Common Sense Economics

What Everyone Should Know About Personal & National Prosperity

James D. Gwartney, Richard L. Stroup, Dwight R. Lee, Tawni H. Ferrarini, Joseph P. Calhoun, Randall K. Filer

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What Everyone Should Know About Personal and National Prosperity

Revised for Central and Eastern Europe and the Former Soviet Union

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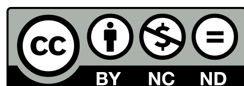

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Preface

The authors of this book want you to live a successful and fulfilling life. We also want you, and every other individual, to live in an environment 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.

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 will 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 economic principles that attracted you to economics in the first place.

The materials are designed to provide 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.

Because the *Common Sense Economics* team is anxious to share these materials with instructors, we can offer workshops designed to enhance the ability of instructors to make the best possible use of our materials. If you would like more information on these activities, please consult our website at http://www.econfun.org.

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 sacrificed their time, their careers, and even their lives to secure the blessings of political and economic freedom to this region. 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

The Twelve Key Elements

1. **Incentives**[(?)] matter: Changes in benefits and costs will influence choices in a predictable manner.
2. There is no such thing as a free lunch: Goods are scarce and therefore we have to make choices.
3. Decisions are made at the margin: If we want to get the most out of our resources, options should be chosen only when the marginal benefits exceed the marginal cost.
4. Trade promotes economic progress.
5. Transaction costs are an obstacle to trade.
6. Prices bring the choices of buyers and sellers into balance.
7. Profits direct businesses toward productive activities that increase the value of resources, while losses direct them away from wasteful activities that reduce resource value.
8. People earn income by providing others with things they value.

9. High living standards result from the production of goods and services people value, not from just "having a job."
10. Economic progress comes primarily through trade, **investment**(?), better ways of doing things, and sound economic institutions.
11. The "invisible hand" of market prices directs buyers and sellers toward activities that promote the general welfare.
12. Too often long-term consequences, or the **secondary effects**(?), of an action are ignored.

Introduction

Video:
Secret to Happiness

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 generally, 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 the integration of key concepts into your thought process. The following section presents twelve concepts that are crucial for the understanding of economies, and 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 furthers prosperity, and why production of things that 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

Incentives Matter

Changes in benefits and costs will influence choices in a predictable manner.

All of economics rests on one simple principle: Changes in incentives 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 derived from 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 that 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 prices will reduce the number of units sold. Attendance in college classes will be below normal the day before school holidays. 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 walking along the street 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.

Video:

The Importance of Incentives

Read:

The Power of Incentives by Dwight Lee

This basic postulate explains how changes in market prices alter incentives in a manner that works 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 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 their goods at the current price, they will have to cut the price of the item. In turn, the lower price will encourage people to buy more—but 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. At that point there is no further pressure for a price change.(1)

For example, bad weather raised the prices of peaches in the U.S. state of Georgia in the summer of 2014, forcing a price increase of 180% compared to the previous year. Despite the huge increase in price, consumers did not complain. Why? When the higher prices made it more costly to purchase peaches, most consumers easily substituted other fruits for peaches, either totally or partially, and made their winter jam reserves from pears or quinces instead.

Furthermore, as buyers reacted to higher peach prices, so did sellers. The farmers supplying peaches planted new trees. Other farmers cut down their apple and pear orchards and planted peach trees instead. Eventually, after two years (when the newly planted trees became fruitful) the price of peaches fell as supply expanded.

Incentives also influence political choices. There is little reason to believe that a person making choices in the voting booth will behave much differently than when making choices in the shopping mall. In most cases voters are likely to support political candidates and policies that they believe will provide them with the most personal benefits, net of their costs. They will

tend to oppose political options when the personal costs are high compared to the benefits they expect to receive. For example, senior citizens have voted numerous times against candidates and proposals that would reduce their pension benefits. Opposition to proposed reductions in pension benefits is widely blamed for the poor showing of the United Russia party in Russia's September 2018 gubernatorial elections. Similarly, polls indicate that students are strongly supportive of educational grants to college students.

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**[?] as they do under **capitalism**[?]. In the former Soviet Union, managers and employees of glass plants were, at one time, rewarded according to the tons of sheet glass they produced. Because their revenues depended on the weight of the glass, most factories produced sheet glass so thick that you could hardly see through it. As a result, the rules were changed so that the managers were compensated according to the number of square meters of glass produced. Under these rules, Soviet firms made glass so thin that it broke easily. 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. The choices of both the self-centered and altruistic will be influenced by changes in personal costs and benefits. For example, both the selfish and the altruistic will be more likely to attempt to rescue a child in a shallow swimming pool than in the rapid currents approaching Dettifoss waterfall.[2] And both are more likely to give a needy person their hand-me-downs rather than their best clothes.

Even though no one would have accused the late Albanian, Mother Teresa, of greediness, her self-interest caused her to respond to incentives, too. When Mother Teresa's organization, the Missionaries of Charity, attempted to open a shelter for the homeless in New York City, the city required expensive 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 went up, Mother Teresa decided that her resources would do more good in other areas.[3]

Changes in incentives influence everyone’s choices, regardless of the mix of greedy, materialistic goals on the one hand and compassionate, altruistic goals on the other, which are driving a specific decision.

ELEMENT 1.2

There Is No Such Thing as a Free Lunch

Goods are scarce and, therefore, we have to make choices.

The reality of life on our planet is that productive **resources**(?) are limited, while the human desire for goods and services is virtually unlimited. Would you like to have some new clothes, a luxury boat, or a vacation in the Swiss Alps? How about more time for leisure, recreation, and travel? Do you dream of driving your brand-new Porsche into the driveway of your oceanfront house? Most of us would like to have all of these things and many others! However, we are constrained by the **scarcity**(?) of resources, including a limited availability of time.

Because we cannot have as much of everything as we would like, we are forced to choose among alternatives. There is "no free lunch." Doing one thing makes us sacrifice the opportunity to do something else we value. This is why economists refer to all costs as **opportunity costs**(?).

Read:

The Road Not Taken by Robert Frost

Many costs are measured in terms of **money**(?), but these too are opportunity costs. The

money you spend on one purchase is money that is not available to spend on other things. The opportunity cost of your purchase is the value you place on the items that must now be given up because you spent the money on the initial purchase. But just because you don't have to spend money to do something does not mean the action is costless. You don't have to 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 have been used to do something else you value, like visiting a friend or reading a book.

Video:

Opportunity Cost

It is often said that some things are so important that we should do them without considering the cost. Making such a statement may sound reasonable at first thought, and may be an effective way to encourage people to spend more money on things that we value and for which we would like them to help pay. But the unreasonableness of ignoring cost becomes obvious once we recognize that costs are the value of forgone alternatives (that is, alternatives given up). Saying that we should do something without considering the cost is really saying that we should do it without considering the value of the alternatives. When we choose between mutually exclusive (but equally attractive) alternatives, the least-cost alternative is the best choice.

The choices of both consumers and producers involve costs. As consumers, the cost of a good, as reflected in its price, helps us to compare our desire for a product against our desire for alternative products that we could purchase instead. If we do not consider the costs, we will probably end up using our income to purchase the "wrong" things—those goods and services not valued as much as the other items we might have bought.

Producers face costs, too—the costs of the resources used to make a product or provide a service. For example, the use of resources such as lumber, steel, and sheet rock to build a new house takes resources away from the production of other goods, such as hospitals and schools. High costs for resources 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. However, government policies can override these signals. They can introduce taxes or subsidies to gain favor with potential supporters by lowering the prices that emerge in free and **open markets**(?). 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 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**(?) were removed, shops were all of a sudden well stocked and there were no queues! A similar phenomenon also from Georgia occurred in 2006 when a pipeline delivering gas from Russia exploded, resulting in a huge increase in demand for heating kerosene. To prevent "**price gouging**(?)," 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. Scarce resources are required to produce each of them and alternative uses exist. For example, the buildings, labor, and other resources used to produce schooling could instead produce more food, recreation, environmental protection, or medical 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. When governments want to encourage people to save for their retirement, a massive advertising program typically proves ineffective, but a tax-deferred savings account often works.

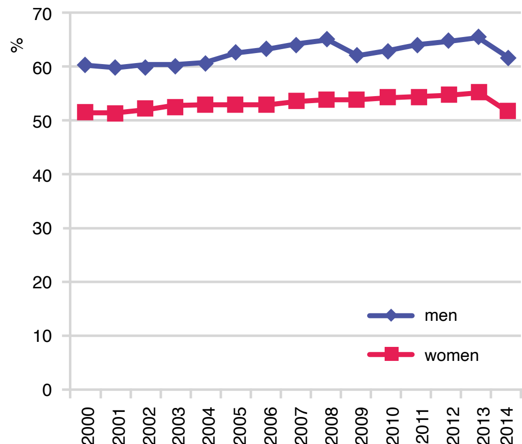
Opportunity cost is an important concept. Everything in life is about opportunity cost. Everyone lives in a world of scarcity and therefore must make choices. By looking at opportunity costs, we can better understand the world in which we live. Consider the impact of opportunity cost on workforce participation, 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

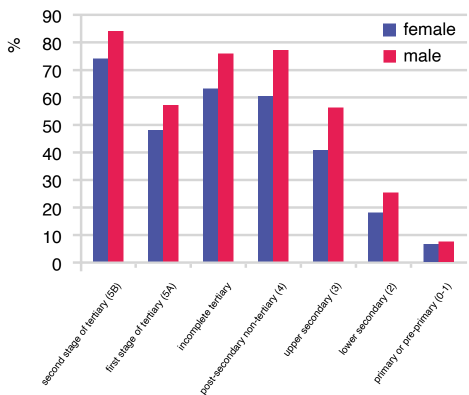
therefore it will be more costly for them to stay at home. The data are consistent with this view. In 2014, in Ukraine, more than 70% of women in the **labor force**[?] aged fifteen to sixty-four with a second stage of tertiary education were employed, compared to 62% of their counterparts with only incomplete tertiary education and 40% of the women with upper secondary schooling.[4] Just as economic theory predicts, when it is more costly for a woman not to work outside the home, fewer will choose this option.

Exhibit 1: Employment-to-Population Ratio by Gender (Population Aged 15–64) in Ukraine, in percent

a) Employment-to-population ratio by gender, 2000-2014



b) Employment rates by gender and education, 2014



Source: Labor Force Survey 2014.

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. The real world reflects this analysis. 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 organizational differences among countries, the higher opportunity cost of having children exerted the same impact on the birth rate in all cases.

Opportunity cost is a powerful tool and 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 choices.

Read:

Opportunities and Costs by Dwight Lee

ELEMENT 1.3

Decisions Are Made at the Margins

If we want to get the most out of our resources, options should be chosen only when the marginal benefits exceed the marginal cost.

Video:

Thinking at the Margin

If we are going to get the most out of our resources, actions should be undertaken when they generate more benefits than costs, and rejected when they are more costly than the benefits derived. 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**(?)." We might ask, "What is the marginal (or additional) cost of producing or purchasing 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, or even an expenditure of time, as in the case of a University or College student choosing among various activities. All these decisions are marginal because they involve consideration of additional costs and benefits.

People do not generally have to make "all-or-nothing" decisions, such as choosing between eating or wearing clothes. Instead they compare the marginal benefits (a little more food) with the marginal costs (a little less clothing or a little less of something else). In making decisions individuals don't compare the total value of food and the total value of clothing, but rather they compare their marginal values. Further, we choose options only when the marginal benefits exceed the marginal costs.

Of course some goods are "lumpy." It is easy to buy a little more food and a slightly

smaller dwelling unit, but hard to add half a child in making fertility decisions. Even in such goods, the marginal principle applies. Parents can invest more or less in child quality (i.e. in investments such as extra tuition, music classes etc. which parents believe will increase a child's success or happiness in life). Consumers can substitute marginally lower quality cars when auto prices rise (or hold on to their current car longer). The fact that housing often determines the schools that children attend creates an especially problematic issue for families when government policy forces children to go to the school closest to their home rather than offering parents a choice of schools according to the school's quality and their children's needs. Things are even less subject to free choice in countries such as China, where residential location (and associated schooling) is highly controlled by the government.

Similarly, a business executive planning to build a new factory will consider whether the **marginal benefits**(?) of the new factory (for example, additional sales revenues) are greater than the **marginal costs**(?) (the expense of constructing the new building). If not, the executive and the company are better off without the new factory.

Effective political actions also require marginal decision-making. Consider the political decision of how much effort should go into cleaning up pollution. If asked how much pollution we should allow, many people would respond "none"—in other words, we should reduce pollution 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 or swim in a cleaner river), but this benefit is not nearly as valuable as protecting our lungs. At some point, before all pollution disappeared, the marginal benefit of eliminating more pollution would decline to almost zero.

As pollution is being reduced, the marginal benefit is going down while the marginal cost is going up, and becomes very high before all pollution is eliminated. The marginal cost is the value of other things that have to be sacrificed to reduce pollution a little bit more. Once

the marginal cost of a cleaner atmosphere exceeds the marginal benefit, additional pollution reduction would be wasteful. It would simply not be worth the cost.

To continue with the pollution example, consider the following hypothetical situation. Assume that we know 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 it doesn't follow from the information given.

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 what to do next, we need to know the marginal benefit of cleanup and the marginal cost of doing so. 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 one euro, additional antipollution 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 countries, they devote most of their income to securing an adequate diet. They devote little time, if any, to playing golf, water skiing, or other recreational activities.

But as people become wealthier, the opportunity cost of acquiring food declines. Although food remains vital to life, continuing to spend most of their money on food would be foolish. At higher levels of affluence, people find that at the margin—as they make decisions about how to spend each additional euro— food is worth much less than recreation. So as Swedes become wealthier, they spend a smaller portion of their income on food and a larger portion of their income on recreation[5].

The concept of marginalism reveals that it is the marginal costs and marginal benefits that are relevant to sound decision-making. If we want to get the most out of our resources, we must undertake only actions that provide marginal benefits that are equal to, or greater than, marginal costs. Both individuals and nations will be more prosperous when their choices

reflect the implications of marginalism.

Read:

Markets and Marginalism by Dwight Lee

ELEMENT 1.4

Benefits of Trade

Trade promotes economic progress.

The foundation of trade is mutual gain. People agree to an exchange because they expect it to improve their well-being. The motivation for trade is summed up in the statement: "If you do something good for me, I will do something good for you." Trade is a win-win transaction. This positive-sum activity permits each of the trading partners to get more of what they value. There are three major sources of gains from trade.

First, trade moves goods from people who value them less to people who value them more. Thus, trade can increase the value of goods even when nothing new is produced. For example, when used goods are sold at flea markets, or through services such as Craigslist (or its local variants such as list.am), the exchanges do not increase the quantity of goods available (as new products do). But the trades move products toward people who value them more. Both the buyer and seller gain, or otherwise the 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 electronics 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. Voluntary exchange that moves the electronics book to the engineer and the painting to the art collector will increase the benefit derived from both goods. The trade will increase the wealth of both people and also 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.

Second, trade makes larger production and consumption levels possible because it allows each of us to specialize more fully in the things that we do best relative to cost. 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. Through these exchanges, people

who specialize in this way will produce a larger total quantity of goods and services than would otherwise be possible. Economists refer to this principle as **the law of comparative advantage**[(?)]. This law applies to trade among individuals, businesses, regions, and nations.

The law of comparative advantage is just common sense. If someone else is willing to provide you with a product at a lower cost than you can provide it for yourself (keep in mind that all costs are opportunity costs), it makes sense to trade for it. You can then use your time and resources to produce more of the things for which you are a low-cost producer. 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 and higher incomes. In contrast, trying to produce everything yourself would mean you are using your time and resources to produce many things for which you are a high-cost provider. This would translate into lower production and income.

Video:

Specialization and Trade

For example, even though most doctors might be good at record keeping and arranging appointments, it is generally in their interest to hire someone to perform these services. The time doctors use to keep records is time they could have spent seeing patients. Because the time spent with their patients is worth a lot, the opportunity cost of record keeping for doctors will be high. Thus, doctors will almost always find it advantageous to hire someone else to keep and manage their records. Moreover, when the doctor specializes in the provision of physician services and hires someone who has a comparative advantage in record keeping, costs will be lower and joint **output**[(?)] larger than would otherwise be achievable.

Third, voluntary exchange allows firms to achieve lower per-unit costs by adopting large-scale production methods. Trade makes it possible for business firms to sell their output over a broad market area so they can plan for large outputs and adopt production processes that take advantage of **economies of scale**[(?)], 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**(?) 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 that are produced. 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. Trade makes it possible for most of us to consume a bundle of goods and services far beyond what we would be able to produce for ourselves. Can you imagine the difficulty involved in producing your own housing, clothing, and food, to say nothing of computers, television sets, dishwashers, automobiles, and telephones? People who have these things have them largely because their economies are organized in such a way that individuals can 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 live more prosperous lives. It is true that a dynamic global economy will mean shifts over time in the jobs in any one country. Economists almost universally agree that the proper response is to facilitate workers moving to new jobs rather than shutting off imports.

Video:

Economics of Voluntary Exchange

ELEMENT 1.5

Transaction Costs Matter

Transaction costs are an obstacle to trade.

Voluntary exchange promotes cooperation and helps us get more of what we want. However, trade itself is costly. It takes time, effort, and other resources to search out potential trading partners, negotiate trades, and close the sale. Resources spent in this way are called **transaction costs**(?), and they are an obstacle 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 it difficult to get products to customers. Investment in roads and improvements in transportation and communications 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 copy of the economics book assigned for a class, but you don't know who has a copy and is willing to sell it at an attractive price. You need to track down someone willing to sell a used copy: the time and energy you spend doing so is part of your transaction costs. In still other cases, transaction costs are high because of regulatory obstacles, such as taxes, licensing requirements, **government regulations**(?), price controls, **tariffs**(?), or **import quotas**(?). 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 and promote economic progress. Such specialists, sometimes called **middlemen**(?), include campus bookstores, real estate agents, **stockbrokers**(?), automobile dealers, and a wide variety of **merchants**(?). Many believe that middlemen merely increase the price of goods and services without providing benefits. If this were true, people would not use their services. Transaction costs are an obstacle to trade, and middlemen reduce these costs. This is why people value their services.

Video:

The Economics of the Shawshank Redemption

The grocer, for example, is a middleman. (Of course, today's giant supermarket reflects the actions of many people, but together their services are those of a middleman.) Think of the time and effort that would be involved in preparing even a single meal if shoppers had to deal directly with farmers when purchasing vegetables, citrus growers when buying fruit, dairy operators if they wanted milk or cheese, and ranchers or fishermen if they wanted to serve beef or fish. Grocers make these contacts for consumers, place the items in a convenient selling location, and maintain reliable inventories. With properly functioning markets, the services of grocers and other middlemen reduce transaction costs significantly, making it easier for potential buyers and sellers to realize gains from trade. These services increase the volume of trade and promote economic progress.

Later, we will discuss how imperfect markets may arise, such as when government or technology gives a monopoly privilege to an individual or firm. The dangers of a single, or **monopoly**(?), supplier are especially evident in the case of vital natural resources such as when one country is the only source for another's natural gas or oil.

In recent years, technology has reduced the transaction costs of numerous exchanges. With just a few swipes on a touch screen, buyers can now acquire information about potential sellers of almost every product. Apps are routinely used to shop for movies, clothing, and household goods, locate a hotel room, obtain tickets for a major concert or big football game, and even hail a taxi. These reductions in transaction costs have increased the volume of trade and enhanced our living standards.

Video:

Blockchain and Trust

ELEMENT 1.6

Prices Create Balance

Prices bring the choices of buyers and sellers into balance.

Market prices will influence the choices of both buyers and sellers. When a rise in the price of a good makes it more expensive for buyers to purchase it, they will normally choose to buy fewer units. Thus, there is a negative relationship between the price of a good or service and the quantity demanded. This negative relationship is known as the **law of demand**(?).

For sellers, the rise in the price of that product brings extra revenue that makes them willing to supply more of it. 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**(?).

The law of demand is so universal that economists have been searching unsuccessfully for decades to find a meaningful exception. However, it is helpful to remember that, while the law of supply is true most of the time, there *are* exceptions. For example, a college student works (supplying labor) to pay her tuition. Now imagine that her wage (the price of selling her labor) rises. If that enables her to pay for her university costs with fewer hours of work, she might choose to cut back on the amount of labor she supplies so that she has more time to study.

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, a 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 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.

The supply curve indicates the various quantities of ice cream producers are willing to

supply at alternative prices. As Exhibit 2 illustrates, it 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.

