a collective resource, service, or good without contributing fairly to its provision or maintenance. ↩

**game theory:** Game theory is a branch of mathematics and economics that studies strategic interactions between rational decision-makers. It provides a framework for analyzing situations in which the outcome of an individual's decision depends not only on their own actions but also on the actions of others. ↩

**government bond:** A debt security issued by a government to support government spending. Federal government bonds in the United States include savings bonds, Treasury bonds, and Treasury inflation-protected securities (TIPS). ↩

**government enterprise:** A legal entity that is created by a government in order to partake in commercial activities on the government's behalf. ↩

**government failure:** A situation in which the structure of incentives is such that the political process, including democratic political decision-making, will encourage individuals to undertake actions that conflict with economic efficiency. ↩

**gross domestic product (GDP):** The market value of all goods and services in their final (rather than intermediate) use which are produced within a country during a specific period. It is a measure of both income and output. ↩

**human capital:** The abilities, skills, and health of human beings that contribute to the production of both current and future output. Investment in training and education can increase the supply of human capital. ↩

**hyperinflation:** A condition where the price of everything in a national economy goes out of control and increases very quickly. People still debate when, precisely, very rapid inflation turns into hyper-inflation (an increase in prices of 50% or even 100% or more within a year).  
↩

**import quota:** A specific limit or maximum quantity or value of a good that is permitted to be

imported into a country during a given period. ↩

**imports:** Goods and services produced by foreigners but purchased by domestic buyers. ↩

**incentives:** The expected payoffs from actions. They may be either positive (the action is rewarded) or negative (the action results in penalty). ↩

**income transfers:** Payments made by the government to individuals and businesses that do not reflect services provided by the recipients. They are funds taxed away from some and transferred to others. ↩

**indexed equity mutual fund:** An equity mutual fund that holds a portfolio of stocks which matches their share (or weight) in a broad stock market index such as the S&P 500. The overhead of these funds is usually quite low because their expenses on stock trading and research are low. The value of the mutual fund shares will move up and down along with the index to which the fund is linked. ↩

**inflation:** A continuing rise in the general level of prices of goods and services. During inflation, the purchasing power of the monetary unit, such as the hryvnia, declines. ↩

**international dollar:** An artificial currency used to eliminate purchasing power differences when comparing national economies. ↩

**investment:** The purchase, construction, or development of capital resources, including both nonhuman and human capital. Investments increase the supply of capital. ↩

**investment goods:** Goods and/or facilities bought or constructed for the purpose of producing future economic benefits. Examples include rental houses, factories, ships, or roads. They are also often referred to as capital goods. ↩

**invisible hand:** The tendency of market prices to direct individuals pursuing their own self-interest into activities that promote the economic well-being of the society. ↩

**“junk” bonds:** High-risk bonds, usually issued by less-than-well-established firms, that pay high interest rates because of their risk. ↩

**labor force:** The labor force is the sum of persons in employment plus persons in unemployment. Together these two groups of the population represent the current supply of labor. ↩

**law of comparative advantage:** A principle that reveals how individuals, firms, regions, or nations can produce a larger output and achieve mutual gains from trade. Under this principle each specializes in the production of goods that it can produce cheaply (that is, at a low opportunity cost) and exchanges these goods for others that are produced at a high opportunity cost. ↩

**law of demand:** A principle that states there is an inverse relationship between the price of an item and the quantity of it which buyers are willing to purchase when other things are held constant. As the price of an item increases, consumers purchase less of it. As price decreases, they buy more. ↩

**law of supply:** A principle that states there is a positive relationship between the price of an item and the quantity of it which producers are willing to supply when other things are held constant. As the price of an item increases, producers will supply more. As price decreases, they will supply less. ↩

**less-developed countries:** Countries with low per capita incomes, low levels of education, widespread illiteracy, and widespread use of production methods that are largely obsolete in high-income countries. They are sometimes referred to as developing countries. ↩

**logrolling:** The exchange between politicians of political support on one issue for political support on another. ↩

**loss:** The amount by which sales revenue fails to cover the cost of supplying a good or service. Losses are a penalty imposed on those who use resources to produce less value than they could have otherwise produced. ↩

**managed equity mutual fund:** An equity mutual fund that has a portfolio manager who decides what stocks will be held in the fund and when they will be bought or sold. A research staff generally provides support for the fund manager. ↩