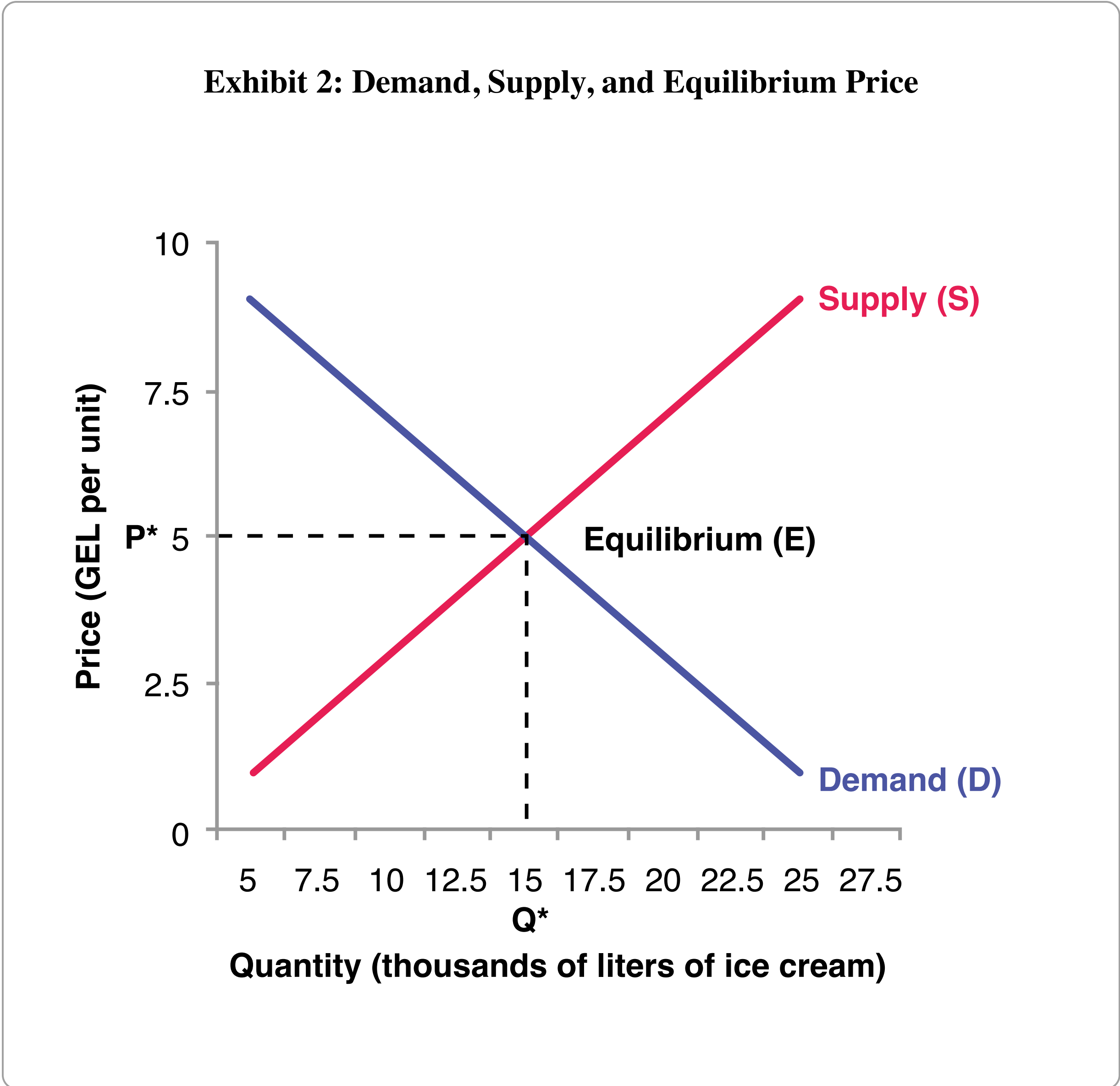


Exhibit 2: Demand, Supply, and Equilibrium Price

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**[?] price of GEL 5, Georgian consumers will want to purchase 15 thousand liters of ice cream per day, 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 7.5—producers will want to supply more ice cream than consumers will want to purchase. At the GEL 7.5 price, producers will be unable to sell as many units as they would like. Inventories will rise and this excess supply will lead some producers to cut their price to reduce their excess inventories. The price will tend to decline until the GEL 5 equilibrium price is reached. It is easy to see, then, that if the price is above the equilibrium, market forces will push the price down toward equilibrium.

Correspondingly, if the price of ice cream is less than GEL 5—for example, GEL 2.5—consumers will want to purchase a larger quantity than producers are willing to supply. This generates excess demand and will place upward pressure on price and it will tend to move 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.

Video:
A Quick Summary of Supply and Demand

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.

Though somewhat less visible than the eBay electronic market, the forces of demand and supply in other **markets**[?] work similarly. The height of the demand curve indicates the maximum amount the consumer is 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. As long as 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.

Thus, consumers will tend to purchase only units that they value more than the actual price. Similarly, producers will supply only units that can be produced at a cost less than that price. 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 its 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 that will alter the demand and supply of goods and services. Factors such as consumer income, prices of related goods, the expectation of a future price increase, and the number of consumers in the market area will influence the market demand for a good. Changes in any of these factors will alter the amount of a good consumers will want to purchase at alternative 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. (Important note to students: Failure to distinguish between a change in demand and a change in quantity demanded is one of the most common errors in all of economics. Moreover, questions on this topic are favorites of many economics instructors. Wise students will take this note seriously.)

Read:

Sacrificing Lives for Profits by Dwight Lee

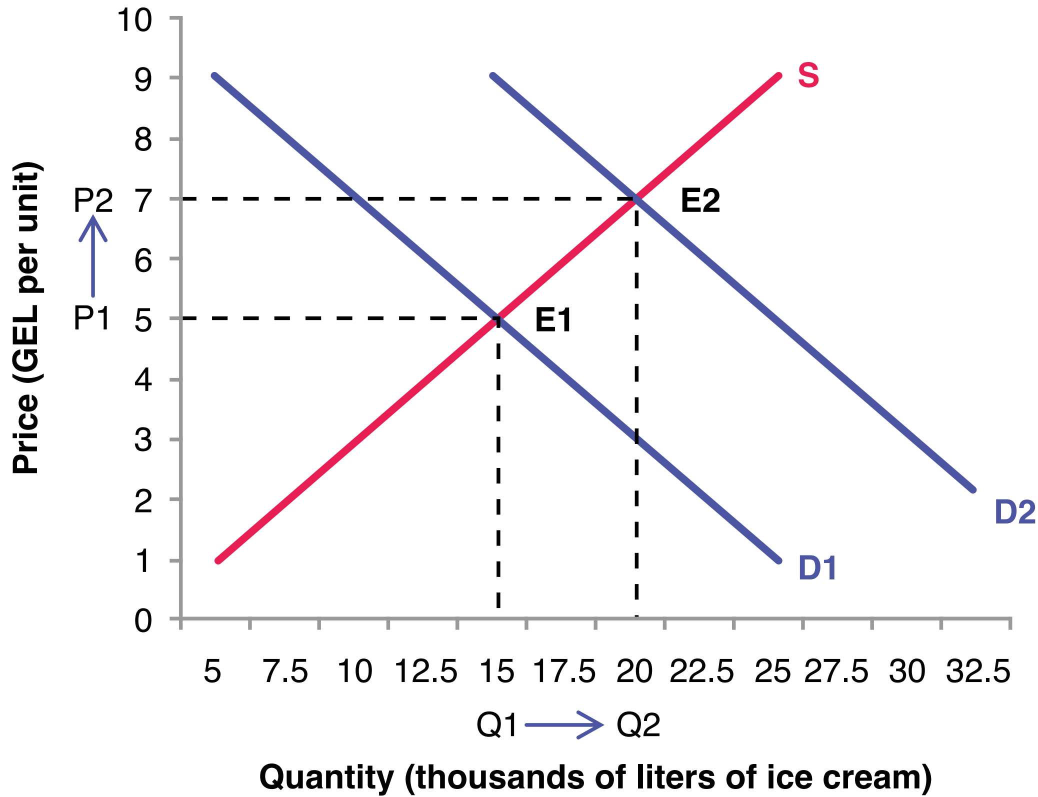
Video:

Pencil and Price System

Exhibit 3 illustrates the impact of an increase in demand on the market price of a good. Suppose there is an increase in consumers' income or a rise in the price of frozen yogurt, a common substitute for ice cream. These changes will increase the demand for ice cream at all prices, causing the demand curve to shift to the right from D1 to D2. 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 (shift in the entire demand curve) will result in an increase in the quantity supplied from 15 thousand to 20 thousand, a movement along the existing supply curve.

A reduction in consumer income 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.

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



Video:

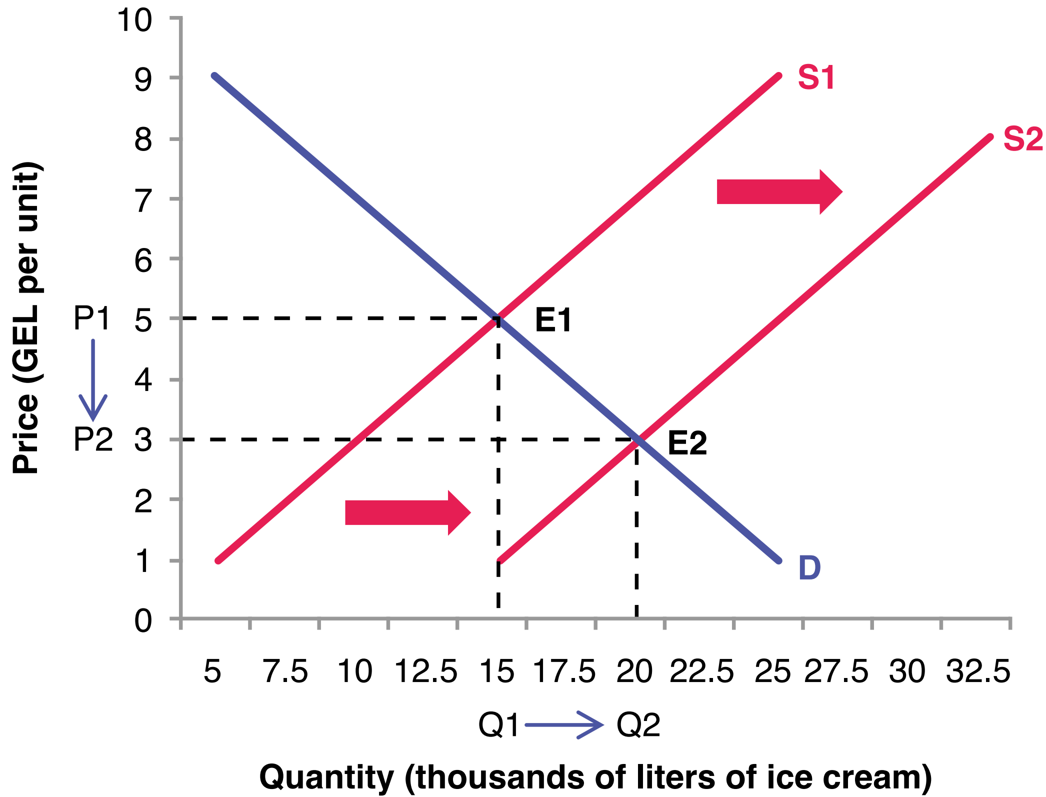
Is "Price Gouging" Bad?

Now let's turn to the supply side of a market. Changes in factors that alter the per-unit cost of supplying a good will cause the entire supply curve to shift. Changes that lower per-unit costs (for example, an improvement in technology or lower prices for the resources used to produce the good) will increase supply, causing the entire supply curve to shift to the right. In contrast, changes that make it more expensive to produce the good such as higher prices for the

required ingredients 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 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 thousand liters per day. Note: The increase in supply (the shift of the entire curve) lowered the price of ice cream and increased the quantity demanded—a movement along the existing demand curve. If changes occurred that increased the cost of producing ice cream (for example, higher prices for the ingredients), the results would be just the opposite: a decrease in supply (shift to the left), 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 will not take place instantaneously. It will take time for both consumers and producers to adjust to the new conditions. In fact, in a dynamic world, the adjustment process is continuous. 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:

<u>The Economics of the Hudsucker Proxy</u>

ELEMENT 1.7

Profits Are a Guide to Productivity

Profits direct businesses toward productive activities that increase the value of resources, while losses direct them away from wasteful activities that reduce resource value.

Video:

Economic Profit and Costs

Businesses purchase natural resources, labor, capital, and entrepreneurial talent. These **productive resources**[?] are then transformed into goods and services that are sold to consumers. In a **market economy**[?], producers will have to 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 producer's opportunity cost of supplying a good or service will equal the payments required to bid the resources away from their other potential uses.

There is an important difference between the opportunity cost of production and standard accounting measures of cost. Accountants focus on the calculation of the firm's net income, which is slightly different than economic **profit**[?]. The net income calculation omits the opportunity cost of assets owned by the firm.

While accountants omit this opportunity cost, economists do not.[6] As a result, the firm's net income will overstate profit, as measured by the economist. Economists consider the fact that the assets owned by the firm could be used some other way. Unless these opportunity costs are covered, the resources will eventually be used in other ways.

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

Profit = Total Revenue – 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 the good. 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 their 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 their alternative uses will have been a profitable one. Profit is a reward for transforming resources into something of greater value.

Business decision-makers will seek to undertake production of goods and services that will generate profit. However, things do not always turn out as expected. Sometimes business firms are unable to sell their products at prices that will cover their costs. **Losses**(?) occur when the total revenue from sales is less than the opportunity cost of the resources used to produce a good or service. Losses are a penalty imposed on businesses that 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 manufacturer sells the one thousand shirts for BGN 22 each, he receives BGN 22,000 in monthly revenue, or BGN 2,000 in profit. The shirt manufacturer has created wealth—for himself and for the consumer. By their willingness to pay more than the costs of production, his customers reveal that they value the shirts more than they value the resources required for their production. The manufacturer'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 for only BGN 17 each, then the manufacturer will earn BGN 17,000, losing BGN 3,000 a month. This loss occurs because the manufacturer'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. But their combined choices provide this information to the manufacturer,

along with the incentive to take steps to reduce the loss.

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 projects.

The people of a nation will be better off if their resources—their land, buildings, labor, and entrepreneurial talent—produce valuable goods and services. At any given time a virtually unlimited number of potential investment projects are available to be undertaken. Some of these investments will increase the value of resources by transforming them into goods and services that consumers value highly relative to cost. These will promote economic progress. Other investments will reduce the value of resources and reduce economic progress. If we are going to get the most out of the available resources, projects that increase value must be encouraged, while those that use resources less productively must be discouraged. This is precisely what profits and losses do.

We live in a world of changing tastes and technology, imperfect knowledge, and uncertainty. Business owners cannot be sure what the future market prices will be or what the future costs of production will be. Their decisions are based on expectations. But the reward-penalty structure of a market economy is clear. **Entrepreneurs**(?) who produce efficiently and who anticipate correctly the goods and services that attract consumers at prices above production cost will prosper. In contrast, business executives who allocate resources inefficiently into areas where demand is weak will be penalized with losses and financial difficulties.

While some criticize the business failures that accompany the market process, this reward-penalty system underlies the prosperity that markets provide. Interestingly, many of the entrepreneurs who initially failed, eventually succeed in a big way. Steve Jobs provides an example. After leaving Apple in 1985, Jobs founded neXT, a firm that he thought would produce the next generation of personal computers. The company struggled. But, Jobs learned from the experience. He returned to Apple in 1997 and soon introduced the iPhone, the iPad,

and other innovative products that succeeded 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 experience **stagnation**(?), or worse.

Video:

The Price System

ELEMENT 1.8

Incomes Come From Usefulness

People earn income by providing others with things they value.

People differ in many ways—in their productive abilities, preferences, specialized skills, attitudes, and willingness to take risks. These differences influence people's incomes because they affect the value of the goods and services that individuals are willing and able to provide to others.

In a market economy, most people who earn high incomes do so because they provide others with things they value more than their cost. If these individuals did not provide valuable goods or services, firms (and indirectly consumers) would not pay them so generously. There is a moral here: If you want to earn a high income, you had better figure out how to do something that helps others a great deal. On the other hand, 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 will help us provide others with valuable goods and services. College students study for long hours, endure stress, and incur the financial cost of schooling 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 website designers. Still others invest and start businesses. Why do people do these things?

In some cases individuals may be motivated by a strong personal desire to improve the world. However—and this is the key point—even people who don't care about improving the world, who are motivated mostly by the desire for income, will have a strong incentive to develop skills and take actions that are valuable to others. High earnings come from providing goods and services that others value. People seeking great wealth will have a strong incentive to pay close attention to what others want. And even those people who want to improve the world need information on the education and skills they can acquire, which will do the most to

make the world a better place for others. This information is generally provided by the earning opportunities in different occupations.

Some people think that high-income individuals must be exploiting others. But people who earn high incomes in a well-functioning marketplace generally do so by providing others with things they value and for which they are willing to pay. Larry Page and Sergey Brin became billionaires because users found Google better served their needs than Yahoo! or Ask Jeeves. Popular singers provide another example. Beyoncé and Taylor Swift each have huge earnings because millions enjoy their music. The role of a society is to ensure that the "rules" of the game are fair, not to prevent some from winning by a large margin because they are good at the game. Problems arise when early movers lock in technologies that may eventually become outdated but hard to replace. This trade-off leads to a great deal of public policy discussion that is often more a function of political opinion than sound economic analysis.

Business entrepreneurs who succeed in a big way do so by making products that millions of consumers find attractive. The late Sam Walton, who founded Walmart, became one of the richest men in the United States because he figured out how to manage large inventories effectively and sell brand-name merchandise at discount prices to small-town America. Bill Gates and Paul Allen, cofounders of Microsoft, became billionaires by developing a set of products that dramatically improved the efficiency and compatibility of desktop computers. Millions of consumers who never heard of Walton, Gates, or Allen benefited from their talents and products. These men made a lot of money because they helped a lot of people.

Read:

I, Pencil, My Family Tree by Leonard Read

Video:

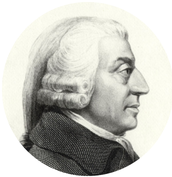
Exchange Wealth Creation

Such examples of “good capitalists” can also be found throughout transition economies. Perhaps not as well known as Bill Gates, the Czech Pavel Baudiš built Avast into a major force in cybersecurity and a fortune of many billions of dollars. The Polish mechanic Zbigniew Sosnowski turned a failing state bicycle company into Kross, a major European maker producing over 1 million bicycles a year. Google “Talking Tom Cat” and you will find a very popular set of children’s videos developed by a young Slovenian couple, Izo and Samo Login, and sold to a Chinese buyer for over a billion dollars.

ELEMENT 1.9

Value Creates Income and Wealth

Production of goods and services people value, not just jobs, provides the source of 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.

— Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations,* Volume II Glasgow Edition (Indianapolis: Liberty Fund, Inc., [1776] 1981): 660. Also available at: http://www.econlib.org/library/Smith/smWN.html

As Adam Smith noted more than 240 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 that people value.

Video:
The Broken Window Fallacy

Clearly, destroying commonly traded goods that people value will make a society worse off. This proposition is so intuitively obvious that it almost seems silly to highlight it. But policies based on the fallacious idea that destroying goods will benefit society have sometimes been adopted. In 1933, the United States Congress passed the Agricultural Adjustment Act (AAA) in an effort to reduce supply and thus prevent the prices of agricultural products 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 so they would be unfit for human consumption. Healthy cattle, sheep, and pigs were slaughtered and buried in mass graves in order to keep them off 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 the United States government continues to pay various farmers to limit their production. While the political demands of those benefiting from the policies are understandable, such programs destroy valuable resources, making the nation poorer.

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" is one of the largest and most controversial parts of the E.U.'s budget.

Video:

Fields of Gold: Lifting the Veil on Europe's Farm Subsidies

Farming is not the only industry targeted, either. In the United States, the 2009 "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 the older cars that were traded in for a new automobile. Dealers were required to ruin the car engines with a sodium silicate solution, then smash them and send them to the junkyard, assuring that not even the parts would be available for future use. The proponents of this program argued that it would stimulate recovery by inducing people to buy new cars. But the new cars cost more than used ones, and the price of used ones increased because of the decline in supply. As a result, consumers spent more on automobiles (both new and used) and therefore less was available for spending on other items. 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 poor people who depend on used cars were punished. And new car sales plunged when the program expired. Germany introduced its own 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. 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. The program operated between 2005 and 2015, and 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 owners to destroy their automobile every year? Think of all of 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.

A more subtle form of destruction involves government actions that increase the opportunity cost of obtaining various goods. Countries worldwide spend $30 billion a year on fisheries subsidies, 60% of which directly encourages unsustainable, destructive, or even illegal practices. The resulting market distortion is a major factor behind the chronic mismanagement of the world's fisheries, which the World Bank calculates to have cost the global economy $83 billion in 2012. Furthermore, rich economies (in particular Japan, the United States, France, and Spain), along with China and South Korea, account for 70% of global fisheries subsidies. 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 E.U. 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 projects are fond of boasting about the jobs created by their spending programs and they exaggerate program benefits. This makes

economic literacy particularly important. While employment is often used 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 people value. When that elementary fact is forgotten, people are often misled into acceptance of programs that reduce wealth rather than create it.

Video:

How to Create a Job

The focus on artificially creating jobs can be extremely misleading. 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.[7]

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

ELEMENT 1.10

There Are Multiple Sources of Progress

Economic progress comes primarily through trade, investment, better ways of doing things, and sound economic institutions.

On the first day of an introductory economics class, we often inform students that workers in developed countries such as the United States produce and earn approximately thirty times as much per person today as in 1750. Then we solicit their 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.

Invariably, our students mention three things: First, today's scientific knowledge and technological abilities are far beyond anything imagined in 1750. Second, we have complex machines and factories, far better roads, and extensive systems of communications. Finally, students usually mention that in 1750 individuals and families directly produced most of the items that they consumed, whereas today we typically purchase them from others.

Basically, the students provide the correct explanation even though they have little or no prior knowledge of economics. They recognize the importance of technology, capital (productive assets), and trade. Their response reinforces our view that economics is the "science of common sense."

We have already highlighted gains from trade and the importance of reducing transaction costs as sources of economic progress. Economic analysis pinpoints three other sources of **economic growth**(?): investments in people and productive assets, improvements in technology, and improvements in economic organization.

First, investments in **physical capital**(?) (such as tools, machines, and buildings) and **human capital**(?) (education, skills, training, and experience of workers) enhance our ability to produce goods and services. The two kinds of investment are linked. Workers can produce more if they work with more and better machines. A logger can produce more when working with a chainsaw rather than a hand-operated, crosscut blade. Similarly, a transport worker can

haul more with a truck than with a mule and wagon.

Second, improvements in technology (the use of brain power 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 source of energy. Automobiles, buses, trains, and airplanes replaced the horse and buggy (and walking) as the chief methods of transportation. Technological improvements continue to change our lifestyles. Consider the impact of personal computers, microwave ovens, cell phones, streaming programs on TV, heart by-pass surgery, hip replacements, automobile air conditioners, and even garage door openers. The introduction and development of these products during the last fifty years have vastly changed the way that we work, play, and entertain ourselves. They have improved our well-being.

Third, improvements in economic organization can promote growth. By economic organization we mean the ways that human activities are organized and the rules under which they operate—factors often taken for granted or overlooked. How easy is it for people to engage in trade or to organize a business? The legal system of a country, to a large extent, determines the level of trade, investment, and economic cooperation undertaken by the residents of a nation. A legal system that protects individuals and their property, enforces contracts fairly, and settles disputes is an essential ingredient for economic progress. Without it, investment will be lacking, trade will be stifled, and the spread of innovative ideas will be impeded. Part 2 of this book will examine in more detail the importance of the legal structure and other elements of economic organization.

Video:

The Economics of Cast Away

Investment and improvements in technology do not just happen. They reflect the actions of entrepreneurs, people who take risks in the hope of profit. 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 to test their ideas to see if they are profitable and, simultaneously, discourages them from squandering resources on unproductive projects.

Video:

The Puzzle of Economic Growth

For this progress to occur, markets must be open so that individuals are free to try their innovative ideas. An entrepreneur with a new product or technology needs to win the support of only enough investors to finance the project. But, **competition**[?] must be possible to hold entrepreneurs and their investors accountable for the efficient allocation of their resources: Their ideas must face the "reality check" of consumers who will decide whether or not to purchase a product or service at a price above the production cost. In this environment, consumers are the ultimate judge and jury. If they do not value an innovative product or service enough to cover its cost, it will not survive in the marketplace. The proper role of government is to ensure that new and better products have a chance to compete, not to decide which products should be favored.

ELEMENT 1.11

The Usefulness of the "Invisible Hand"

The "invisible hand" of market prices directs buyers and sellers toward activities that promote 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.*[8]
>
> **— Adam Smith (1776)**

Video:
Invisible Hand Steak

Self-interest is a powerful motivator. As Adam Smith noted long ago, when directed by the **invisible hand**[?], self-interested individuals will 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 he is directed by the invisible hand of market prices to promote the goals of others, leading to greater prosperity.

The principle of the "invisible hand" is difficult for many people 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 market prices coordinate the actions of self-interested individuals when private property and freedom of exchange are present. 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 best possible information on the current actions and preferences 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 wondered why the supermarkets in your community have approximately the right amount of milk, bread, vegetables, and other goods—an amount large enough that the goods are nearly always available but not so large that a lot gets spoiled or wasted? 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 quantity that consumers desire? 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 provides the answer. 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 Prize recipient Friedrich Hayek called the market system a "marvel" because just one indicator, the market price of a commodity, spontaneously carries so much information that it guides buyers and sellers to make decisions that help both obtain what they want.(9) 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 giant computer network grinding out an indicator that gives all participants both the information they need, and the incentive to act on it.

No individual or central-planning authority could possibly obtain or consider all the information needed for millions of consumers and producers of thousands of different goods and services to coordinate their actions the way markets do. Moreover, market prices contain

this information in a distilled form. They will direct producers and resource suppliers toward production of those things that consumers value most (relative to their costs). No one will have 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 will it be necessary for anyone to remind producers to search for and utilize low-cost methods of production. Self-interest directed by the invisible hand of market prices will provide them with an incentive to seek out the best combination of resources and the most **cost-effective**(?) production methods. Because lower costs will mean higher profits, each producer will strive to keep costs down and quality up. In fact, competition will virtually force 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 sit down to a nice dinner, think about all the people who helped make it possible. It is unlikely that any of them—from 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 turkeys 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, always using the low-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. Moreover, the invisible hand works so quietly and automatically that the order, cooperation, and availability of a vast array of goods and services 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 1.12

Unintended Consequences Create Problems

Too often long-term consequences, or the secondary effects, of an action are ignored.

In 1946, Henry Hazlitt, a famous economic journalist, wrote a book titled *Economics in One Lesson*. This economics primer, which builds on the 1850 essay by the Frenchman Frédéric Bastiat (whose work was discussed in Element 1.9), is perhaps the all-time bestselling treatise in economics.

Recall Bastiat's story of a young boy who breaks the window of a shopkeeper by throwing a ball through it. As a result, the shopkeeper hires a glazier to fix the window. Some observers, noting the highly visible employment of the glazer, argue that the broken window is a good thing because it created a job for the glazier. However, as Hazlitt stresses, this is wrong because it ignores the secondary effects.

If the shopkeeper had not spent money fixing the window, he would have spent it 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 greater and 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 destruction resulting from floods, hurricanes, and badly designed public policy harm a society and fail to expand net employment. The view that replacing destruction creates employment and is good for the economy is now known as the "broken window fallacy." The resources used in such replacement must reduce a society's ability to produce other valuable goods or services. See Element 1.9 for several examples of this fallacious view.

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.[10]

Hazlitt believed that failure to apply this lesson was the most common source of economic error. He had written extensively on the economy during the Great Depression of the 1930s, and he knew that, especially in politics, there is a tendency to stress the short-term benefits of a policy while ignoring the longer-term, often unintended, consequences.

Video:

Economics On One Foot

Let's consider three examples that illustrate the potential importance of secondary effects. In an effort to reduce air pollution from vehicle emissions by reducing gasoline consumption, the Georgian government designed a new excise tax targeting older automobiles with bigger engines. Since Georgia is a low-income country, demand has always been high for older used cars because they are cheaper (91% of the cars for sale in used car lots were manufactured before 2006). The new tax, which came into effect in January 2017, was a sliding scale. For example, the customs clearance plus excise tax on a 2002 car with a 1.5 liter engine was GEL 3731, but for a car of the same year with a 2.5 liter engine it was GEL 6219, and for a 3.5 liter engine, GEL 8706. Although the changes in the tax policy clearly incentivized people to purchase cars with small engines, one has to ask, was this regulation a sound policy? What was its full impact, including secondary effects?

Since the new Georgian excise tax policy has been in effect for only a short time, we need to look at the experience of other countries with similar policies aimed at reducing fuel consumption. Data reveals an increase in driving since the greater fuel efficiency of light vehicles makes them cheaper to operate. This, in turn, increases congestion and results in a smaller reduction in gasoline consumption than was intended by the regulation. Furthermore, in the case of accidents, the lighter cars, induced by the need to meet standards, do not offer as much protection for occupants as the heavier, bigger-engine cars they replace, so the result may be an increase in highway deaths and injuries. Once the secondary effects are considered,

fuel efficiency regulations may prove much less beneficial than they might first appear.

Similar unintended consequences were found after the introduction of laws requiring the use of seatbelts. The British Department of Transportation found that in the 20 months after a law came into effect requiring drivers and front seat passengers to wear seat belts, the number of deaths among those traveling in the front seats was reduced by 656. The same time period, however, saw an increase in deaths of pedestrians (77), bicyclists (63), and back seat passengers (69),[11] apparently caused by drivers who felt safer when wearing seat belts and subsequently drove more dangerously.

Trade restrictions between nations have important secondary effects as well. The proponents of tariffs and import quotas on foreign goods almost always ignore the secondary effects of their policies. Tariffs and quotas may initially protect the country's workers who make similar products at a higher cost, but there will be unintended secondary consequences.

Consider the Common Agriculture Policy (CAP) of the European Union, which uses quotas and tariffs to restrict sales of foreign-produced agriproducts, and subsidizes member countries' agriculture directly from the E.U. budget. "The CAP was created so that people could enjoy good food at affordable prices and farmers earn a fair living," we read in the document dedicated to the 50-year anniversary of the policy.[12] Overall, subsidies paid through the CAP account for somewhat over a third of the total E.U. budget. Proponents of this policy argue that the E.U. farm and food sectors would be approximately 8% smaller without CAP,[13] and that it is thereby "saving" jobs and increasing employment. No doubt, the sector is bigger than it otherwise would be, but what about secondary effects?

Expenditure on the CAP crowds out other possible uses within the E.U. budget and prevents allocation of E.U. funds to other public goods activities. The subsidies cost each European Union citizen more than €100 a year, according to the European Commission. Moreover, tariffs and quotas maintain local prices at a higher level than competitive world prices,[14] so E.U. consumers pay even more for agriproducts. Individual families are essentially paying twice for their food: first, they pay higher prices due to protectionism of the agricultural sector, which raises prices in the stores; second, they are taxed to pay for agricultural subsidies. Also, tariffs and quotas indirectly affect other firms that produce food by processing agriproducts. For example, in France for 2007 the CAP reduced the size of

manufacturing by 1.5%, and the large services sector contributed a mere 0.1% of its labor and capital to other sectors that benefited from the CAP. Releasing the CAP would decrease the price of capital (land and equipment), which would benefit the farms that are not supported by the CAP. In addition, the CAP reduces the size of forestry, which competes directly along with other rural activities for agricultural land. (In France, the CAP reduces the area devoted to forestry by about 3.6%.) Furthermore, because of tariffs and quotas, non-E.U. countries sell less farm products in the E.U. market, reducing their ability to purchase E.U. exports, and reducing employment in the sectors that lose these sales.

Once the secondary effects of trade restrictions like the CAP are taken into consideration, there is no reason to expect E.U. employment and overall production to increase as a result. There may be more jobs in favored industries, but there will be less employment in others. Trade restrictions reshuffle employment rather than increase it. But those who fail to consider the secondary effects will miss this point.

Secondary effects are not just a problem for political decision-making. They can also lead to unanticipated outcomes for individuals. The recent experience of a first-grade teacher in West Virginia illustrates this point. Her students were constantly losing their pencils, so she reasoned that if she paid them 10 cents for the stub, they would respond to the incentive to hang on to the pencil until it was completely used. To her dismay, the students soon formed long lines at the pencil sharpener, creating stubs just as fast as she could pay for them. It pays to be alert to unintended consequences!

Read:

What Is Seen and What Is Not Seen by Frédéric Bastiat

PART 2

Seven Major Sources of Economic Progress

Elements:

1. Legal system: The foundation for economic progress is a legal system that protects privately owned property and enforces contracts in an evenhanded manner.
2. Competitive markets: Competition promotes the efficient use of resources and provides the incentive for innovative improvements.
3. Limits on government regulation: Regulatory policies that reduce exchange and restrict competition impede economic progress.
4. An efficient capital market: To realize its potential, a nation must have a mechanism that channels capital into wealth-creating projects.
5. Prudent monetary policy: A stable monetary policy is essential for the control of inflation, efficient allocation of investment, and achievement of economic stability.

6. Low tax rates: People produce more when they can keep more of what they earn. Control of government spending and deficits (fiscal policy) is crucial to economic stability and growth.
7. Free trade: People achieve higher incomes when they are free to trade with people in other countries.

Introduction

Video:

200 Countries, 200 Years (15)

Robert Lucas, the 1995 Nobel Laureate in economics, stated, "Once you start thinking about economic growth, it is hard to think about anything else."(16) Why do Lucas and many other economists place so much emphasis on economic growth? Growth of real output is necessary for the growth of real income. Without growth, higher income levels and living standards cannot be achieved.

During the past two hundred years, economic growth, particularly in the West, has elevated living standards and improved both the length and quality of life. This period, however, is exceptional. Throughout most of human history, economic growth has been extremely rare. Prior to 1800, most of the world's population worked hard for fifty, sixty, and seventy hours per week in order to obtain enough food and shelter for subsistence. It was a constant struggle for survival and many lost the battle. Living standards in 1800 were not much different than a thousand years earlier, or even two thousand years earlier, during the time of ancient Rome.

The bleak economic story of human history began to change about two hundred years ago. The late Angus Maddison, an economist for the Organization for Economic Co-operation and Development, is widely recognized as the leading authority on historical income and life expectancy data. Exhibit 5 presents his estimated annual income levels per person for the past thousand years. Measured in 1990 dollars, the **gross domestic product (GDP)**(?) per person of

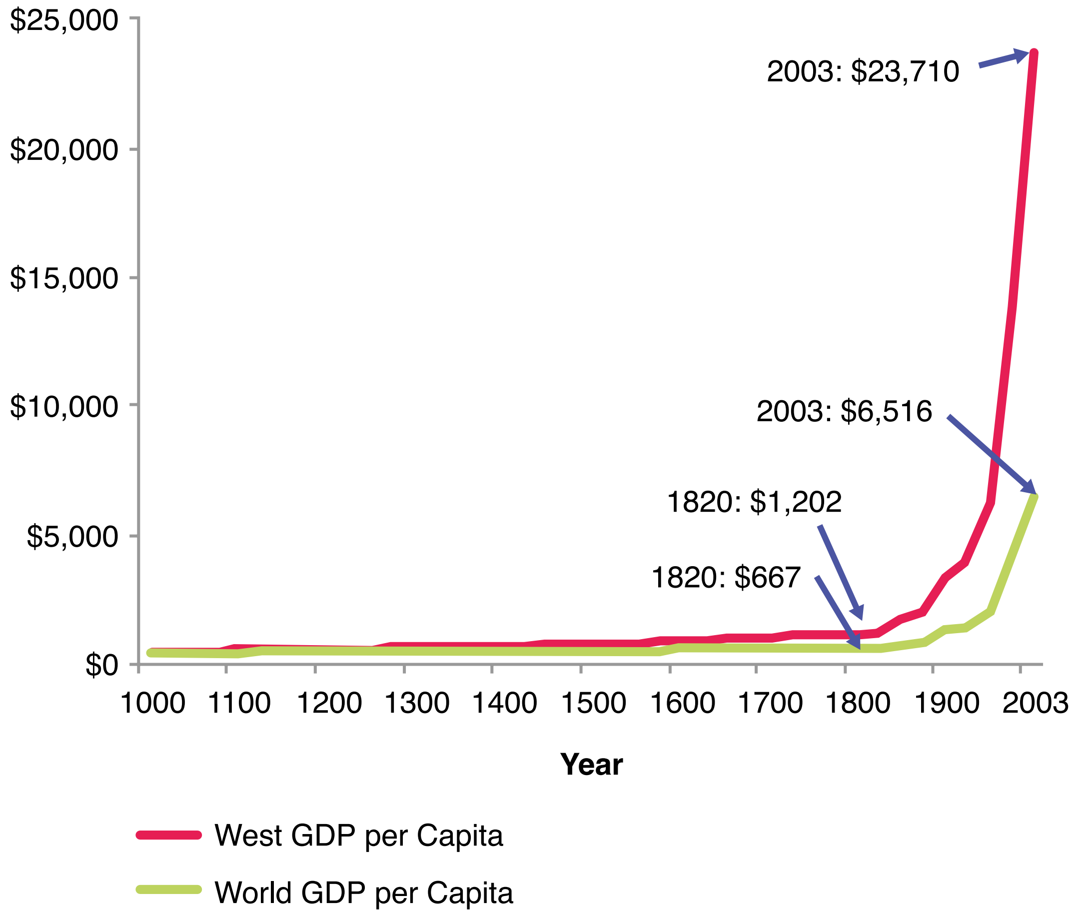
the world was $667 in 1820, compared to $450 in 1000.[17] Thus, over 800 years, per-person income levels increased by only about 50 percent. Western Europe and its offshoots of the United States, Canada, Australia, and New Zealand—commonly referred to as the West—did a little better, as income in this region approximately tripled from $426 in 1000 to $1,202 in 1820. But even in the West it took around five hundred years for income to double.

Read:

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

Now, take a good look at what has happened since 1820. During the past two hundred years, there has been a virtual explosion of economic growth. By 2003, the world's income per person had risen to $6,516, ten times the level of 1820. In the West, by 2003 income per person had soared to $23,710, nearly twenty times the figure for 1820. Thus, after experiencing centuries of income levels at or near subsistence, real per capita income has skyrocketed during the past two hundred years.

Exhibit 5: GDP per Capita (1990 dollars)



Source: Angus Maddison, Contours of the World Economy, 1–2030 AD: *Essays in Macro-Economic History* (Oxford: Oxford University Press, 2007).

The pattern of life expectancy was similar. Life expectancy at birth for the world rose from 24 years to 26 years between 1000 and 1820, but it then increased to 31 years in 1900 before soaring to 64 years in 2003. In the West, life expectancy rose from 24 years to 36 years between 1000 and 1820, but by 2003 it had reached 76 years.

As history illustrates, economic growth does not occur automatically. Why do some

countries grow and achieve high levels of income while others stagnate? What institutions and policies will promote growth and higher living standards? This section examines these vitally important questions.[18]

Before we do, however, it is worth adding a cautionary note about the measurement of GDP, especially with respect to post-communist countries. A definition that seems simple such as "value of final output of goods and services" masks a host of difficult questions. For something traded in a free market, establishing value is easy. But what about something subject to price controls? Should it be valued at what people actually paid or what they would have paid in a free market? Should the value of time spent queuing be included? What about output that is not traded? If soldiers are conscripted, how should their labor be evaluated? How well can statistical authorities capture the output in the underground (grey or black) market? If I bake a pizza at home, the value of the cheese is included but not my time in the kitchen. On the other hand, if I buy the pizza from a restaurant the labor *is* included in the GDP. Yet, assuming you are as good a cook as the chef, it is an identical pizza.

The difficulty in measuring GDP and related price changes creates problems in understanding the early years after the collapse of communism. The official statistics show a huge drop in output—but this is inconsistent with the actual experience of citizens.[19]

ELEMENT 2.1

The Legal System

The foundation for economic progress is a legal system that protects privately owned property and enforces contracts in an evenhanded manner.

[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.[20]

— Tom Bethell, Economic Journalist

The legal system provides the foundation for the protection of property rights and enforcement of contracts. As we discussed in Element 4 of Part 1, trade moves goods toward people who value them more and makes larger outputs possible as the result of gains from specialization and large-scale production methods. To reduce the uncertainties accompanying trade, a legal system must provide evenhanded enforcement of agreements and contracts. This increases the volume of exchange and the gains from trade, and thereby promotes economic progress.

Well-defined and enforced property rights are crucial for the realization of gains from trade. Property is a broad term that includes ownership of labor services, as well as physical assets such as buildings and land. Private ownership of property 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) to others.

Video:
Eusebio's Dream Property Rights

Private owners can decide how they will use their property, but they are held accountable for their actions. People who use their property in a manner that invades or infringes on the property rights of another will be subject to the same legal forces that protect their own property. For example, **private property rights**(?) prohibit me from throwing my hammer through the windshield of your automobile because if I did, I would be violating your property right to your car. Your property right to your automobile restricts me and everyone else from its use (or abuse) 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 people with a strong incentive to maintain and care for items that they own. If private owners fail to maintain their property or if they allow it to be

abused or damaged, they will bear the consequences in the form of a decline in their property's value. For example, if you own an automobile, you have a strong incentive to change the oil, have the car serviced regularly, and see that the interior of the car is well-maintained. Why is this so? If you are careless in these areas, the car's value to both you and potential future owners will decline. If the car is kept in good running order, it will be of greater value to you and to others who might want to buy it from you. For the owner, 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 others (such as the government, or a large group of people owning in common—in socialist economies this was said to be "ownership by the people"), the incentive for each user to take good care of it is weakened. For example, when the government owns housing, no individual or small group of owners has a strong financial incentive to maintain the property, 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 nations where markets provide price signals, and in socialist countries where they do not. Laxity in care, maintenance, and repair reflects the weak incentives that accompany government ownership of property, even in the midst of working markets for other privately owned assets. A common saying in Soviet times captured this problem: "When everybody is the owner, nobody is the owner."

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 burnt-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) whom 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.

Insurance[(?)], while important as will be discussed later, also creates such an incentive for “misuse.” This is known as a **moral hazard**[(?)], where an individual deciding how to use an asset knows that someone else will pay the price for any bad outcome. Drivers who know that the insurance company will replace their car if it is stolen may be less careful about where they park or forget to lock their cars. Skiers without health insurance will be less likely to risk black diamond slopes.

Second, private ownership encourages people to use and develop their property in ways others value highly. If they employ and develop their property in ways that others find attractive, the market value of the property will increase. In contrast, changes that others dislike—particularly if the others are customers or potential future buyers—will reduce the value of one’s property.

Private ownership also affects personal development. When people are able to 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. 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 that are highly valued by others.

Similarly, private ownership provides the owners of land, buildings, and other physical assets with an incentive to use, protect, and develop them in ways that are beneficial to others. Further, those who fail to do so will bear the cost in terms of a lower value of their assets. Consider the owner of an apartment complex who personally cares nothing about having parking spaces, convenient laundry facilities, a nice workout room, or an attractive lawn and

swimming pool within the complex. If consumers value these things highly (relative to the costs of producing them), the apartment owner has a strong incentive to provide them. Why? Consumers will be willing to pay higher rents for apartments with the highly valued amenities. Thus, apartment owners who supply such amenities will be able to improve the well-being of their customers and increase their own net earnings (and the market value of their apartment complex). In contrast, apartment owners who insist on providing only what they like, rather than the things that consumers prefer, will find that their earnings and the value of their capital (their apartments) will decline.

Interestingly, private ownership influences productivity even in socialist countries. Farming in the former Soviet Union illustrates this point. Under the Communist regime, families were permitted to keep or sell the goods they produced on small private plots, which ranged up to less than half a hectare in size. 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 one-fourth of the total value of Soviet agricultural output was raised on that tiny fraction of privately farmed land. This indicates that the output per acre on the private plots was about sixteen times that of the state-owned farms.

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 and the government ignored 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.[21]

Third, private ownership makes owners legally responsible for damages imposed on others as the result of how their property is used. 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. Owners are held responsible

precisely because they are in a position to exercise control. In turn, this accountability provides owners with a strong incentive to use their property responsibly and take steps to reduce the likelihood of harm to others.

Video:

Economics of Private Property Rights

Consider the following examples. The owner of a dying tree has an incentive to cut it down before it falls into a neighbor's house. Dog owners have an incentive to leash or restrain their dogs if they are likely to bite others. A car owner has a right to drive his car, but will be held accountable if the brakes aren't maintained and the car damages someone else's property. Similarly, a chemical company has control over its products, but, exactly for that reason, it is legally liable for damages if it mishandles the chemicals.

Fourth, private ownership promotes the conservation of resources for the future, as well as wise development. Using a resource may generate revenue, which reflects the desires of present consumers who want what the resource can provide. But future consumers also 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 later? In other words, will the expected value of the trees when they are more mature be greater than if they are logged today? And will that value exceed their value if harvested 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 on current use—to make sure that the resource will be available when it is more valuable.