**marginal:** A term used to describe the effects of a change in the current situation. For example, the marginal cost is the cost of producing an additional unit of a product, given the producer's current facility and production rate. ↩

**marginal benefit:** The change in total value or benefit derived from an action such as consumption of an additional unit of a good or service. It reflects the maximum amount that the individual considering the action would be willing to pay for it. ↩


**marginal cost:** The change in total cost resulting from an action such as the production of an additional unit of output. ↩


**marginal tax rate:** The percentage of an extra dollar of income that must be paid in taxes. It is the marginal tax rate that is relevant in personal decision-making. ↩


**market:** An abstract concept that encompasses the trading arrangements of buyers and sellers which underlie the forces of supply and demand. ↩


**market failure:** A situation in which the structure of incentives is such that markets will encourage individuals to undertake activities which are inconsistent with economic efficiency.





**market forces:** The information and incentives communicated through market prices; profits and losses that motivate buyers and sellers to coordinate their decisions. 


**middlemen:** People who buy and sell goods or services or arrange trades. Middlemen reduce transaction costs. 

**minimum wage:** Legislation requiring that workers be paid at least the stated minimum hourly rate of pay. 

**moderate poverty rate:** The moderate poverty rate refers to the proportion of a population living below a poverty threshold \$3.65 that is higher than the extreme poverty line but still indicates a low standard of living. The \$3.65 poverty line is derived from typical national poverty lines in countries classified as Lower Middle Income. 

**monetary policy:** The deliberate control of the national money supply and, in some cases, credit conditions, by the government. This policy establishes the environment for market exchange. 

**money:** Anything that is generally accepted as final payment for goods and services by buyers and sellers; serves as a medium of exchange, a store of value, and a standard of value. Characteristics of money are portability, stability in value, uniformity, durability, and acceptance. 

**money market certificate:** A type of savings product in which a bank or lending institution invests your money in a variety of investments. 

**money supply:** The supply of highly liquid (easily available) assets used to make purchases. The money supply typically includes currency and balances in checking account funds. Other

definitions expand to include assets that can be converted into payment mechanisms easily, such as savings account balances. Note that credit cards are not part of the money supply. If they are paid at the end of the month, to count them would mean double counting checking account balances. An interesting debate is if and when Central Banks will start to include Bitcoin (and other cyber currencies) as a part of the money supply. ↩

**monopoly:** A monopoly, in a broader economic sense, is a market structure characterized by a single seller or producer supplying a unique product or service with no close substitutes. The concept of monopoly covers a range of contexts, from economic markets to the specific case of governmental authority. ↩

**moral hazard:** A situation where providing protection against a risk increases the occurrence of the risky behavior because it reduces the potential adverse consequences of the action. ↩

**mortgage:** An instrument used to borrow funds against an asset such as a house. The asset is used as security. If the borrowed funds are not repaid as promised, the lender can foreclose against the asset and use the sale proceeds to recover the unpaid balance of the loan. ↩

**mortgage default:** Home mortgages on which the borrower is ninety days or more late with the payments on the loan or it is in the foreclosure process. ↩

**mutual fund:** An entity that pools the funds of investors and channels them into various categories of investments. There are a variety of mutual funds, including equity funds, bond funds, real estate funds, and money-market funds. ↩

**national debt:** The sum of the indebtedness of a government in the form of outstanding interest-earning bonds. It reflects the cumulative impact of budget deficits and surpluses. ↩

**national income:** The total income earned by the citizens of a country during a specific period.

↩

**nominal GDP growth:** It refers to percentage increase in the value of all goods and services produced by an economy over a specific period, measured in current market prices. ↩

**nominal return:** The return on an asset in monetary terms. Unlike the real return, it makes no allowance for changes in the general level of prices (inflation). ↩

**normative question:** A question that asks what SHOULD be (a subjective condition) — instead of asking an objective fact. ↩

**occupational licensing:** A requirement that a person obtain permission from the government in order to perform certain business activities or work in certain occupations. ↩

**oligarch:** A very rich business leader with a great deal of political influence (particularly with reference to individuals who benefited from the privatization of state-run industries after the collapse of the Soviet Union). ↩