Private owners will gain by conservation whenever the future value of a consumable 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 the elderly tree farmer have an incentive to conserve the trees for future use? With private ownership rights, the answer is clearly "yes." As long as the growth of the trees is

expected to enhance future revenue as much as alternative investments would, the farmer will gain by conserving the trees for the future. With private ownership, the market value of the farmer's land will increase as the trees grow and the expected day of harvest moves closer. So even though actual logging may not take place until well after his death, the owner will be able to sell the trees (or the land including the trees) at any time, capturing their increasing value.

For centuries pessimists have argued that we are about to run out of trees, critical minerals, or various sources of energy. Again and again, they have been wrong because they failed 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 of wood and led to investment in the discovery and better use of coal. The wood crisis soon dissipated.

Even when a specific resource is not owned, the market for other resources that are owned can often solve problems. In the middle of the nineteenth century, dire predictions arose that the United States was about to run out of whale oil, the primary fuel for artificial lighting at the time. No one owned the whales, which were being hunted to excess on the high seas. If a whale hunter failed to take a whale when the opportunity arose, someone else would probably do so in the near future. As whale oil prices rose, the incentive for individuals to conserve whales for the future was missing because private ownership rights were absent. No one limited whale hunting even though the whale population was declining.

However, the higher whale oil prices strengthened the incentive to find and develop substitute energy sources. If entrepreneurs could develop a cheaper new energy source, they could earn substantial revenues. With time, this led to the discovery of commercially profitable sources of petroleum, the development of relatively cheaper kerosene, a resulting drop in the price of whale oil, less whale hunting, and thus the end of the whale oil crisis.

Later, as people switched to petroleum, predictions emerged that this resource, too, would be exhausted. In 1914 the Bureau of Mines reported that the total U.S. supply of oil was under six billion barrels, about what the United States now produces every forty months. In 1926 the Federal Oil Conservation Board estimated that the U.S. supply of oil would last only for another seven years. More recently, a study sponsored by the highly influential Club of

Rome made similar predictions for the world during the 1970s.

Understanding the incentives that emanate from private ownership makes it easy to see why such doomsday forecasts of resource depletion have not materialized. When the scarcity of a privately owned resource increases, the price of the resource will rise. The increase in price provides consumers, producers, innovators, and engineers with incentives to (1) conserve on the direct use of the resource (such as turning off lights when the room is empty or wearing a sweater instead of turning up the heat for consumers and tuning up cars and machinery for both consumers and producers); (2) search more diligently for **substitutes**(?) (such as buses instead of cars for consumers or wind, hydro, or nuclear power to replace oil); and (3) develop new methods of discovering and recovering larger amounts of the resource (such as horizontal drilling and fracking). To date, these forces have pushed doomsday ever further into the future, and there is every reason to believe that they will continue to do so for resources that are privately owned. If you want to see this difference in a stark manner, consider the difference between the cow and the American buffalo. No two animals could be more similar in size and meat value, yet while the commonly owned buffalo was hunted almost to the point of extinction, no one could possibly claim that there is a **shortage**(?) of privately owned cows.[22]

A legal system that protects property rights and enforces contracts in an evenhanded manner provides the foundation for gains from trade, **capital formation**(?), and resource development, which comprise the mainsprings of economic growth. In contrast, insecure property rights, uncertain enforcement of agreements, and legal **favoritism**(?) undermine both investment and the productive use of resources.

Video:

The Power of Property Rights

Throughout history people have tried other forms of ownership such as large-scale cooperatives, socialism, and communism. On any scale beyond the small village with a strong cultural harmony, these experiences have ranged from unsuccessful to disastrous. To date, we do not know of any institutional arrangement that provides individuals with as much freedom

and incentive to serve others by using resources productively and efficiently as does private ownership within the framework of the **rule of law**[?].

Video:

The Tragedy of the Commons

The reference to the "rule of law" is critical. Property rights can never be unlimited. Societies impose rules ("drive on the right side of the road" or "have a fire alarm in your home") to ensure that the assertion of rights by one person does not cause harm to others. The Nobel Prize-winning economist Ronald Coase has pointed out that in some cases markets can achieve the same outcome, but that when many people are affected public rules may be the only solution.

Read:

Private Property and Opportunity Costs by Dwight Lee

ELEMENT 2.2

Competitive Markets

Competition promotes the efficient use of resources and provides the incentive for innovative improvements.

> *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.*[23]
>
> **— Clair Wilcox, Former Professor of Economics, Swarthmore College**

Competition is present when the market is open and alternative sellers are free to enter. Competition is the lifeblood of a market economy. The 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 the preferences of consumers. Competition weeds out

inefficient producers. Firms that fail to provide consumers with quality goods at attractive prices will experience losses and eventually be driven out of business. Successful competitors have to 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 cost 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 service? Competition provides the answer. If McDonald's fails to provide a tasty sandwich at an attractive price delivered with a smile, people will turn to Burger King, Wendy's, Subway, Taco Bell, and other rivals. Even the largest firms will lose business to small upstarts that find ways to provide consumers with better products at lower prices. Firms as large as Fiat, Toyota, General Motors, and Ford will lose customers to Honda, Hyundai, Volkswagen, and other automobile manufacturers if they fall even a step behind in providing the type of vehicle people want at competitive prices.

Video:

Walmart Competition and Cost Control

Competition gives firms a strong incentive to develop better products and discover lower-cost methods of production. Because technology and prices change constantly, no one knows precisely what products consumers will want next or which production techniques will minimize costs per unit. Competition helps discover the answer. Is **marketing**(?) through social media the greatest retail idea since the shopping mall? Or is it simply another dream that will eventually turn to vapor? Competition will provide the answer, which will differ across markets and change over time.

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 the innovation enough to cover its costs, the new business will profit and prosper. But if consumers find that the new product is worth less than it costs, the business will suffer losses and fail. Consumers are the ultimate judge and jury of business innovation and performance.

When new products are introduced, they typically follow a predictable price-quality pattern. Initially, new products are generally very expensive and purchased by relatively few consumers, mostly those with high incomes. These consumers will pay dearly for the earlier availability because during this initial phase, the product quality tends to be lower than it will be later as producers gain experience, while the price will be high due to limited production volume. These initial purchasers play a vital role: They provide the revenue to cover the product's start-up cost and make it possible for entrepreneurs to acquire the experience that will help them improve quality and reduce per-unit cost in the future. Moreover, market incentives will encourage them to do so. With time, entrepreneurs will figure out how to make the product more affordable and expand its availability to more and more consumers.

Cellular phones illustrate this price/quality pattern. When cell phones were initially introduced in the late 1980s, they sold for around $4,000, were about the size of a brick, and could not do much of anything other than make phone calls. With time, their size was reduced, their information processing power and functions expanded, and their price declined. 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.

Cell Phone Evolution 1973–2015

Numerous goods, including automobiles, televisions, air conditioners, dishwashers, microwave ovens, and personal computers have gone through this same pattern. All were highly expensive when they were 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 price-quality pattern.

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 also discovers the business structure and size of firm that can best keep the

per-unit cost of a product or service 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 has to pass only one test: cost-effectiveness. If a business entity, whether a corporation or an employee-owned firm, produces quality products at attractive prices, it will profit and succeed. But if its structure results in higher costs than other forms of business organization producing a product of similar quality, 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 marque Wartburg and the Russian car marque 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—the manufacturing of airplanes and automobiles, for example—firms will need to be quite large to take full advantage of economies of scale. Building a single automobile would be extremely costly, but 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.

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 will tend to dominate and large firms will have difficulty competing. This is generally the case in the markets for legal and medical services, gourmet restaurants, hair styling, and specialized printing. Thus, these markets are usually dominated by small firms.

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 superior products and technologies. When the new methods improve quality and/or reduce costs, they will grow rapidly and often replace the old ways of doing things.

History abounds with examples. The automobile replaces the horse and buggy. The supermarket replaces the mom-and-pop grocery store. Fast-food chains like McDonald's largely replace the local diner. Carrefour and Metro Cash & Carry grow rapidly while other retailers shrink or even go out of business. MP3s and iPods replace CD players, which had previously displaced cassette decks and record players. Personal computers replace typewriters, and smart phones substitute for less mobile computer devices. One could go on and on with similar examples. The great economist Joseph Schumpeter referred to this dynamic competition as "**creative destruction**[?]," and he 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 self-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.*[24]

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. At the same time, prices in open and competitive markets provide producers with a strong incentive to keep costs low, cater to the desires of consumers, and discover superior products and better ways of doing things.

It is important to note that competition is not "pro-business." In fact, businesses do not like to face competition and they commonly lobby for 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 and the political process, examples of business behavior seeking to reduce the competitiveness of markets will arise again and again. Indeed, the problem of oligarchs managing to dominate markets for certain goods and services is particularly common in post-communist economies.

Read:

Running Out of Agricultural Land by Dwight Lee

ELEMENT 2.3

Sensible and Limited Regulation

Regulatory policies that reduce exchange and restrict competition impede economic progress.

As we previously noted, gains from trade directed by competitive markets promote both economic progress and social cooperation. Government regulations, often promoted by established businesses, are a major source of trade barriers and market entry restraints. There are three major ways that regulations limit exchange and reduce the competitiveness of markets.

First, regulations often 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 have to 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 pay a bribe or contribute to their political coffers. Often, well-established and politically influential businesses that you would be competing against can successfully oppose your application.

Video:

Food Truck Roadblock

In his revealing book *The Mystery of Capital*, Hernando de Soto reports that in the late 1990s in Lima, Peru, it took 289 days for a team of people working six hours a day to meet the regulations required to legally open a small business producing 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 in order to get permission to operate legally.) In an example

of the power of simple understanding of economic common sense, attention to these delays, perhaps motivated by the wide attention given to Professor de Soto's work, has resulted in a massive easing of the bureaucracy required to open a business in recent years. The World Bank reports that the global average time to open a business has fallen from 51 days in 2005 to 20 days in 2018. Time required improved dramatically among countries at every income level and in every region of the world except North America, where it remained constant at an already low 3.5 days. 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.[25] 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 14 days on average across the region as compared to 23 days in East Asia and 28 days in Latin America.

Second, regulations that substitute political authority for the rule of law and freedom of contract will tend to undermine gains from trade. Several countries make a habit of adopting laws that grant political administrators substantial discretionary authority. 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. Popular support for regulation often stems from the desire to promote a cleaner environment or provide consumers with protection against unscrupulous business operators. Regulations can play a positive role in these areas. Even here, however, the law needs to be precise, unambiguous, and nondiscriminatory. If it is not, it will be a roadblock to gains from trade.

Regulations often help some businesses by restricting competitors. Because such regulations are lucrative to the few who benefit, they impose an additional cost: Businesses, labor organizations, and other special interest groups will seek advantage for their constituents by trying to influence the political process. Some will lobby politicians and regulators to establish or increase these roadblocks, while others (those most severely harmed) will lobby to diminish their effects. Lobbying for all sides of any issue consumes the time and effort of

highly skilled individuals who could be producing wealth instead of seeking political advantages from policies that reduce the productivity of others. Efforts that waste valuable resources in ways that may be productive for an individual or firm but not for society as a whole are referred to as **rent-seeking**(?) behavior and are frequently the result of regulations.

Video:

Risks of Good Intentions

Third, the imposition of price controls will also stifle trade. Governments sometimes set prices above the market level. For example, some governments require that the producers of various agricultural products be paid a specified minimum price for their commodities. At the higher set price, buyers will purchase fewer units than they otherwise would. Some governments also set prices lower than the market level, as in cases of apartment rent controls and regulated electric power rates. In terms of units produced and sold, it makes little difference whether price controls push prices up or force them down. Both will reduce the volume of trade and the gains from production and exchange.

Minimum wage(?) rates are perhaps the most commonly imposed price control throughout the world. A minimum wage rate establishes a **price floor**(?) that pushes the hourly wage of some workers (and jobs) above market level. It is currently a hot topic in North Macedonia, as in many other European countries. Among European Union members, annual minimum wages in 2017 (adjusted for differences in price levels) ranged from $7,900 in Latvia to $22,600 in the Netherlands.

The basic postulate of economics indicates that a higher minimum wage will reduce the employment of low-skill 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 employment by between 1 and 2 percent. Because the wage increases are substantially larger than the reductions in employment, a higher minimum wage will nearly always increase the total earnings of low-skill workers. The proponents of higher minimum wages believe that the higher total earnings are well worth the cost of the relatively

small reductions in employment.

Video:

Minimum Wage Washout

Many supporters of a higher minimum wage also believe that it will reduce the **poverty**[?] rate. At first glance, this appears to be true, but examination of the data indicates it is highly questionable. There are several major reasons why this is the case. Take the figures for the United States, for example. The bulk of minimum wage employees—about 80 percent—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 16 and 24 years and most of them work part-time. Only 1 out of every 7 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, there will be unintended effects of the higher minimum. Employers will take steps to control (or compensate for) their higher wage costs. These will include a reduction in hours worked, fewer training opportunities, a less convenient work schedule, and fewer fringe benefits. Further, many of the minimum wage workers are also consumers of products impacted by the higher minimum wage. These workers will have to pay higher prices for goods such as fast food as will other low-income consumers such as retirees. Thus, the actual compensation of the minimum wage workers will increase by less than the expansion in the minimum.[26] Finally, more than half of the poor families in the United States do not have anyone in the labor force, and therefore a higher minimum wage will not help them.

The evidence regarding minimum wages in less developed countries is mixed but tends to show that minimum wages that are high enough to have an impact may raise wages in the formal economy at the cost of driving a large number of workers out of the formal economy into the informal sector, where earnings are lower and much more highly variable.

When thinking about the effects of the minimum wage on youthful low-skill workers, it

is important to consider the impact in both the short and long run. Work experience provides youthful workers with an opportunity to develop self-confidence, good work habits, skills, and attitudes that will make them more valuable to future employers. This opportunity is particularly important for high school dropouts and others with weak educational backgrounds. Unless these young people are able to 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.

The value of work experience and skill development is widely recognized in the case of those with higher levels of education. For example, college students often take unpaid internships—that is, they work for a zero wage—with government agencies and nonprofit organizations in order to gain experience that will enhance their future earning opportunities. Indeed, members of the United States Congress advertise unpaid internships to college students by pointing out the benefits of work experience in beginning-level jobs. Yet many of these same politicians support minimum wage levels that reduce the opportunity of disadvantaged youth to acquire the work experience and on-the-job training that will enhance their future employment prospects. This adverse impact on low-skill youth is almost always ignored, except by economists. Nonetheless, it is an important unintended secondary effect of minimum wages that adversely impacts the long-term employment of young people, particularly those with the least amount of education.

Video:

Minimum Wage—Good or Bad Idea?

Regulations are particularly important in **labor markets**[?]. Many countries have imposed regulations that interfere with and undermine the use of contracts or voluntary agreements to deal with various issues. Dismissal regulations provide an example. A number of European countries require employers who want to reduce the size of their workforce to (1) obtain permission from political authorities; (2) notify the dismissed employees months in advance; and (3) continue paying the dismissed employees for several more months.

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 additional workers because of the high dismissal costs. As a result, it will be difficult for new labor force entrants to find jobs, and the growth of employment will be slowed. This has been the case in European countries, where restrictive labor market regulations are more pronounced than in the United States. Such regulations are a major reason why the unemployment rates of Western European countries such as Italy, Spain, and France have been at least 4 or 5 percentage points higher than the United States during the past couple of decades.[27] Research by Steve Hanke at Johns Hopkins University has found that between 2010 and 2015 unemployment rates in E.U. countries with mandated minimum wages were up to 50 percent higher than in those E.U. countries without mandated minimum wages.

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 and an increase in the size of the informal economy.[28]

While hiring and dismissal regulations are generally less restrictive in the United States than in Europe, **occupational licensing**[?] is a major labor market restriction in both the United States and the European Union. Most of the occupational licensing in the United States occurs at the state level. In order to obtain a license, one has to pay fees ranging from modest to exorbitant, take training courses for 6 to 12 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. Now, according to the Council on Licensure, Enforcement and Regulation, more than 1,100 occupations are licensed. 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 E.U. 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 E.U.[29]

The supporters of licensing argue that it is necessary to protect consumers from shoddy and potentially unsafe products. But, licenses are required in numerous occupations that have little to do with public safety or protection of the consumer.[30] For example, one or more states in the United States require a person to be licensed in order to work in the following occupations: interior designer, makeup artist, florist, hair braider, shampoo specialist, dietician, private detective, athletic trainer, tour guide, hearing-aid fitter, funeral attendant, casket seller, and even ferret breeder and palm reader. The pressure for licensing seldom originates from consumer groups. Instead, it nearly always arises from those already in the occupation. This is not surprising to economists because the current suppliers are the primary beneficiaries of licensing.

Individuals can often acquire the skills necessary for high-level performance in many licensed occupations through on-the-job experience and working with others skilled in the trade. The licensing requirements prohibit persons developing their skills via these methods from 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. The employment opportunities of the unlicensed producers are diminished and potential gains from trade lost.

Certification[?] provides an attractive alternative to licensing. With certification, the government could 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, without restricting their choices. Further, it would make it possible for practitioners to develop and demonstrate their competence, while still providing consumers with the information needed to make informed choices.

Regulations often appear to be an easy way to solve problems. Want higher wages? Increase the minimum wage. Want a lower unemployment rate? Pass laws making dismissal of workers more difficult. Want higher earnings in an occupation? Restrict the entry of price-cutters. But there is a problem here: These simplistic policies do not enhance production and

they ignore the secondary effects. Our living standard is directly linked to the production of goods and services that people value. Mutually advantageous trade and competitive markets encourage efficient use of resources and discovery of better ways of doing things. They help us get 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 that restrict trade and the competitiveness of markets.

Read:

Censoring Pleas for Help by Dwight Lee

ELEMENT 2.4

Efficient Capital Markets

To realize its potential, a nation must have a mechanism that channels capital into wealth-creating projects.

While consumption is the goal of all production, it will often be necessary first to use resources to build machines, heavy equipment, and buildings, which can then be used to produce the desired consumer goods. In other words, investment increases future consumption, but it requires forgoing some present consumption. **Capital investment**(?)—the construction and development of long-lasting resources designed to help produce more consumer goods and services in the future—is an important potential source of economic growth. For example, the purchase of an investment good such as an oven by a local pizzeria will help enlarge its future output.

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

Not all investment projects, however, are productive. An investment project 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 a mechanism that will attract savings and channel them into the investments that are most likely to create wealth.

In a market economy, the **capital market**(?) performs this function. Broadly defined, it includes the markets for stocks, bonds, and real estate. **Financial institutions**(?) such as **stock exchanges**(?), banks, insurance companies, mutual funds, and investment firms play important roles in the operation of the capital market.

Private investors, such as small business owners, corporate **stockholders**(?) and **venture capitalists**(?) place their own funds at risk in the capital market. Investors sometimes make mistakes, however. Sometimes they 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 role of entrepreneurship, risk-taking, and the capital market in the development of Internet services. In the mid-1990s, Sergey Brin (an immigrant from Russia) and Larry Page were graduate students at Stanford University in California, working on a research project designed to make it easier to find things on the Internet. They might have seemed unlikely candidates for entrepreneurial success. But in 1998, Brin and Page founded Google Inc., a business providing free Internet services that generates revenues through advertising. The powerful Internet search engine that they developed increases the productivity of millions of individuals and businesses each day. They have earned a fortune and Google is a household name with more than 85,000 employees (including its parent company Alphabet) in 2018. Other Internet-based companies, such as eBay and Amazon, have also earned profits and achieved substantial growth during the past decade.

But the experience of numerous other Internet start-ups was quite different. Many "dot-coms," like Broadband Sports and eVineyard, went bust because their revenues were insufficient to cover their costs. The high hopes of these firms did not materialize.

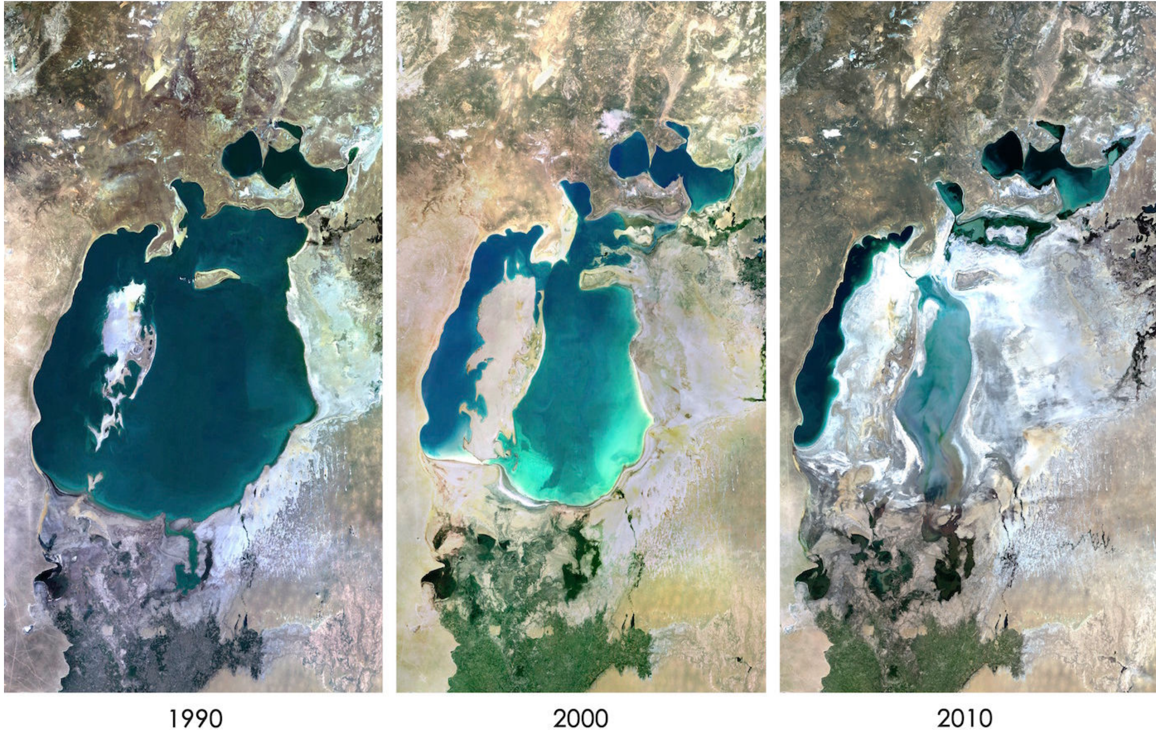
In a world of uncertainty, mistaken investments are a necessary price that must be paid for fruitful innovations in new technologies and products. Such counterproductive projects, however, must be recognized and brought to a halt. In a market economy, the capital market performs this function. If a firm continues to experience losses, eventually investors will terminate the project and stop wasting their money.

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 leader, industrial planning committee, or government agency. Without a private capital market, there is no mechanism that can be counted on to consistently channel investment funds into wealth-creating projects.

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 market returns will determine which projects will be undertaken. Investment projects that reduce rather than create wealth will become far more likely. Political decision making is also biased towards new projects rather then maintenance. Ribbon cutting on a new highway is much more visible than pothole repair.

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 allocated approximately one-third of the national output into capital investment. Even these high rates of investment, however, did little to improve living standards because political rather than economic considerations determined which projects would be funded. Resources were often wasted on economically impractical projects and important political leaders favored investments with high political visibility ("prestige"). Two examples illustrate this misallocation. Stalin insisted on building the White Sea 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 resulted in vast irrigation schemes, which eventually destroyed the Aral Sea[31].

The Aral Sea Over Time



Misdirection of investment and failure to keep up with dynamic change eventually led to the demise of socialism in most of these countries.

Video:

The Global Village

Recent U.S. experience with government allocation of credit for housing finance also provides insight into how political allocation of capital works. The Federal National Mortgage Association and Federal Home Loan Mortgage Corporation, commonly known as Fannie Mae and Freddie Mac, were chartered by Congress as government-sponsored corporations in 1968 and 1970, respectively. It was thought that they would improve the operation of the capital

market and make home financing more affordable. Even though Fannie Mae and Freddie Mac were privately owned businesses, investors perceived that the bonds they issued to raise their funds were less risky because they were backed by the government. As a result, Fannie Mae and Freddie Mac were able to borrow funds at approximately half of a percentage point cheaper than private firms. This gave them a huge advantage over their rivals and they were highly profitable for many years.

But the government sponsorship also made Fannie Mae and Freddie Mac highly political. The president appointed several members to their boards of directors. Top management of Fannie Mae and Freddie Mac provided key congressional leaders with large political contributions. They also often hired away congressional staffers into high paying jobs, who then lobbied their former government bosses. Their lobbying activities were legendary. Between 1998 and 2008, Fannie Mae spent $79.5 million and Freddie Mac spent $94.9 million lobbying Congress for special favors and continuation of their privileged status.[32]

Fannie Mae and Freddie Mac did not originate **mortgages**[?]; that is, they did not directly lend money to people buying houses. Instead, they purchased the mortgages in the secondary market, a market where mortgages originated by banks and other lenders are purchased. Because they had cheaper access to funds, they could purchase lots of mortgages and by the mid-1990s, these two government-sponsored enterprises held approximately 40 percent of all home mortgages. Their dominance of the secondary market was even greater. During the decade prior to their **insolvency**[?] in 2008, Fannie Mae and Freddie Mac purchased more than 80 percent of the mortgages sold by banks and other mortgage originators.

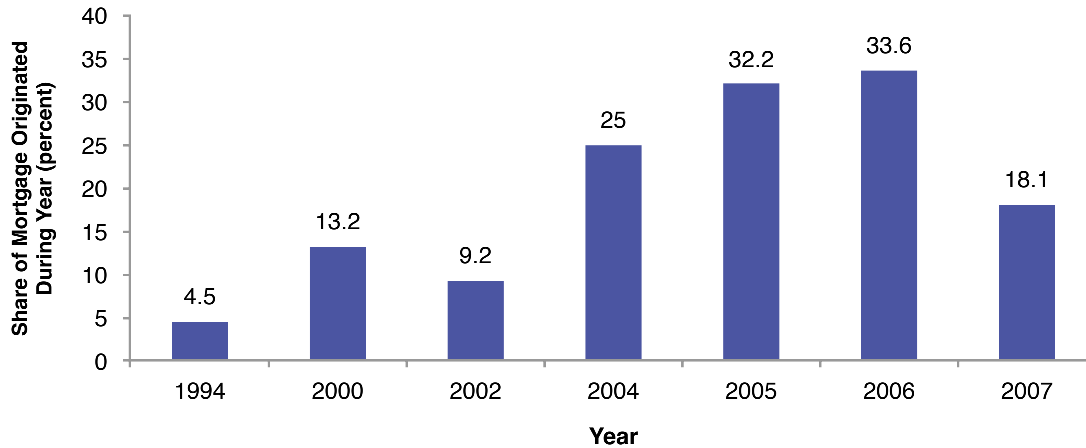
While Fannie Mae and Freddie Mac lobbied for and received favors from Congress, members of Congress used them to achieve political objectives, including making mortgage funds for housing purchases more readily available to low and middle-income borrowers. Responding to earlier congressional directives, the Department of Housing and Urban Development mandated that, by 1996, 40 percent of the mortgages financed by Fannie Mae and Freddie Mac must go to households with incomes below the median. This figure was increased to 50 percent by 2000 and to 56 percent by 2008. In order to meet these mandates, Fannie Mae and Freddie Mac began accepting more mortgages with little or no **down payment**[?]. They also substantially increased the share of mortgages granted to borrowers

with a poor credit history, known as subprime borrowers. Because of their dominance of the secondary market, their lending practices exerted a huge impact on the lending standards accepted by mortgage originators. Recognizing that riskier loans could be passed on to Fannie Mae and Freddie Mac, the originators had less incentive to scrutinize the credit worthiness of borrowers or worry much about their ability to repay the funds. After all, sale of the mortgage to Fannie Mae and Freddie Mac would transfer the risk to them as well.

As Exhibit 6 shows, subprime mortgages (including those extended with incomplete documentation) soared from 4.5 percent of the new mortgages in 1994 to 13.2 percent in 2000 and to 33.6 percent of the total share of mortgage originations by 2006. During the same time frame, conventional loans, for which borrowers are required to make at least a 20 percent down payment, fell from two-thirds of the total to only one-third. The default and **foreclosure rates**(?) for **subprime loans**(?) range from seven to ten times the parallel rates for conventional loans to prime borrowers. Predictably, the growing share of loans to those with weaker credit eventually led to higher default and foreclosure rates.

Both Congress and the presidential administrations of Bill Clinton and George W. Bush were highly supportive of these regulatory policies and took credit for the initial increase in home ownership they helped to generate. As the policies eroded mortgage-lending standards, making credit more readily available for risky loans, the initial effects seemed positive. The demand for housing increased, housing prices soared during 2001–2005, and there was a boom in the construction industry.

Exhibit 6: Subprime Mortgages as a Share of the Total, 1994–2007



Source: The 1994–2000 data are from Edward M. Gramlich, *Financial Services Roundtable Annual Housing Policy Meeting*, Chicago, Illinois, 21 May 2004. The 2002–2007 data are from the Joint Center for Housing Studies of Harvard University, *The State of the Nations Housing 2008*, https://www.jchs.harvard.edu/research-areas/reports/state-nations-housing-2008. Loans with incomplete documentation and verification, known as **Alt-A loans**[?], are included in the subprime category. Studies indicate that most of the Alt-A loans were to subprime borrowers.

But the artificially created housing boom was not sustainable. By 2004–2005, approximately half of all mortgages were either subprime (including those with incomplete documentation) or loans against the equity people had in their homes. As soon as prices leveled off and then began their decline during the second half of 2006, the house of cards came crashing down. The foreclosure and **mortgage default rates**[?] immediately began to rise. All of this occurred well before the **recession**[?], which did not start until December 2007. Of course, the collapse of the housing industry eventually spread to the rest of the economy, and the bad mortgages generated huge financial problems in banking and finance both in the United States and abroad. By summer 2008, Fannie Mae and Freddie Mac were insolvent. Their operations were taken over by the government and the American taxpayer was left with approximately $400 billion of bad debt.

The interest rate policies of the Federal Reserve System also contributed to the Great Recession of 2008–2009, as we will explain in the following element. But one thing is clear: The political allocation of credit and accompanying regulatory erosion of lending standards channeled a lot of financial capital into projects that should never have been undertaken. Many homebuyers were incentivized to purchase more housing than they could afford, and that was a major contributing factor in the housing boom and subsequent bust, and the recession it helped generate.

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.[33] Similar policies in Spain created precisely the same result during the same time frame.

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**[?]. 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

Monetary Stability

A stable monetary policy is essential for the control of inflation, efficient allocation of investment, and achievement of economic stability.

Money is vitally important for the operation of an economy. Most importantly, money is a means of exchange. It reduces transaction costs because it provides a common denominator into which the value of all goods and services can be converted. Economists refer to this property of money as being a "medium of exchange." We have discussed elsewhere the benefits of **division of labor**(?). Imagine, however, a world where people specialized but exchanged goods directly for other goods through what is known as the **barter system**(?). How many apples would equal one cow? How would you make change if someone had enough apples to buy only one-third of a cow?

Money makes it possible for people to gain from complex exchanges that take place over time, such as the sale or purchase of a home or car, which involve the receipt of income or payment of a purchase price across lengthy time periods. Money also provides a means to store purchasing power for future use. This enables the accumulation of funds for investments that drive productivity and economic growth. Economists call this function of money a "store of value." Money is also a "unit of account" that enhances people's ability to keep track of benefits and costs, including those incurred across time periods. Without money it's almost impossible to compare benefits and costs which occur over time, and it's this comparison which allows people to make better decisions regarding when to spend and when to save, and what to buy and what not to buy.

The productive contribution of money, however, is directly related to the stability of its value. In this respect, money is to an economy what language is to communication. Without words that have a clearly defined meaning to both speaker and listener, communication would be difficult. So it is with money. If money does not have a stable and predictable value, it will be difficult for borrowers and lenders to find mutually agreeable terms for a loan, saving and

investing will involve additional risks, and transactions that take place over time (such as payment for a house or automobile) will be fraught with additional uncertainty. When the value of money is unstable, many potentially beneficial exchanges are not made and the gains from specialization, large-scale production, and social cooperation are reduced.

There is no mystery about the cause of monetary instability. Like other commodities, the value of money is determined by supply and demand. When the supply of money is constant or increases at a slow, steady rate, the purchasing power of money will be relatively stable. In contrast, when the supply of money expands rapidly compared to the supply of goods and services, the value of money declines and prices rise. This is **inflation**[?]. It occurs when governments print money or borrow from a central bank in order to pay their bills.

Persistent inflation has a single source: rapid growth in the supply of money. The **money supply**[?] is the total of the nation's currency, **checking deposits**[?], and similar sources of payment[34] held by individuals and businesses. When that supply increases faster than the growth of the economy, the prices of goods and services will rise.

Exhibit 7: Monetary Growth and Inflation, 1990–2014

	Average Annual Growth Rate of Money Supply (%)	Average Annual Rate of Inflation (%)
Slow Growth of the Money Supply		
Sweden	3	2.3
United States	3	2.1
Switzerland	3.4	1.1
Singapore	3.5	1.4
United Kingdom	5.5	2.7
Central African Republic	6.4	3.6
Canada	7.5	2.1
Rapid Growth of the Money Supply		
Nigeria	22.6	23.2
Uruguay	23	23.4
Malawi	26.7	23.4
Ghana	29	24.5
Venezuela, RB	37.6	34
Russian Federation	41.4	39.3
Romania	46.1	53.1
Turkey	48.4	41.7
Hypergrowth Growth of the Money Supply		
Ukraine	140.4	276.8
Zimbabwe	164.8	165.3

Source: The World Bank (WB), *World Development Indicators (WDI), 2015* and International Monetary Fund, *International Financial Statistics* (annual).

Note: The data for Ghana and Venezuela are for 1990–2013. The data for Russia are for 1994–2014. The data for Ukraine are for 1993–2014. In the case of missing data, they were updated from country sources: Canada figures for 1990–2008 come from the World Bank and figures for 2009–2014 come from the Canada Central Bank. The data for Zimbabwe are for 1990–2007 and come from the World Bank, *World Development Indicators 2009* report.

Exhibit 7 illustrates the linkage between growth of the money supply and inflation.

Note how countries that increased their money supply at a slow annual rate (7.5 percent or less) experienced low rates of inflation during 1990–2014. This was true for large high-income countries like the United States and Canada, as well as for smaller ones like Sweden, Singapore, and the Central African Republic.

When the growth rate of the money supply in a country expanded more rapidly, however, the inflation rate accelerated. During 1990–2014, the money supply grew at an annual rate between 20 percent and 50 percent in Nigeria, Uruguay, Malawi, Ghana, Venezuela, Russian Federation, Romania, and Turkey. Note how these countries experienced annual inflation rates similar to their rates of monetary growth.

Extremely high rates of monetary growth (100 percent and above) lead to **hyperinflation**[?], as in Ukraine and Zimbabwe. As the growth rate of the money supply in these countries soared, so too did their rate of inflation.

As Exhibit 7 illustrates, there is a close relationship between rapid monetary expansion and high rates of inflation when measured over lengthy time periods. Historically, this linkage has been one of the most consistent relationships in all of economics.[35]

Video:

Milton Friedman on Inflation

Countries with high rates of inflation frequently also have wide fluctuations in the inflation rate. Variable rates of inflation make it even harder than consistent high rates to plan for the future, undermining prosperity. When prices increase 20 percent one year, 50 percent the next year, 15 percent the year after that, and so on, individuals and businesses are unable to develop sensible long-term plans. This uncertainty makes the planning and implementation of capital investment projects risky and less attractive. Unexpected changes in the inflation rate can quickly turn an otherwise profitable project into an economic disaster. Rather than dealing with these uncertainties, many decision-makers will simply forgo capital investments and other transactions involving long-term commitments. Some will even move their business and investment activities to countries with a more stable environment. As a result, potential gains

from trade, business activities, and capital formation will be lost.

Moreover, when governments pursue inflationary policies, people will spend less time producing and more time trying to protect their wealth. Because failure to accurately anticipate the rate of inflation can devastate one's wealth, individuals will shift scarce resources away from the production of goods and services and toward actions designed to hedge against inflation. The ability of business decision-makers to forecast changes in prices becomes more valuable than their ability to manage and organize production. When the inflation rate is uncertain, businesses will shy away from entering into long-term contracts, place many investment projects on hold, and divert resources and time into less productive activities. Funds will flow into the purchase of gold, silver, and art objects, in the hope that their prices will rise with inflation, rather than into more productive investments such as buildings, machines, and technological research. As resources move from more productive to less productive activities, economic progress slows.

Economic progress will also be undermined when monetary policymakers are constantly shifting between monetary expansion and contraction. When the monetary authorities expand the money supply rapidly, initially the more expansionary **monetary policy**[(?)] will generally push interest rates downward, stimulating current investment and creating an artificial economic boom. However, the boom will not be sustainable. If the expansionary monetary policy continues, it will generate inflation, which will cause monetary policymakers to shift toward a more restrictive policy. As they do so, interest rates will rise, which will impede **private investment**[(?)] and throw the economy into a recession. Thus, monetary shifts between expansion and restriction will generate economic instability, jerking the economy back and forth between booms and busts. This pattern of monetary policy will also create uncertainty, slow private investment, and reduce the rate of economic growth.

Why might those in control of the supply of money (the monetary authorities) shift between expansionary and contractionary regimes? Note that there is likely to be an unsustainable boom following a rapid expansion of the money supply. If the monetary authorities are subject to control by or influence from political leaders, the interests of these leaders may be to create just such a boom prior to elections in the hope that they will be re-elected before the inevitable recession arrives.

While these **political business cycles**[?] can be seen in much of the world, there has been a different relationship in transition economies. As always, policy stability is important to create business confidence and, therefore, investment and expansion. Post-communist countries had to decide between different paths of **reform**[?] to a market economy. Some countries were consistent and early reformers (such as Estonia), while the leadership in others was dominated by ex-communists (Uzbekistan). Countries, therefore, followed different speeds and types of reforms, some better than others. In all of them, however, economic actors could rely on consistent policies and plan for the future under these policies. By contrast, in countries that followed inconsistent and changing paths, switching back and forth between reform and delay (such as Bulgaria and Ukraine) increased uncertainty prior to elections when it was not clear who would form the new government. The political business cycle was reversed, with slow growth leading up to elections because of policy uncertainty leading to low investment.[36]

Video:

Too much money

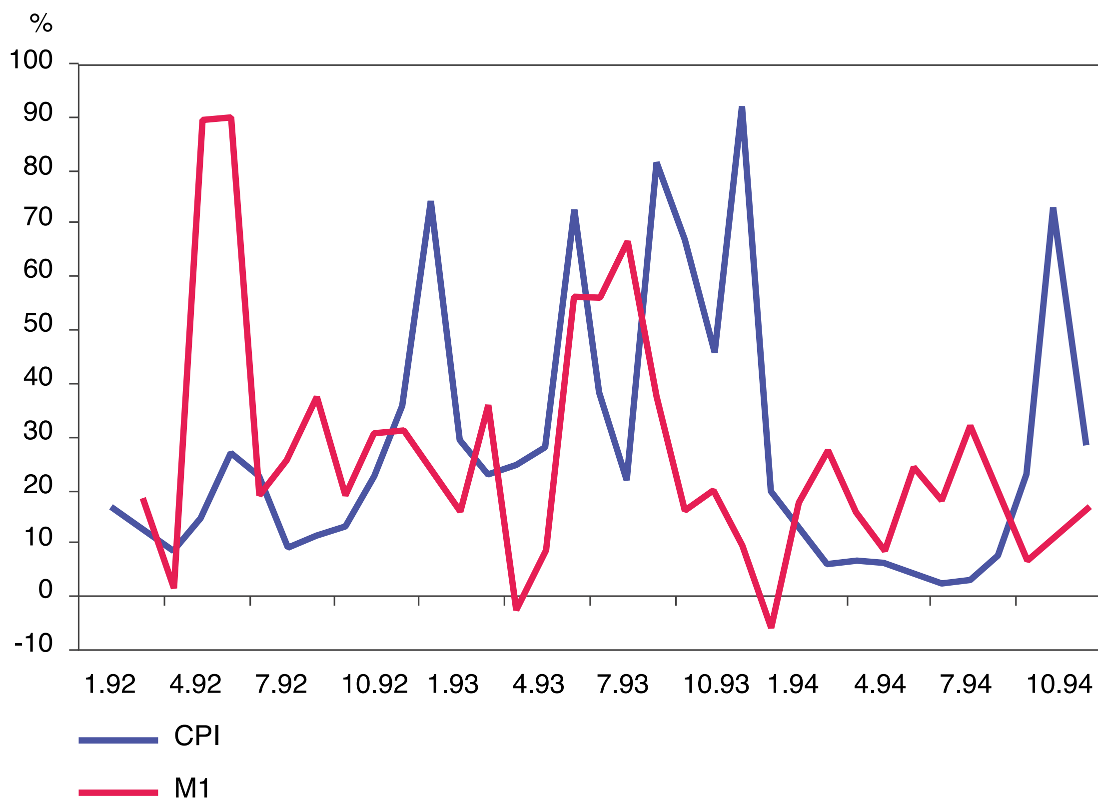
Poor monetary policy is what is at least partially responsible for economic success or failure as countries transitioned from communism in the 1990s. All of the economies suffered from an apparent huge drop in reported production and struggled to form market economies. In Ukraine, between 1990 and 1994, the reported GDP fell by more than 48 percent.[37] The government of Ukraine responded to this shock by issuing massive ruble credits, thereby financing subsidies in industry and agriculture. Huge **budget deficits**[?] were monetized, meaning they were paid for by having the National Bank of Ukraine (NBU) simply create money to pay the government's bills. In February and March 1992, the monetary base was increased monthly by 50 percent. Hyperinflation reached 2,730 percent in 1992, and 10,155 percent in 1993. In total, ten of the fourteen countries created by the breakup of the former Soviet Union recorded hyperinflation at some point (due to similar excessive money supply policies), as did Poland, Yugoslavia, and Bulgaria. Only war-ridden Armenia had higher

inflation than Ukraine according to the EBRD.[38] Ukraine's NBU, which was literarily subordinated by the Parliament, realized its mistake and halted the issuing of credits. Monthly inflation fell to 2.1 percent in July 1994. Parliament was unhappy with the NBU's decision and in August 1994 the NBU was forced to again issue large credits (i.e. implemented expansionary monetary policy), and these credits boosted inflation to 23 percent in October 1994. Recessions caused by the process of collapse of the Soviet economy were further deepened by the monetary policy of that era.

Video:

Who Wants to be a Trillionaire?

Exhibit 8: Money Supply Growth and Inflation, 1992–94



Source: The graph is from *History of Monetary Development in Ukraine (2006)*, Petryk, Oleksandr, National Bank of Ukraine, p.7. Data source: State Statistics Committee of Ukraine, own calculations.

Monetary stability is an essential ingredient of the environment for economic progress. Without monetary stability, potential gains from capital investment and other exchanges involving time commitments will be eroded and the people of the country will fail to realize their full potential.

Video:

The Effects of Printing Money

ELEMENT 2.6

Prudent Fiscal Policy

People produce more when they can keep more of what they earn.