**oligopoly:** Oligopoly is a market structure characterized by a small number of large firms that dominate the market for a particular product or service. ↩

**open market operations:** The purchase and sale of government securities (such as bonds) in the open market by a central bank. ↩

**open markets:** Markets that suppliers can enter without obtaining permission from governmental authorities. ↩

**opportunity cost:** The highest valued alternative good or activity that must be sacrificed as a result of choosing an option. ↩

**patent:** A right or title for a set period giving the holder the sole right to exclude others from making, using, or selling an invention. ↩

**pay as you go:** A system in which a person or organization pays for the costs of something when they occur rather than before or afterwards. ↩

**personal income:** The total income received by domestic households and non-corporate businesses. ↩

**personal income tax:** A tax levied on the income earned by individuals, including wages, salaries, dividends, interest, and other income a person earns throughout the year. ↩

**physical capital:** Human-made resources (such as tools, equipment, and structures) used to produce other goods and services. They enhance our ability to produce in the future. ↩

**plunder:** The act of acquiring things by taking them from others. ↩

**pork-barrel legislation:** Government spending projects that benefit local areas but which are paid for by taxpayers at large. The projects typically have costs that exceed benefits; the residents of the district getting the benefits want these projects because they do not have to pay much of the costs. ↩

**portfolio:** The holdings of savings, investments, and real assets such as real estate owned by an individual or financial institution. ↩

**price controls:** Prices that are imposed by the government. The prices may be set either above or below the level that would be established by markets. ↩

**price floor:** A government-established minimum price that buyers must pay for a good or resource. ↩

**price gouging:** When a seller spikes the prices of goods, services, or commodities to a level much higher than is considered reasonable or fair, and is considered exploitative, potentially to

an unethical extent. ↩

**principal:** The amount of funds borrowed. The borrower will pay interest on this amount. ↩

**private investment:** The flow of private-sector expenditures on durable assets (fixed investment) plus the addition to inventories (inventory investment) during a period. These expenditures enhance our ability to provide consumer benefits in the future. ↩

**private property rights:** Property rights that are exclusively held by an owner, or group of owners, and which can be transferred to others at the owner's discretion. ↩

**productive function:** Productive function of government refers to government provision of (1) a legal and monetary environment for the smooth operation of markets and (2) a few goods that are difficult to provide through markets. ↩

**productive resources:** The inputs used to make goods and services (i.e., natural resources, human resources and capital goods). ↩

**productivity:** The average output produced per worker during a specific time period, usually measured as output per hour worked. ↩

**profit:** Revenues that exceed the cost of production. The cost includes the opportunity cost of all resources involved in the production process, including those owned by the firm. Profit results only when the value of the good or service produced is greater than the cost of the resources required for its production. ↩

**protective function:** A system of rules and laws that protect individuals and their property from damages associated with the use of force, fraud, or theft. ↩

**public choice:** The study of decision-making as it affects the formation and operation of

collective organizations such as governments. In general, the principles and methodology of economics are applied to political science topics. ↩

**public good:** Goods with the following two characteristics: (1) jointness in consumption—provision of the good to one party simultaneously makes it available to others; and (2) non-excludability—it is difficult or virtually impossible to exclude nonpaying customers. ↩

**publicly provided good:** Publicly provided good, also known as a public good, is a type of good or service that is non-excludable and non-rivalrous in consumption. ↩

**purchasing power parity:** A money conversion rate used to express the purchasing powers of different currencies in common units. ↩

**quartiles:** Quartiles are statistical measures that divide a set of data into four equal parts or groups, with each part representing a quarter of the dataset. The dataset is first sorted in ascending order, and then three points are identified that divide the data into four equal groups. ↩

**random walk theory:** The theory that current stock prices already reflect all known information about the future. Therefore the future movement of stock prices will be determined by surprise occurrences, which will cause prices to change in an unpredictable or random fashion. ↩

**rational ignorance:** Voter ignorance resulting from the fact that people perceive their individual votes as unlikely to be decisive. Therefore they are rational in having little incentive to seek the information needed to cast an informed vote. ↩

**real GDP:** It measures the total economic output of a country, adjusted for inflation or price changes, over a specific period. ↩

**real value:** The value adjusted for inflation. ↩

**realtor commissions:** A fee paid to a real estate agent or broker for their services—sometimes a percentage of the sale price, but also as a different fee model. ↩