> *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 streets and seeking jobs in vain.*
>
> **— Franklin D. Roosevelt, Pittsburgh, October 19, 1932**

When high tax rates take a large share of income, the incentive to work and use resources productively declines. The **marginal tax rate**[?] is particularly important. This is the share of additional income that is taxed away at any given income level. The marginal tax rates vary across countries. For example, in the United States in 2015, if a taxpayer with $60,000 in taxable income earned an extra $100, he or she had to pay $25 of that $100 in federal income tax. Therefore, the taxpayer faced a marginal tax rate of 25 percent. The marginal tax rate in Romania is 16%; in Poland it is 32% if a taxpayer earns more than €20,000; and in France it is up to 45% for incomes over €152,260.

"Can I write off last year's taxes as a bad investment?"

As marginal tax rates increase, the share of additional earnings that people get to keep declines. For example, at the 25 percent marginal tax rate, individuals are permitted to keep

€75 if they earn an additional €100. But, if the marginal tax rate rose to 40 percent, then the taxpayer would get to keep only €60 out of a €100 increase in earnings.

There are three reasons why high marginal tax rates will reduce output and income. First, high marginal tax rates discourage work effort and reduce the productivity of labor. When marginal tax rates soar to 55 or 60 percent, individuals get to keep less than half of their additional earnings. When people are not allowed to keep much of what they earn, they tend not to earn very much. Some, perhaps people with working spouses, will drop out of the labor force. Others will simply work fewer hours, retire earlier, or take jobs with longer vacations or a more preferred location. 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. High tax rates can even drive a nation's most productive citizens to countries where taxes are lower. Such movements will reduce the size and productivity of the available labor supply, causing output to decline.

Video:

Portugal Hopes to become a Pensioner's Paradise with Zero Tax Offer

Of course, most people will not immediately quit work, or even work less diligently, in response to an increase in the marginal tax rate. A person who has spent years 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 by high marginal tax rates. Thus, some of the negative effects of high tax rates on work effort will be felt in the form of reduced productivity for many years in the future.

High tax rates will also cause some people to shift to activities in which they are less productive because they do not have to pay taxes on them. For example, high taxes will drive up the costs of skilled painters, perhaps leading you to paint your own house, even though you lack the skill to do it efficiently. Without high tax rates, the professional painter would do the job at a cost you could afford, and you could spend your time doing work for which you are

better suited. Waste and economic inefficiency result from these tax-distorted incentives.

Second, high marginal tax rates will 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 where both taxes and production costs are lower than at home. This reduces investment and the availability of productive equipment, which provides the fuel for economic growth. Domestic investors will also turn to projects that shelter current income from taxation, and away from projects with a higher **rate of return**(?) but fewer tax-avoidance benefits. These tax shelters enable people to gain personally from projects that do not enhance the value of resources. Again, scarce capital is wasted, and resources are channeled away from their most productive uses.

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. When purchases are tax-deductible, individuals who purchase them do not bear their full cost, because the expenditure reduces the taxes they would otherwise pay. When marginal tax rates are high, tax-deductible expenditures become relatively cheap.

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 in the United Kingdom were as high as 98 percent on large incomes. A business owner paying that tax rate could 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—but the owner would have received only £2,000 of his or her profit anyway, because the 98 percent marginal tax rate would have reduced the £100,000 to £2,000. In effect, the government was paying 98 percent of the car's costs (through lost tax revenue). When the United Kingdom cut the top marginal tax rate to 70 percent, the sales of Rolls-Royces plummeted. After the 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 reducing their purchases.

High marginal rates artificially reduce the personal cost, but not the cost to society, of items that are tax-deductible or that can be taken as a business expense. Predictably, taxpayers confronting high marginal tax rates will spend more money on such tax-deductible items as

plush offices, Hawaiian business conferences, business entertainment, and a company-provided automobile. 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 byproducts of high marginal tax rates and the perverse incentives they generate.

Reductions in tax rates, particularly high rates, can usually increase the incentive to earn and improve the efficiency of resource use. The government of Georgia made radical changes to tax legislation from 2005 to 2008. The 21 different tax rates that were applied in 2004 were reduced to 6 in 2005. From 2009, aggregated taxes (income tax and social tax together) were reduced by abolishing social tax and implementing a single **personal income**[(?)] tax rate. The marginal income tax was reduced from 32 percent to 20 percent.

The disincentive effects discussed above have caused many economists to advocate for what is called a "flat tax," under which the marginal tax rate is the same for all income levels above a certain minimum. The untaxed minimum, if high enough, can still mean that actual taxes paid as a percentage of income increase as families get wealthier. Many post-communist governments have been leaders in moving to flat taxes, including Russia, Georgia, Slovakia, and Serbia. As predicted, there is research showing that such policy causes a decrease in the share of economic activity that happens "off the books" in what is called the shadow or underground economy.

In contrast, large tax increases can exert a disastrous impact on the economy. United States tax policy during the Great Depression illustrates this point. 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 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 they earned. (Note: 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.

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 confront high implicit marginal tax rates, the combination of additional taxes plus the loss of benefits from income-tested transfer programs. 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 existing social programs. He or she would confront an implicit marginal tax rate of 80 percent! Thirty percent would come in the form of a higher tax bill and an additional 50 percent in the form of 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 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, will 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 tax rate increases during a period of economic weakness can exert a disastrous impact on the economy.

Video:

The Economics of Tax Reform: Lessons from the Donut Shop

Of course, low tax rates do not mean *no* taxes. As will be discussed in Part 3 below, there are legitimate reasons for governments to provide some goods and services that it is hard for the market to deliver. Societies are also free to decide, after considering the effects of incentives and unintended consequences, that they want to use tax and spending policy to alter the distribution of income. Finally, as will also be discussed in Part 3, many economists believe that there is a role for taxes and government spending (so-called fiscal policy) to reduce the inherent variations in economic activity.

Of course, the burdens of taxes extend far beyond the effect of the funds raised (especially where those funds are used for productivity-increasing public investments). To the extent that a high tax burden encourages firms to produce in the underground economy, they are likely to remain inefficiently small in order to reduce the chance of being discovered by the tax authorities. In addition, the more extensive and complex the tax system, the more time and money that firms will have to spend in tax compliance.

While creating indices of complex matters is always hard and the results are subject to challenge, the rankings of the burden of taxes compiled by the World Bank as a part of its "Doing Business" index (which includes both tax rates and complexity) seem intuitively correct.(39) For 2019, the most tax-friendly countries include some we would expect to find, such as Hong Kong,(40) 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 12th), Georgia (14th), Latvia (16th), and Lithuania (18th). The average transition economy ranked 67th, about the same as Greece, surely not a model to be emulated. If post-communist countries could reduce their tax burdens to the level of the leaders in the Baltics and Georgia, growth rates would clearly increase.

ELEMENT 2.7

Free Trade

People achieve higher incomes when they are free to trade with people in other countries.

> ***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.*[41]
>
> **— 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 allows each of the trading partners to produce and consume more goods and services than would otherwise be 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. Resource endowments differ substantially across countries. Goods that are costly to produce in one country may be economical to produce in another. For example, countries with warm, moist climates such as Brazil and Colombia find it advantageous to specialize in the production of coffee. In

temperate continental climates such as Moldova and Georgia, we see specialization in wine-making and fruit orchards while Siberia exports swamp cranberries. People in Canada and Australia, where land is abundant and population sparse, tend to specialize in land-intensive products, such as wheat, feed grains, and beef. 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 will permit each of the trading partners to use more of their resources to produce and sell things they do well rather than having them tied up producing things at a high cost. As a result of this specialization and trade, total output increases and people in each country are able to achieve a higher standard of living than would otherwise be attainable.

Second, international trade allows domestic producers and consumers to benefit from the economies of scale typical of many large operations. This point is particularly important for small countries. With international trade, domestic producers can operate on a larger scale and therefore achieve lower per-unit costs than would be possible if they were solely dependent on their domestic market. For example, trade makes it possible for textile manufacturers in countries like Costa Rica, Guatemala, Thailand, and Vietnam to 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. With international trade, however, textile firms in these countries can produce and sell large quantities and compete effectively in the world market.

International trade also allows domestic consumers to benefit by purchasing from large-scale producers abroad. Given the huge design and engineering costs of 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 promotes competition in domestic markets and allows consumers to purchase a wider variety of goods 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.

Governments often impose regulations that restrain international trade. These can be tariffs (taxes on imported goods), quotas (limits on the amount imported), **exchange rate**(?) controls (artificially holding down the value of the domestic currency to discourage imports and encourage exports), 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 element, trade restraints are like a military blockade that a nation imposes on its own people. Just as a blockade imposed by an enemy will harm a nation, imposing a blockade in the form of trade restrictions also harms the nation.

Should any given country be considered a supporter of free trade? If there are all kinds of products in the local shopping malls and supermarkets, it may seem reasonable to assume the country supports free trade—but that would not necessarily be true. For example, the average tariff in Ukraine for all industrial products exceeds 10 percent, and is up to 20 percent for agricultural products. Imports of other products are discouraged even more, with sugar being taxed at 50 percent and sunflower seed oil at 30 percent. In Bulgaria, tariff rates for imports from countries outside the E.U. range from 5 percent to 45 percent. The United States imposes quotas on dairy products, sugar, ethanol, cotton, beef, canned tuna, and tobacco. Imports above the quotas are subject to prohibitively high tariffs.

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 bans can be used for purposes other than trade policies. Russia, for example, banned almost all agricultural imports from the European Union, the United States, Canada, Australia, and Norway in response to political disputes after the start of conflicts with Ukraine. In 2018 and 2019, President Trump of the United States used tariff policy in disputes with China.

Non-economists often argue that import restrictions can create jobs. As we discussed in Part 1, Element 9, 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 shielded by restraints 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 12. When a country erects tariffs, quotas, and other barriers limiting the ability of foreigners to sell in that country, it is simultaneously reducing foreigners' ability to buy from itself. **Imports**[?] into a country simultaneously provide people in other countries with the purchasing power they need to buy **exports**[?] from, or invest in, the importing country. Thus, import restrictions will indirectly reduce exports. Output and employment in export industries will decline, offsetting any jobs "saved" in the protected industries.[42]

Trade restrictions neither create nor destroy jobs; they reshuffle them.[43] The restrictions artificially direct workers and other resources toward the production of things that are produced at a higher cost than in other countries. Output and employment shrink in areas where a country's resources are more productive—areas where its firms could compete successfully in the world market if it were not for the impact of the restrictions. Thus, labor and other resources are shifted away from areas where their productivity is high and moved into areas where it is low. Such policies reduce both the output and income levels of countries adopting them.

Read:

Markets and Freedom by Dwight Lee

Many people believe that workers from high-income countries cannot compete with foreigners who sometimes make as little as $2 or $3 per day. This view is wrong and stems from a misunderstanding of both the source of high wages and the law of comparative advantage. Workers in high-income countries are well-educated, possess a high skill level, and work with large amounts of capital equipment. These factors contribute to their high

productivity, which is the source of their high wages. In low-wage countries like Burundi and Ethiopia, wages are low precisely because productivity is low. The fact that Ukrainians have average incomes over twenty-five times those of Burundians should not prevent Ukrainians from enjoying a cup of Burundian coffee.

Each country will always have some things that it does relatively better than others. Both high- and low-wage countries will benefit when they can focus on using more of their resources pursuing productive activities that they do comparatively well. If a high-wage country can import a product from foreign producers at a lower cost than it can be produced domestically, importing it makes sense. Fewer resources will be tied up producing items that could be supplied domestically only at a high cost, and more will be directed toward production of goods and services that domestic producers can supply at a low cost.[(44)] Trade will make it possible for 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 will lead to higher wages for both.

What if foreign producers were able to provide consumers with a good so cheap[(45)] that domestic producers were unable to compete? The sensible thing to do would be to accept the economical goods and use domestic resources to produce other things. Remember, it is availability of goods and services, not jobs, that determines our living standards. 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 were requesting that the Deputies pass a law requiring the closing of windows, blinds, and other openings so that sunlight could not enter buildings. The petition goes on to list the occupations in the lighting industry in

which there would be a large increase in employment if the use of 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 in order to "save" domestic producers and promote employment.

During the past several decades, transportation costs have fallen and trade barriers have declined. The reduction in trade barriers has been most pronounced in low-income countries. In 1980, it was commonplace for poor, **less-developed countries**[?] to impose tariffs of 20 percent or more. Many also imposed exchange rate controls, which made it difficult for their citizens to get their hands on the foreign currency needed to purchase imports. Today, the situation is dramatically different. Beginning in the 1980s, numerous less-developed countries, including China and India, lowered their tariffs, relaxed exchange rate controls, and removed other trade barriers. As a result, international trade has grown rapidly.

The growth of international trade has made it possible for the world to produce a larger output and achieve a higher level of consumption than otherwise would have been the case. Per capita income has increased rapidly in many less-developed countries, particularly the populous nations of Asia. The poor in particular have benefited from the freer trade. Worldwide the number of people in extreme poverty fell by over 1.1 billion between 1980 and 2015, falling from 40% of the world's population to less than 10%. Today approximately two-thirds of products exported from developing countries to the rest of the world face zero tariffs.

Further, the growth of international trade has narrowed the income gap between rich and poor nations. In recent decades, less-developed countries have grown more rapidly than high-income developed nations. Moreover, the growth of income has been particularly rapid in China and India, home to nearly one-third of the world's population. As a result, the distribution of income worldwide is becoming more and more equal, especially since the year 2000.[46]

However, the impact of the expansion in trade on the distribution of income is often different in high-income countries such as the United States, Canada, Japan, and those of Western Europe. Predictably, high-income countries will tend to export goods requiring lots of high-skill, well-educated labor while disproportionately importing goods produced by low-skill labor. Thus, trade may increase the demand for high-skill labor relative to low-skill labor. To

the extent that this is the case, the earnings of high-skill workers will rise relative to low-skill workers, increasing domestic income inequality. Income inequality has increased in almost all high-income countries in recent decades, and the growth of international trade may well be a contributing factor.

Currently, there appears to be a surge in hostility toward international trade in several high-income countries. Leading political figures have called for various types of trade barriers, particularly restrictions directed toward imports from poor countries. The increased income inequality and slow growth in the earnings of low-skill, poorly educated workers contribute to this hostility. But there is another crucially important factor here: the political power of well-organized interests. Trade restrictions benefit specific producers and their resource suppliers, including some workers, at the expense of consumers and suppliers in other industries. Typically, industries lobbying the government for protection against foreign rivals are well-organized and their gains are concentrated and highly visible, while 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 (in the form of contributions and other forms of political support), providing politicians with a strong incentive to cater to their views.

Video:

Freedom's Sound International Trade

Furthermore, it is easy to see the harm to the workers who lose their jobs when steel, for example, is produced more cheaply abroad and freely imported. In contrast, the gains of those helped by the freer trade are much less visible. In the case of trade restrictions, sound economic thinking often conflicts with a winning political strategy.

History indicates that the growing hostility to trade is potentially dangerous. As the economies slowed in the late 1920s, a similar hostility toward trade developed. This led to the passage in the United States of the **Smoot-Hawley tariff**(?) bill at mid-year 1930. This legislation increased tariffs by more than 50 percent on approximately 3,200 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.”[(47)]

While the rhetoric sounded great, the results were dramatically different. The tariff increase angered foreigners, and sixty countries responded with higher tariffs on American products. International trade plunged and so did output in the United States. By 1932 the volume of United States trade had fallen to less than half the level prior to the bill. Gains from trade were lost, the tariff revenues of the federal government actually fell, output and employment plunged, and the unemployment rate soared. Unemployment stood at 7.8 percent when the Smoot-Hawley 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 during the months following adoption.

More than a thousand economists signed an open letter to President Hoover warning of the harmful effects of Smoot-Hawley and 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. But the Smoot-Hawley trade bill was also a major cause of the tragic events of that era.

Will history repeat itself? Hopefully not, but the experience of the 1930s indicates that 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.[48] 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 9. [49]

Exhibit 9: 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 10 and 11[50] 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 10: Export Volume After World Wars I and II (in Five West European Economies)

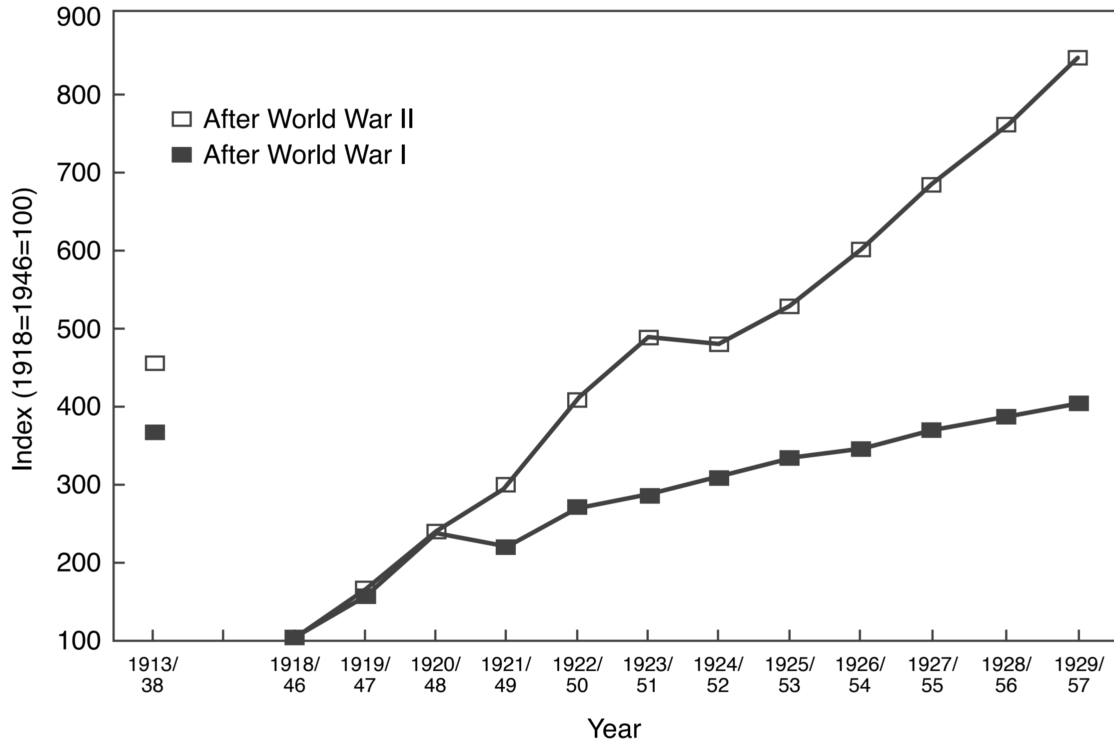
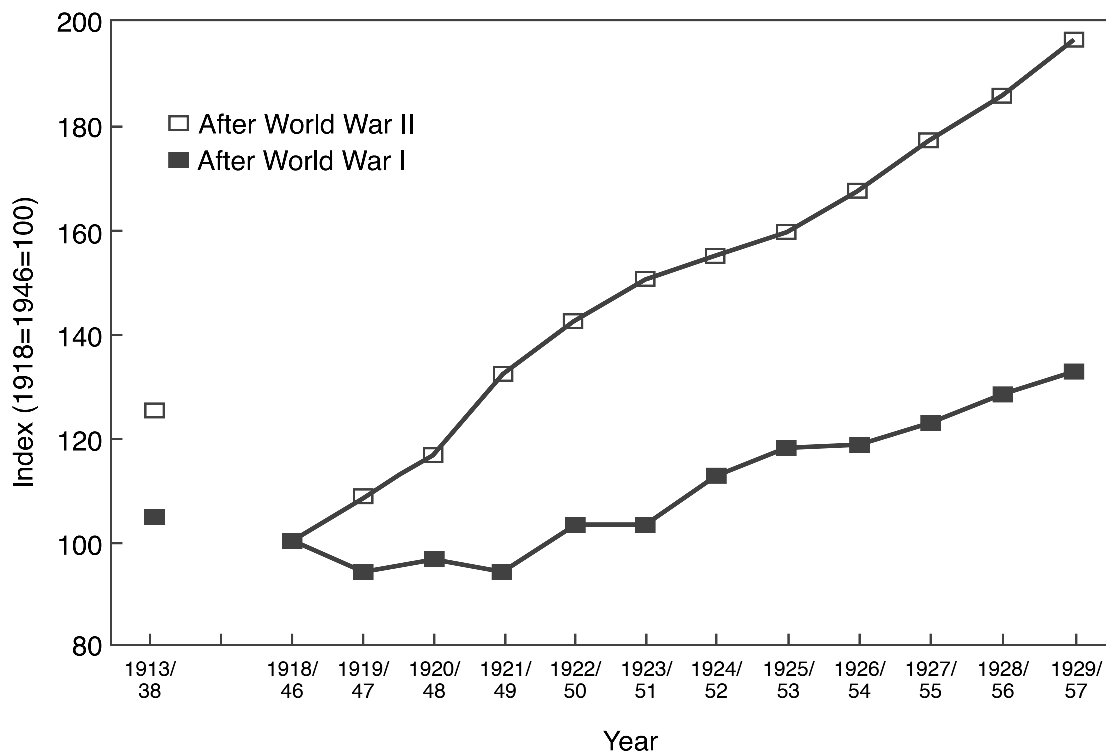


Exhibit 11: Real Output After World Wars I and II (in Five West European Economies)



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.

Part 2 Final Thoughts

The Importance of Institutions and Policies

Video:

Development Economics

In recent years there has been a virtual explosion of scholarly research providing support for the view that **economic institutions**[?] and policies are the primary determinants of economic growth and development. By economic institutions, we mean the legal requirements, regulations, traditions, and customs that create the framework in which an economy operates. They include constitutional mandates, legal processes, rules that govern exchange, and the structure of monetary arrangements. Economic *policies* are defined as more specific political actions that can be altered much more quickly than institutions.

The area of study that analyzes the impact of institutions and policies on economic growth, development, and performance is known as the New Institutional Economics. Institutions and policies that encourage productive actions and discourage predatory behavior are regarded as providing the key to economic growth and prosperity. Numerous econometric studies have examined the improvement in institution quality generated by the transition from communism and have found that countries that moved faster to develop good institutions generally performed much better economically.[51]

While there is some debate about the precise institutions that are most appropriate for the achievement of rapid growth, there is considerable agreement that secure property rights, open markets, monetary stability, and minimal trade restrictions are central to the establishment of a sound institutional environment. The points outlined in this section reflect the New Institutional Economics.

Video:

Economic Freedom Index

How much do institutions and policies matter? To answer this question, we need a way of comparing the institutions and policies of different countries. Since the mid-1980s, the Fraser Institute of Vancouver, Canada, along with a number of partners, has reported a cross-country index of economic freedom called the "Economic Freedom of the World (EFW)" index. Now published by a worldwide network of institutes, this index measures the extent to which a country's institutions and policies are consistent with economic freedom. It captures size of government, the legal system and property rights, sound money, freedom to trade, and the regulatory environment. The index incorporates 42 separate components and provides ratings for approximately 160 countries, some going as far back as 1980 and others added as data becomes available.

In many ways, the EFW index reflects the elements outlined in previous sections of 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 to both domestic and international trade, and rely more fully on markets rather than government expenditures and regulations to allocate goods and resources. If these institutional and policy factors really do affect economic performance, countries with persistently high EFW ratings should do much better than those with persistently low ratings.

Exhibit 12 presents data on 2017 per capita income and its recent growth for the ten countries with the highest and lowest EFW ratings in 2016. The countries with the highest ratings are not surprising, except for Georgia and Mauritius, where the effect of recent economic reforms is clearly evident. At the bottom of the rankings is Venezuela. Under the Chavez/Maduro government, what was once the most prosperous country in South America has become a clear example of the disastrous failure of communist/socialist economic planning. Countries exhibiting the most economic freedom have an average 2017 per capita income of $56,749, almost seven times the average for the least-free countries.

As can also be seen in Exhibit 12, economically free countries have consistently positive growth rates. The least-free countries exhibit a wide variety of growth experiences. Some, during periods of stability and starting from a low growth rate, grow strongly, but others with especially bad policies, even shrink over time. The average annual growth rate of the top group was 3.7 percent, compared to -0.4 percent for the bottom group.

Exhibit 12: Economic Freedom, Income and Economic Growth

Economic Freedom	Country	2017 GDP Per Capita	2013–2017 Annual Growth
Top 10 Rank 2016			
1	Hong Kong	$61,540	2.8%
2	Singapore	$93,905	3.5%
3	New Zealand	$40,917	3.3%
4	Switzerland	$65,006	1.8%
5	Ireland	$76,305	9.4%
6	United States	$59,532	2.2%
7	Georgia	$10,689	3.7%
8	Mauritius	$22,279	3.7%
9	United Kingdom	$43,887	2.2%
10	Australia	$47,047	2.4%
10	Canada	$46,378	2.2%
	AVERAGE	$56,749	3.7%
Bottom 10 Rank 2016			
153	Sudan	$4,904	2.8%
154	Guinea-Bissau	$1,700	4.5%
155	Angola	$6,389	1.1%
156	Central African Republic	$726	-4.4%
157	Syria	$2,900	N/A
157	Republic of the Congo	$887	6.1%
159	Algeria	$15,275	3%
160	Argentina	$20,787	0.7%
161	Libya	$19,631	-9.2%
162	Venezuela	N/A	-7.8%
	AVERAGE	$8,133	-0.4%

Source: Data from the World Bank.

Note: GDP per capita, PPP.

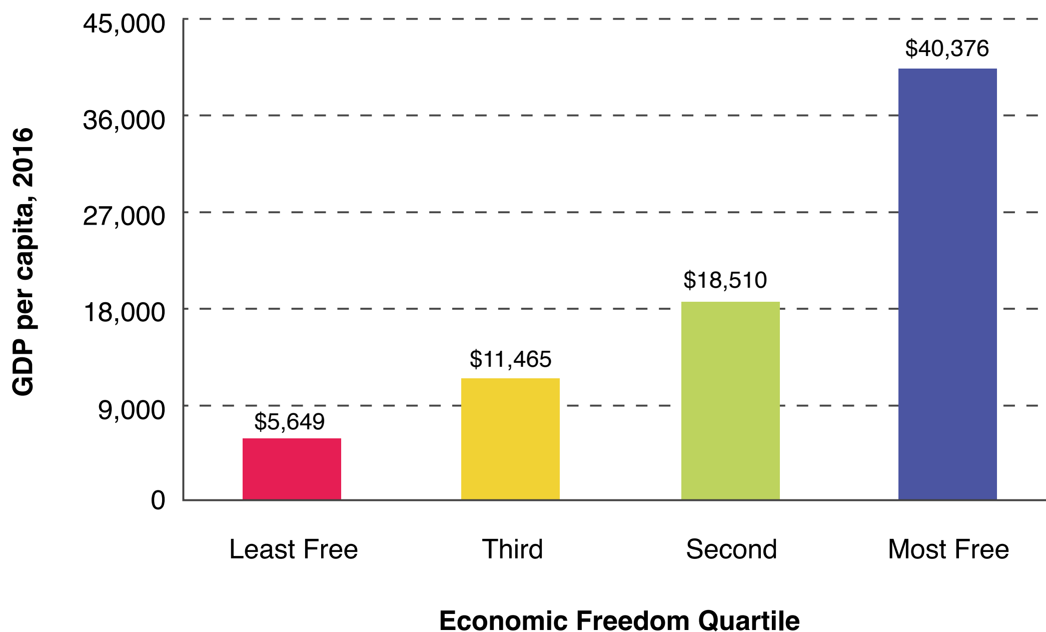
Video:

Economic Freedom Impacts

When low-income countries adopt good institutions and policies, they are able to achieve exceedingly high growth rates and narrow the income gap relative to high-income industrial nations. In 1980, the two most populous countries, China and India, were also among the world's least free economies. During the 1980s and 1990s, they adopted policies more consistent with economic freedom and are now achieving impressive rates of economic growth of 6% a year or more.

Although the greater economic success of freer countries can be inferred from the examples above, there are always countries that don't quite fit the pattern. The link is clearer if we combine countries in groups. Exhibit 13 breaks the countries into four groups (called quartiles), where each group contains 25% of the countries arrayed from low to high by their EFW rating, and shows their average income level over a longer period. Since current income reflects the effect of growth over decades or more, the differences stand out. Making the assumption (which is supported by deeper analysis) that currently free countries have spent more time in recent years also being free, it is clear that the freer economies (as measured by average scores for the two decades from 1995 to 2016) have achieved much higher income levels. The most-free countries had an average 2016 per capita income of $40,376, over seven times the average for the least-free countries.

Exhibit 13: Economic Freedom and Income per Capita



Countries with greater economic freedom have substantially higher per-capita incomes.

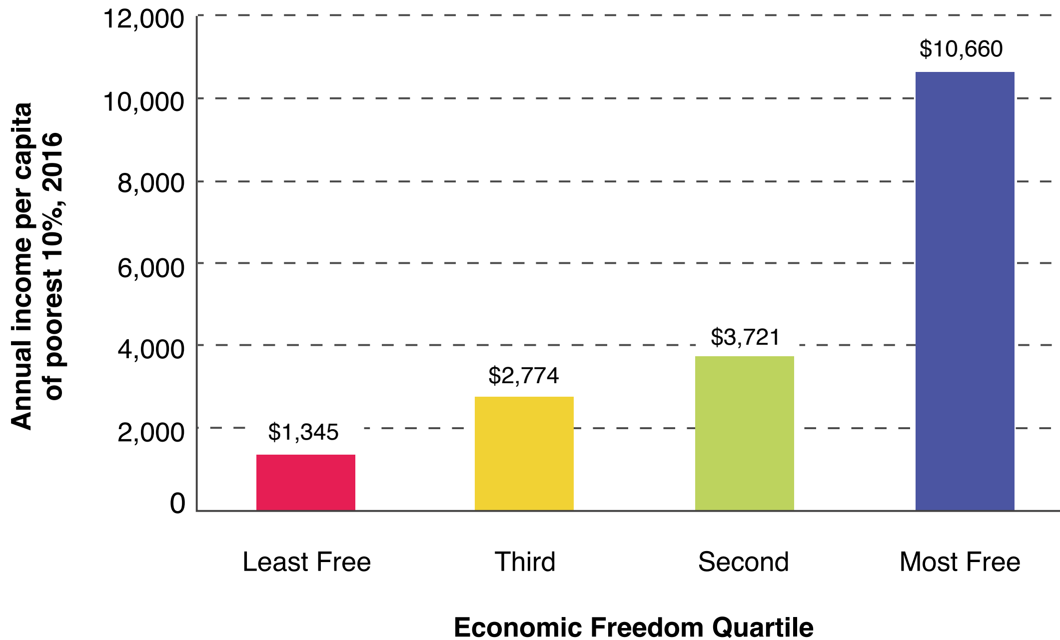
Note: Income = GDP per capita, (PPP constant US$), 2016.

Sources: Average Economic Freedom Panel Score, 1995–2016; World Bank, 2017, *World Development Indicators*.

The graphs in this section are taken from James Gwartney et al. *Economic Freedom of the World: 2018 Annual Report* at: https://www.fraserinstitute.org/studies/economic-freedom.

Not only were freer countries more prosperous overall, the benefits of a freer economy extended to poorer households. Exhibit 14 shows the average per capita income of the poorest tenth in each country sorted by their level of economic freedom. Even without considering the benefits of freedom itself, given a choice, poor households would obviously choose to live in the free societies. This marked difference says a great deal about the migration pressures that have come to dominate public policy discussions in many countries in recent years.

Exhibit 14: Economic Freedom and the Income Earned by the Poorest 10%



The amount of income, as opposed to the share, earned by the poorest 10% of the population is much higher in countries with higher economic freedom.

Note: Annual income per capita of poorest 10% (PPP constant US$), 2016.

Sources: Average Economic Freedom Panel Score, 1995–2016; World Bank, 2017, *World Development Indicators*.

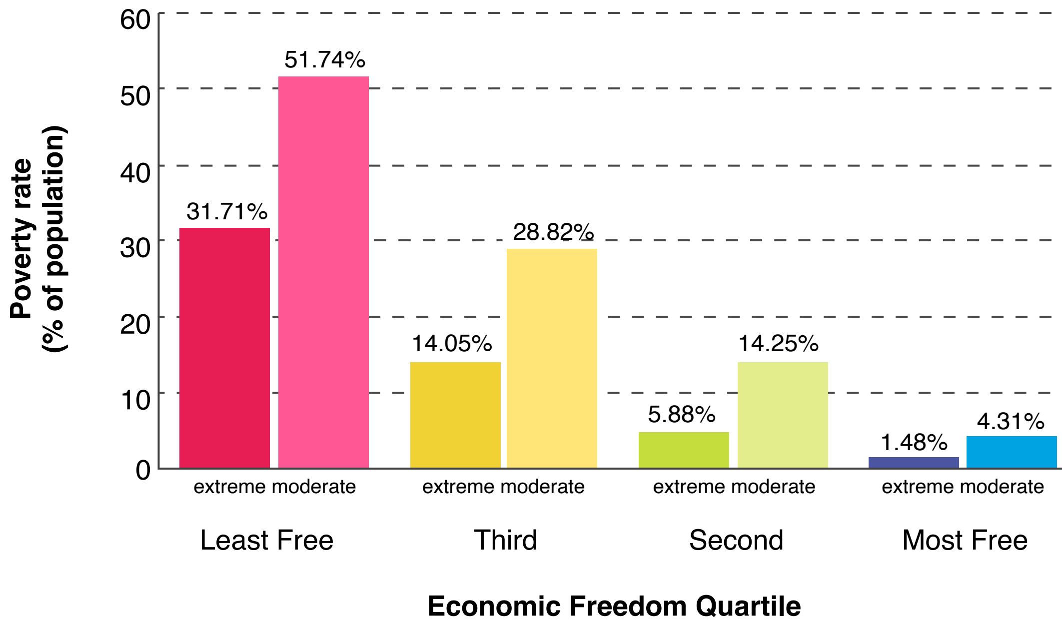
Of course, using the incomes of the lowest 10% to measure poverty can be misleading. The poorest 10% may be living rather well in a rich country, but truly suffering in a poor country. Let us examine Exhibit 15, which shows the fraction of the population living in "extreme" or "moderate" poverty as defined by the World Bank. Extreme poverty means living on $1.90 per person per day while moderate poverty means less than $3.20 a day (U.S. dollars adjusted for price differences).[52] It is easy to see the advantage of living in a country that has high levels of economic freedom—citizens of such countries are very unlikely to be poor.

Globally, the world has made great progress in eliminating poverty. According to the World Bank, 42% of people lived in extreme poverty in 1981. By 2016, this fraction had fallen to less than 10%. While there is still a way to go, the focus on market economics by United States President Ronald Reagan (1981–1989) and United Kingdom Prime Minister Margaret Thatcher (1979–1990) was surely a major factor in this progress.

Video:

Economic Freedom and Growth

Exhibit 15: Economic Freedom and Extreme and Moderate Poverty Rates



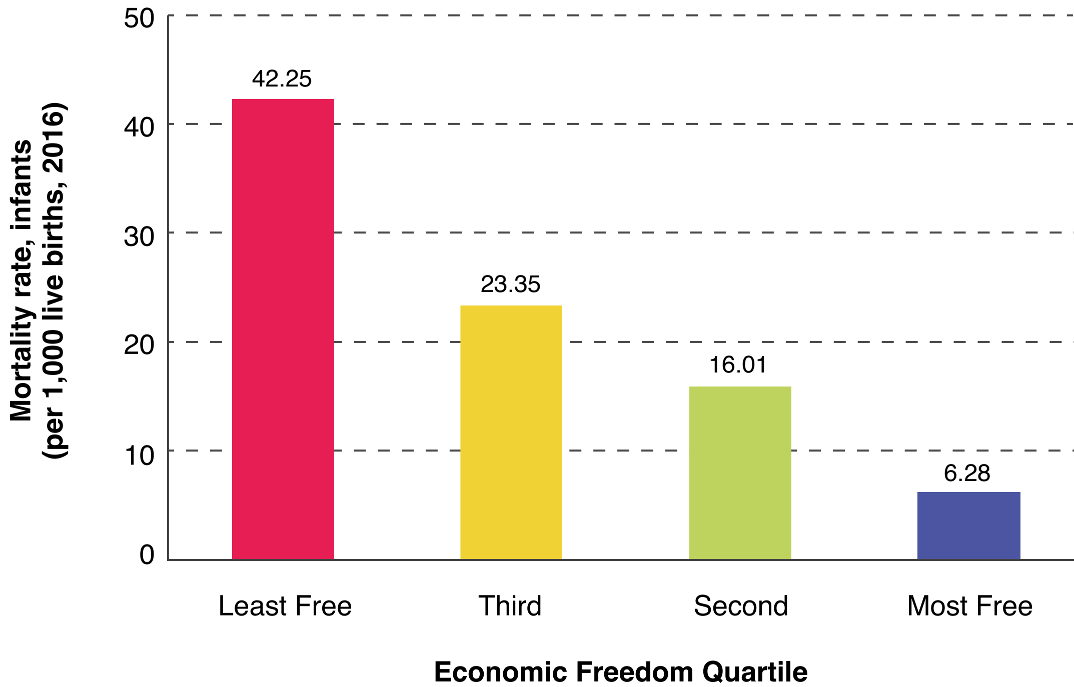
Extreme and moderate poverty are lower in countries with more economic freedom.

Note: The **extreme** poverty rate is the percentage of a country's population that lives on **$1.90** per day; the **moderate** poverty rate is the percentage that lives on **$3.20** per day, in 2011 constant PPP-adjusted dollars.

Sources: Average Economic Freedom Panel Score, 1995–2016; World Bank, 2017, *World Development Indicators*; for details, see Connors, 2011.

Of course, money is not the only way to measure increasing well-being in the world. Economically free countries are also the place to live if you care about other outcomes. Infant mortality (shown in Exhibit 16) serves as a good indicator of the quality of medical care.

Exhibit 16: Economic Freedom and Infant Mortality Rate

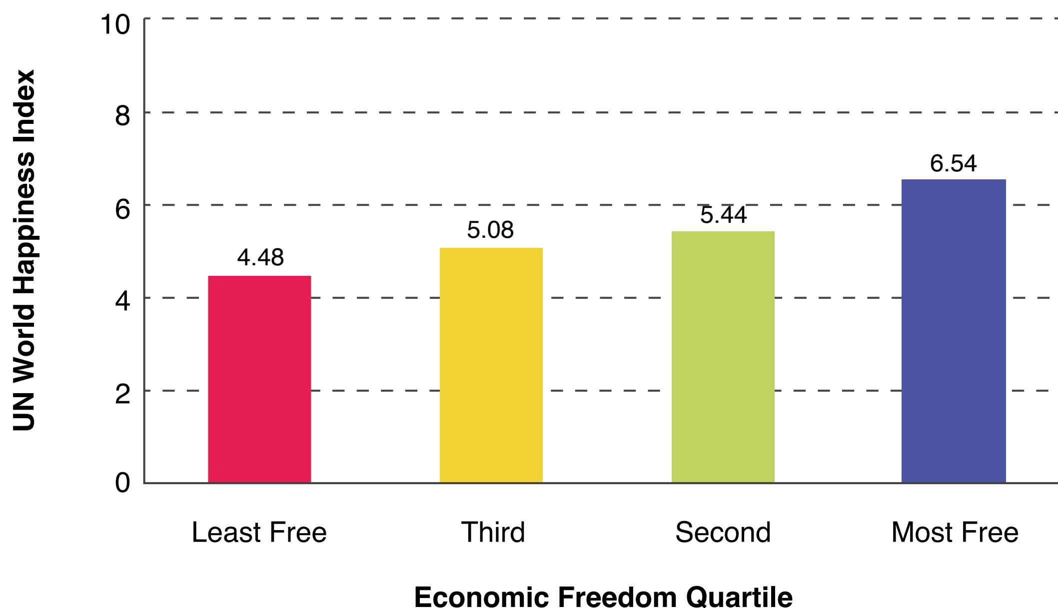


The infant mortality rate is almost seven times higher in nations in the lowest quartile of economic freedom compared to nations in the highest quartile.

Sources: Average Economic Freedom Panel Score, 1995–2016; World Bank, 2017, *World Development Indicators*.

Finally, there is happiness itself. Economists are uncomfortable with simply asking people: "How happy are you?", but Exhibit 17 reveals that there is clearly a link between their answers to such a question and the degree of economic freedom they have.

Exhibit 17: Economic Freedom and the UN World Happiness Index



People in countries with greater economic freedom tend to be happier about their lives.

Note: "The rankings are based on answers to the main life evaluation question ... This is called the Cantril ladder: it asks respondents to think of a ladder, with the best possible life for them being a 10, and the worst possible life being a 0. They are then asked to rate their own current lives on that 0 to 10 scale." Data are for 2015.

Sources: Average Economic Freedom Panel Score, 1995–2016; United Nations, 2016, *World Happiness Report 2016 Update*.

Recently, the Fraser Institute and its partners have supplemented the Economic Freedom Index with a second measure designed to capture "Personal Freedom." This measure focuses on the rule of law, security and safety, and freedom of movement, religion, assembly, expression and identity. As can be seen in Exhibit 18, there is a close correspondence between personal freedom and economic freedom. Free societies are not only richer, they usually show greater respect for human rights.

Exhibit 18: Relationship Between Personal and Economic Freedom, 2016

Source: Ian Vasquez and Tanja Porcnik, *The Human Freedom Index 2018: A Global Measurement of Personal, Civil, and Economic Freedom*. Publishers: The Cato Institute, the Fraser Institute, and the Friedrich Naumann Foundation for Freedom.

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. The key to economic progress is to create sound institutions and adopt consistent policies to enhance both economic and personal freedoms. The sooner citizens and political leaders around the world become

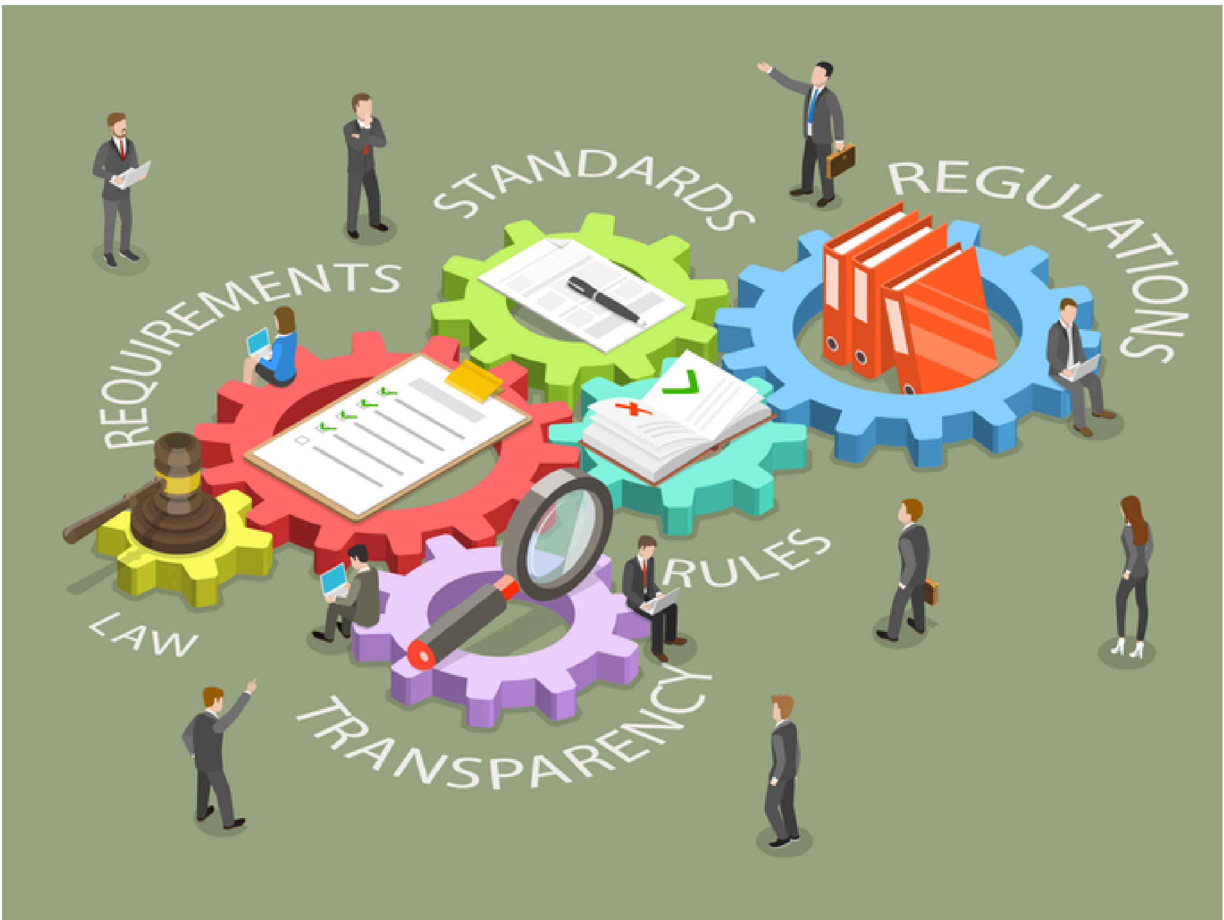
aware of this need and begin moving their countries toward greater economic freedom, the more prosperous the world will be.