**recession:** A downturn in economic activity characterized by declining real gross domestic product (GDP). As a rule of thumb, economists define a recession as two consecutive quarters in which there is a decline in real GDP. ↩

**regulatory capture:** A situation when a regulatory agency that is created to promote the public interests prioritizes the interests of the industries they regulate. ↩

**rent-seeking:** Actions by individuals and interest groups designed to restructure public policy in a manner that will either directly or indirectly redistribute more income to themselves. ↩

**replacement rate fertility:** The number of births per woman that keeps the population size stable over time. ↩

**resource:** An input used to produce economic goods and services. Natural resources, labor, skills, entrepreneurial talent, and capital are examples. Human history is a record of our struggle to transform available, but limited, resources into things that we would like to have (economic goods). ↩

**rule of law:** The effective understanding that everyone is subject to the same laws, preventing some from enacting laws that they will not have to abide by. ↩

**saving:** The portion of after-tax income that is not spent on consumption. ↩

**scarcity:** Condition in which people would like to have more of a good or resource than is freely available from nature. Almost everything we value is scarce. ↩

**secondary effects:** Consequences of an economic change that are not immediately identifiable but are felt only with the passage of time. ↩

**shortsightedness effect:** Misallocation of resources that results because public sector action is biased (1) in favor of proposals yielding clearly defined current benefits in exchange for difficult-to-identify future costs; and (2) against proposals with clearly identified current costs but yielding less concrete and less obvious future benefits. ↩

**Smoot-Hawley trade bill:** The Smoot-Hawley Tariff Act, a piece of legislation passed by the U.S. Congress in 1930, aimed to protect American farmers and other industries from foreign competition by raising U.S. tariffs to historically high levels on imported goods. ↩

**socialism:** The set of beliefs that states that all people are equal and should share equally in a country's money, or the political systems based on these beliefs. ↩

**special interest:** Refers to groups or organizations that advocate for specific policies, regulations, or funding allocations that benefit their particular industries, causes, or constituencies. ↩

**special-interest effect:** The bias of the political process toward adoption of programs that provide substantial individual benefits to well-organized interest groups at the expense of small individual costs imposed on the bulk of voters. There is a tendency for such programs to be adopted even when they are inefficient. ↩

**special-interest issue:** An issue that generates substantial individual benefits to a small organized minority while imposing a small individual cost on many other voters. ↩

**specialization:** Specialization is a method of production whereby an entity focuses on the production of a limited scope of goods to gain a greater degree of efficiency. ↩

**Standard & Poor's (S&P) 500 Index:** A basket of five hundred stocks that are selected because they are thought to be collectively representative of the stock market as a whole. Over 70 percent of all U.S. stock value is contained in the S&P 500. ↩

**stock:** Ownership shares of a corporation. Corporations raise funds by issuing stock ownership shares, which entitle the owners to a proportional share of the firm's profits. The stock owners are not liable for the debts of the corporation beyond their initial investment. However, there is no assurance that the owners will receive either their initial investment or any return in the future. ↩

**subsidy:** A government payment or tax credit provided to either the producers or consumers of certain goods. The payments to producers of ethanol, which sum to about \$1.50 per gallon, provide an example. ↩

**substitutes:** Products that serve similar purposes. An increase in the price of one will cause an increase in the demand for the other, and a decline in the price of one will cause a decline in the demand for the other (for example, hamburgers and tacos, butter and margarine, Chevrolets and Fords). ↩

**tariff:** A tax levied on goods imported into a country. ↩

**tax shelter:** A tax shelter is a legal method or financial arrangement that enables individuals or businesses to reduce their taxable income and therefore lower their tax liability. ↩

**third sector:** An umbrella term that covers a range of different organizations with different structures and purposes, belonging neither to the public sector (i.e., the state) nor to the private sector (profit-making private enterprise). ↩

**transaction cost:** The time, effort, and other resources needed to search out, negotiate, and consummate an exchange of goods or services. ↩

**treasury bill:** A form of short-term government debt on which interest is paid at the end of the borrowing period. They are used for managing fluctuations in the government's short-run cash needs. ↩

**Treasury Inflation Protected Securities (TIPS):** Inflation-indexed bonds issued by the U.S. Department of Treasury. These securities adjust both their principal and coupon interest payments upward with the rate of inflation so that their real return is not affected by the change in rate. TIPS have been issued in the United States since January 1997. ↩

**VAT:** Value added tax, a type of tax that is paid by the person who buys goods and services. ↩

**venture capitalist:** A financial investor who specializes in making loans to entrepreneurs with promising business ideas. These ideas often have the potential for rapid growth but are usually also very risky and thus do not qualify for commercial bank loans. ↩

**zero-sum game:** The situation in game theory in which one person's gain is equivalent to another's loss, so the net change in wealth or benefit is zero. In the financial markets, options and futures are examples of zero-sum games, excluding transaction costs. ↩

## About the Authors

**James D. Gwartney** was a professor emeritus of the department of economics at Florida State University, where he taught for fifty-three years. He was the lead author of *Economics: Private and Public Choice* (Cengage Learning, 2020), a widely used economic principles text now in its seventeenth edition. Professor Gwartney was also coauthor of the Fraser Institute’s annual report, *Economic Freedom of the World*, which provides information on the consistency of institutions and policies with economic freedom for 165 countries. His publications appeared in a variety of scholarly journals, including the *American Economic Review*, *Journal of Political Economy*, *Journal of Economic Education*, *Southern Economic Journal*, and *Journal of Institutional and Theoretical Economics*. From 1999–2000, he served as chief economist of the Joint Economic Committee of the U.S. Congress. He was a past president of the Southern Economic Association and the Association of Private Enterprise Education. Dr. Gwartney passed away in January 2024.

**Dwight R. Lee** received his PhD from the University of California, San Diego, in 1972. He has served on the faculty at the University of Colorado, Virginia Tech University, George Mason University, and the University of Georgia, where he was the Ramsey Professor of Economics and Private Enterprise from 1985–2008. He was the William J. O’Neil Professor of Global Markets and Freedom at Southern Methodist University in Dallas from 2008–2014. He is currently an affiliated visiting faculty fellow in the Institute for the Study of Political Economy in the Miller College of Business at Ball State University. Professor Lee’s research has covered a variety of areas, including the economics of the environment and natural resources; the economics of political decision-making; public finance; law and economics; and labor economics. Lee has published over 170 articles in academic journals and nearly 300 articles in magazines and newspapers; he has coauthored 14 books and been the contributing editor of five others. Lee has lectured at universities and conferences throughout the United States, as well as in Europe, Central America, South America, Asia, and Africa. He was president of the Association of Private Enterprise Education from 1994–1995 and president of

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**Randall K. Filer** is professor of economics at Hunter College and the Graduate Center of the City University of New York and, since 1993, visiting professor of economics/senior scholar at CERGE-EI, a joint workplace of Charles University and the Academy of Sciences of the Czech Republic. Professor Filer served as president of the CERGE-EI Foundation, the largest supporter of economics education in the post-communist transition economies from 1999 until 2021. He directs the CERGE-EI Foundation Teaching Fellows and Distance Learning programs, which have provided economic education to over 275,000 college-level students at more than 200 universities in 28 post-communist countries. Professor Filer is president of the Economic Fundamentals Initiative (EFI), a non-profit organization dedicated to promoting economic literacy in post-communist countries. He is a member of the Academic and Governing Boards of the International School of Economics (ISET) in Tbilisi, Georgia. Previously Professor Filer served as the Central and Eastern European Coordinator of the World-Bank sponsored Global Development Network. He is a research fellow of IZA (Bonn) and CESifo (Munich) and was a Wriston Fellow at the Manhattan Institute (NYC). Professor Filer graduated from Haverford College and received his Ph.D. from Princeton University. His

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# Academic Advisory Committee

**Boris Cota** is a Professor at the Faculty of Economics of the University of Zagreb and head of the International Economics and Finance postgraduate study program. He has served as a member of the Board of Directors of the Institute of Economics, Zagreb (1997–2000) and Chairman of the Supervisory Board of the Union of Science and Higher Education for the Republic of Croatia (2003–2006). He has been a member of the Council of the Croatian National Bank (2006–2013), Special Advisor for the Economy to the President of the Republic of Croatia (2010–2012), and President of the Council for the Economy of the President of the Republic of Croatia (2010–2015).

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