Video:

Economic Freedom, Slovakia

PART 3

Ten Key Elements of Economic Thinking About the Role of Government



Elements:

1. Government promotes economic progress by protecting the rights of individuals and supplying certain goods and services that are difficult to provide through markets.
2. When monopoly is present and barriers to entry are high, markets will fail to achieve

ideal efficiency.

3. Public goods and externalities result in incentives that may encourage self-interested individuals to undertake activities that are inconsistent with ideal economic efficiency.
4. Allocation through political voting is fundamentally different than market allocation.
5. Unless restrained by constitutional or other strict rules, special interest groups will use the democratic political process to obtain government favors at the expense of others.
6. Unless restrained by constitutional or other strict rules, legislators will run budget deficits and spend excessively.
7. When governments become heavily involved in providing favors to some individuals or firms at the expense of others, inefficiency results and improper, unethical relationships develop between government officials and businesses.
8. The net gain of transfer recipients is less, and often substantially less, than the amount of the transfer.
9. The economy is far too complex to be centrally planned and efforts to do so will result in inefficiency and cronyism.
10. Competition is just as important in government as in markets.

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**[?] 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. We follow this convention—we 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 40 percent or more of national income in the United States and several other countries. Given its size and scope, understanding how political allocation works is vitally important. During the past half century, this topic has

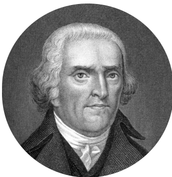
become an integral part of economics. Economists use the term **public choice**[?] when referring to this area of study.[53] Part 3 will incorporate this analysis.

Governments often use taxes and borrowing to provide some individuals and businesses with transfers, subsidies, and other forms of favoritism. We will analyze this process and explain why the impact of these programs is different, and often substantially different, than most believe. Part 3 will also outline a set of constitutional rules that might improve the operation of government and its potential to enhance the quality of our lives. We hope you find our approach stimulating and that it will challenge you to think more seriously about both the potential and limitations of the political process.

ELEMENT 3.1

Protect Rights and Produce Limited Goods and Services

Government promotes economic progress by protecting the rights of individuals and supplying a few goods and services that are difficult to provide through markets.



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 improvement, and shall not take from the mouth of labor the bread it has earned. This is the sum of good government, and this is necessary to close the circle of our felicities.

— Thomas Jefferson, First Inaugural Address, March 4, 1801

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

Video:

Limited Government

The **protective function**(?) encompasses the government's maintenance of a framework

of security and order, including the enforcement of rules against theft, fraud, and violence. Governments are granted a monopoly on the legitimate use of force in order to protect citizens from each other and from outsiders. Thus the "protective state" seeks to prevent individuals from harming one another and maintains an infrastructure of rules that allow 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 1) forms the core of the 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, and producers will be directed toward production of the goods and services that are most highly valued by consumers compared to their 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. In turn, the **incentive structure**[?] will encourage people to develop resources, engage in mutually advantageous trade, and undertake wealth-creating projects.

It is difficult to overstate the importance of the government's protective function. When this function is performed well, citizens can have confidence that they will not be cheated and that the wealth they create will not be taken from them—by either 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 is true, people will sow and reap abundantly, and economic progress will result.

In contrast, when the protective function is performed poorly, problems will abound. Opportunities to get ahead through deception, fraud, theft, and political favoritism rather than through production and trade will emerge. Earnings and wealth will be insecure, 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**(?), involves the provision of activities that are 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. As 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 with 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 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. There are some goods for which it is difficult to establish a one-to-one relationship between payment for and receipt of the good. For example, national defense is jointly consumed by the citizenry. It would be virtually impossible to provide some citizens with protection against foreign aggressors without simultaneously providing it to all. Markets will tend to produce too little of goods with such characteristics. As a result, government provision may improve economic conditions. This issue is considered in more detail in Element 3 below.

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, particularly those in cities and towns, provide an example. The cost of collecting fees and thereby charging users directly for their use would be exceedingly high. Thus, it is typically more efficient to make most roads available to all and finance them through taxation.

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

As the quotation 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). 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). However, as the government moves beyond these activities, the case for still more government weakens. In order to better evaluate the economic role of government, developing a deeper understanding of the shortcomings of markets and applying the tools of economics to the operation of the political process are important.

Read:

Not Yours to Give by Edward Ellis

ELEMENT 3.2

Regulate Monopolies

When a monopoly is present and barriers to entry are high, markets will fail to achieve ideal efficiency.

> *People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices.*
>
> **— Adam Smith,** ***An Inquiry into the Nature and Causes of the Wealth of Nations***

If a society is going to get the most out of its resources, the resources must be used efficiently. Competition is central to this efficient use. As previously discussed, businesses operating in a competitive environment have 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, they will spend their money elsewhere.

A monopoly exists when there is a firm that is the only producer of a good or service for which there are no good substitutes. When this is the case, the firm will have an incentive to restrict output and raise 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—producing a larger quantity at a lower price. Inefficiency will result because the firm is failing to produce some units of the good or service that customers value more than their cost of production.

There are two major sources of monopoly: economies of scale and grants of privilege. 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 the generation of electricity 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 this 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. This is referred to as an "oligopoly" meaning "sales by a few." Note the similarity to "oligarchy," or "rule by the few." A firm may have to produce a large share of the industry output—for example 20 or 25 percent—in order to achieve a low per-unit cost and compete effectively. When this is the case, there may be room for only four or five low per-unit cost firms. Such markets tend to be dominated by a small number of firms, which have an incentive to collude, raise the price of their product, and act as a monopolist would. Manufacturing industries such as automobiles, television sets, and computer operating systems are examples of markets dominated by a relatively small number of firms. The privatization of large state enterprises in post-communist countries often resulted in such market concentration by oligarchs who benefited from insider deals in return for support to those in power.

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 and make it more difficult for potential rivals to enter the market, thereby encouraging monopolies and dominant firms.

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 making things worse through licensing requirements and discriminatory taxes. In the vast majority of markets, sellers will find it difficult or impossible to limit the entry of rival firms (including rival producers from other countries). This means that suppliers will be unable to limit competition unless government imposes entry restrictions or creates rules and regulations that favor some firms relative to rivals.

To promote competition, governments may also prohibit anticompetitive actions such as **collusion**[?], 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.

The record of government in this area has been mixed, however. On the one hand, government policies have reduced the incidence of collusion and various practices that limit competition. But some laws have 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 have actually granted monopoly powers. As we proceed, the underlying reasons for this become more visible.

ELEMENT 3.3

Mitigate Market Failures

Public goods and externalities result in incentives that may encourage self-interested individuals to undertake activities that are inconsistent with ideal economic efficiency.

As we have stressed, 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

The nature of some goods makes it difficult for producers to benefit from their production. This is the case with a category of goods that economists call public goods. **Public goods**(?) have 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. For example, flood control meets the first criterion because once it is provided everyone in the region benefits, and it meets the second criterion because the supplier will have trouble charging people for the service. Thus, because potential suppliers are unable to establish a one-to-one relationship between payment for and receipt of the good, it will be difficult to provide public goods through markets.

Consumers will have an incentive to become "free riders"—to consume the good even though they do not help to pay for it. And 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. In addition to flood

control, national defense, municipal police protection, and mosquito abatement are examples of public goods. Because these goods are difficult to supply through markets, they are often provided by governments.

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 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. Even a park is not a public good since non-payers can be excluded if desired—think EuroDisney. Thus, even though they are often provided by governments, they are not public goods.

There are very few true public goods and services. In most cases it is easy to establish a link between payment and receipt of a good or service. If you do not pay for an ice cream, an automobile, television set, smart phone, a pair of jeans, and literally thousands of other items, suppliers will not provide them to you and you cannot freely benefit from those items purchased by others. In the case of private goods, it is unlikely that consumers will benefit from government provision.

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 called **externalities**[(?)]. For example, if you are trying to study and others in your apartment complex or dormitory 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.

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 may be used to produce goods that are valued less than their full production costs, and 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 may emit pollutants into the atmosphere that impose costs on residents living around the mills—the smell caused by sulfur, the organic compounds that contribute to smog, and even pollutants that can cause paint on buildings to deteriorate. Such pollutants may make it difficult for some people to breathe normally and perhaps cause other health hazards.

If the residents living near a pulp mill can prove they have been harmed, they could take the mill to court and force the paper producer to cover the cost of their damages. But it will often be difficult to prove the harm and that the pulp mill is responsible. When this is the case, the costs they experience will not be reflected through markets and, therefore, 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, including the external costs.

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.

Sometimes the spillover effects will 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. However, because of the communal nature of viruses, as more and more people take the vaccine, those who haven't bought the vaccine 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. Thus, when external benefits are present, market forces may supply less than the amount consistent with economic efficiency.

Perhaps the government should take action. In the case of external costs, a tax imposed on the activities that generate the external costs might lead the person or firm to reduce its activities and achieve an output level more consistent with economic efficiency. Similarly, in the case of external benefits, government subsidies might spur production, resulting in a more efficient output level.

The potential adverse consequences of externalities can sometimes be controlled without government, however. In the case of external benefits, entrepreneurs have an incentive to figure out ways to capture more fully the gains their actions generate for others. The development of golf courses illustrates this point. Because of the beauty and openness of golf courses, many people find it attractive to live nearby. Thus, constructing a golf course typically generates an external benefit—an increase in the value of the nearby property. In recent years, 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 are able to obtain revenues from what would otherwise be external benefits.

As for external costs, simple rules can help control them. For example, with respect to noise from nearby residents, apartment owners often have rules about playing loud music late at night and they enforce the rules by 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. More broadly, 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

Our analysis indicates that public goods and externalities may undermine the efficient operation of markets. Economists use the term **market failure**[?] to describe the situation where the existing structure of incentives creates a conflict between personal self-interest and getting the most out of the available resources. Market failure encourages self-interested decision-makers to engage in counterproductive rather than productive activities.

Market failure creates the potential for government action to improve economic efficiency. But the political process is merely an alternative form of economic organization. We need to know more about how that form of organization works so that it can be compared realistically with markets.[54] We now turn to that topic.

ELEMENT 3.4

Understand Political Pressures

Allocation through political voting is fundamentally different than market allocation.

> *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.*[55]
>
> **— Thomas Sowell, Professor of Economics, Stanford University**

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, say, an autocratic regime), there is no assurance that government actions will be productive. 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, the public choice analysis developed during the past half century provides considerable insight into the operation of democratic political decision-making.

Clearly, policies favored by a 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 three to two. Increasing the number of voters from five to 5 million or 200 million will not alter the general outcome. As this simple example illustrates, majority voting can clearly lead to adoption of counterproductive projects.

It is useful to compare markets with democratic political allocation, the major alternative form of economic organization. It is particularly important to 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 is forced to pay for its support even if they strongly disagree. For example, if the majority votes for a new football stadium, housing **subsidy**[?] 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, or are harmed in other ways.

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 competitive 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 product. Indeed, private firms must provide benefits that exceed the price charged in order to attract customers.

Video:

The Power to Coerce

Second, there is little incentive for voters to be well-informed about either candidates or issues. An individual voter will virtually 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 it is that their vote will be decisive in a city, regional, or national election!

Recognizing this point, most voters spend little, if any, time and energy studying issues and candidates in order to cast a well-informed vote. Most simply decide on the basis of

information acquired as the result of their other activities (watching television, interaction with friends on social media, or discussions at the workplace). Given these incentives, most voters have little or no idea where candidates stand or what impact government actions (such as agricultural subsidies and trade restrictions) have on the economy. Economists refer to this as the **rational ignorance effect**[?]. That is, voters are poorly informed, but their lack of information is rational because an individual's vote is so rarely decisive.

Video:

Trade Restrictions and Crony Capitalism

The weak incentive of voters to make informed choices is in sharp contrast to that of consumers in the marketplace. Market consumers individually decide how to spend their money, and if they make bad choices, they personally bear the consequences. 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 similar items, they have a strong incentive to acquire information and make informed choices.

Third, the political process generally imposes the same outcome on everyone, while markets 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 desired options. This can be illustrated with schooling. When schooling is allocated through the market (through private schools and homeschooling), rather than supplied by the government, some parents choose schools that stress religious values, while others opt for education that emphasizes basic skills, cultural diversity, or vocational preparation. Individual buyers (or members of a group) willing to pay the cost are able to choose a desired educational option and receive it. Markets provide for a system of proportional representation and this makes it possible for more people to obtain goods and services more consistent with their preferences. Moreover, markets also avoid the conflicts that inevitably arise when the majority imposes its will on various minorities.

Video:

[Is Government Too Big?]

Fourth, market 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. But, the political process does not have a similar mechanism that can be counted on to direct resources toward productive activities. This is true even when controlled through voting. Instead, when unconstrained by constitutional limits, elected officials will tend to gain votes by providing favors to some at the expense of others. As the saying goes, if you take from Peter and give to Paul, you can usually count on the support of Paul.

To a large degree, the modern political process can be viewed as a series of "exchanges" between coalitions and politicians. Concentrated interest groups provide 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 a lot can happen in the halls of legislatures of which voters are unaware. As a result, resources are moved toward lobbying and other favor-seeking activities and away from production and development of better products.

Video:

Stimulus and Crony Capitalism

As explained in the two previous elements, economic analysis indicates there are cases where markets will fail to allocate resources efficiently. But this is also true of the political process. Put another way, there is government failure as well as market failure. **Government failure**[(?)] is present when the incentives confronted by political participants encourage counterproductive rather than productive use of resources. Like market failure, government

failure reflects the situation where there is a conflict between what is best for individual decision-makers and getting the most value out of resources.

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, by the organic law 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. However, as time passed and governments changed, the majority party in Parliament initiated changes aiming to release the restriction and restore the power to initiate new taxes and/or change existing rates. As we proceed, we will analyze in more detail the operation of the democratic political process and consider modifications that might bring government into greater harmony with economic growth and prosperity.

Read:

Politics and Foreign Trade by Dwight Lee

ELEMENT 3.5

Adopt Rules to Limit the Influence of Special Interests

Unless restrained by constitutional or other strict rules, special-interest groups will use the democratic political process to achieve gains at the expense of taxpayers and consumers.

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, each member's personal gain from the legislation is likely to be large. In contrast, while many taxpayers and consumers are harmed, the cost imposed on each is small, and the source of the cost is often difficult to identify.

"Honey, you'll never guess what just happened! On my way home from work, I was corrupted by several obscure but powerful special interest groups!"

Since the personal stake of the interest group members is substantial, they have a powerful incentive to form alliances and let candidates and legislators know how strongly they feel about the issue. Many interest group members will decide whom to vote for and whom to support financially almost exclusively on the basis of 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 **special-interest issue**(?) because each one exerts little 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 the 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 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 our living standards. Economists refer to this bias of the political process as the **special-interest effect**(?).

Video:
The Power of Special Interests

The power of special interests is further strengthened by logrolling and pork-barrel legislation. **Logrolling**(?) is the practice of trading votes between politicians to get the necessary support to pass desired legislation. **Pork-barrel legislation**(?) 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 19 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) a sports stadium in District A; (2) construction of an indoor rain forest in District B; and (3) subsidies for ethanol that generate benefits for the corn farmers of District C. For the residents of each district, the net benefit or

cost is shown—that is, the benefit to the residents of the district minus the tax cost imposed on them. Note: The sum of the net benefits generated by each of the projects is negative. Because the total costs across all voters exceeds the benefits by €20, each project is counterproductive.

If these counterproductive projects were voted on separately, each would lose by a 4-to-1 vote because only one district would gain, and the other four would lose. However, when the projects are bundled together through either logrolling (representatives A, B, and C could agree to trade votes) or pork-barrel legislation (all three programs incorporated into a single bill), they can all pass, despite the fact that 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-barrelling**(?) and other special interest policies 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 19.

Exhibit 19: Trading Votes and Passing Counterproductive Legislation

Net Benefits (+) or Costs (-) to Voters in Equal Size Districts

Votes of Districts	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
Total	**-€20**	**-€20**	**-€20**	**-€60**

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, where 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. For example, 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 percent to 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 reaped by large growers whose owners have incomes far above the national average. On the other hand, sugar consumers pay between $2.9 billion and $3.5 billion, or approximately $25 per household, in the form of higher sugar prices.[56] As a result, Americans are worse off because their resources are wasted in producing a good Americans are ill-suited to produce and one 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 the most recent four-year election cycle, the sugar lobby contributed more than $16 million to candidates and political-action committees. A single firm, the American Crystal Sugar Company, gave $1.3 million to 221 members of Congress during this election cycle and spent another $1.4 million lobbying Congress. 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.

One could say that the primary business of modern politics is 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. Examples abound. Taxpayers and consumers from all over the world spend their earnings to support specific sectors and thus specific interest groups in their countries. Comically, 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 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.(57) While each of these programs imposes only a small drag on our economies, together they expand the government budget deficit, waste resources, and significantly lower our standard of living. 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 the net benefits of the overall population.

The special-interest effect also tends to stifle innovation and the competitive process. Older, more established businesses have built a stronger record of political contributions, have better knowledge of lobbying techniques, and have developed a closer relationship with powerful political figures. Predictably, the more mature firms will generally have more political clout than newer upstarts, and they will use it to deter innovative rivals.

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 smartphones and the Uber app immediately gives them a wait time. Uber also provides feedback information about drivers to potential passengers and vice versa. The technology reduces transaction costs and the process is often faster and cheaper than traditional taxi service. As Uber has sought to enter markets in large cities throughout the world, the traditional taxi industry has fought for and often achieved legislation prohibiting the use of the technology employed by Uber and similar firms seeking to enter this market.(58) As a result, the gains from the innovative technology and expansion in the volume of exchange have been slowed.

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, the 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.

Interestingly, the development of Tesla itself was based on government favoritism. Tesla received hundreds of millions of dollars in subsidies (grants, government guaranteed loans, and tax credits) from the federal government to develop and produce its Model S luxury electric car, which sells for more than $100,000. In 2014, the state of Nevada provided Tesla with a package of subsidies estimated to be worth $1.3 billion to build a battery-manufacturing facility near Reno. Tesla will not have to pay any payroll or property taxes for ten years and no sales taxes for twenty years, and will receive $195 million in "transferable tax credits" that can be sold to other companies to satisfy their Nevada tax bills.[(59)] Perhaps there is a lesson here: Crony businesses that live by government favoritism will sometimes get gored by other crony businesses with even more political clout.

The framers of the Constitution of the United States were well aware of the problems arising from the power of special-interest groups. They called the interest groups "factions." The Constitution sought to limit pressure from the factions in Article I, Section 8, which specifies that Congress is to levy only uniform taxes for programs that promote the common defense and general welfare. This clause was designed to preclude the use of general tax revenue to provide benefits to subgroups of the population. However, through the years court decisions and legislative acts have altered its meaning. Thus, as it is currently interpreted, the Constitution now fails to constrain the political power of well-organized special-interest groups.

ELEMENT 3.6

Avoid Excessive Spending and Deficits

Unless restrained by constitutional or other strict rules, legislators will run budget deficits and spend excessively.

> *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.*[(60)]
>
> **— James Buchanan, 1986 Nobel Laureate**

When a government's spending exceeds its revenues, a budget deficit results. Governments generally issue interest-earning bonds to finance their budget deficits. These bonds comprise the **national debt**[(?)]. 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**[(?)] 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.

The Keynesian revolution changed all of this. The English economist John Maynard Keynes developed a theory that provided both an explanation for the length and severity of the Great Depression and a remedy for prevention of 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.

While the effectiveness of Keynesian fiscal policy is a point of controversy, its impact on the budget of most countries is clear. Freed from the **balanced budget**[?] constraint, politicians consistently spent more than they were willing to tax. Over 22 years, from 1995, the Greek government ran twenty deficits and two surpluses. Exhibit 20 shows the path of the Greek government deficit measured as a share of GDP during this era. The deficits were larger during recessions, especially during the financial crisis in the years 2008–2009. The government deficit averaged about 6.5 percent of GDP before the financial crisis, and the era of deficit control was exceedingly short. Greece only managed to switch to surplus in 2016 and 2017.

Deficits push the national debt upward. Measured as a share of GDP, outstanding general government debt in Greece rose from 97 percent in 1995 to 134 percent in 2009, and 183 percent in 2015. Greece's public debt is the highest share of GDP in the E.U. Besides Greece there are four other European nations where debts exceed 100% of annual economic output (Belgium, Cyprus, Portugal, and Italy).[61]

Video:

<u>Debts and Deficits</u>

The political attractiveness of spending financed by borrowing rather than taxation is

not surprising. It reflects what economists call the **shortsightedness effect**(?): the tendency of elected political officials to favor projects that generate immediate, highly visible benefits at the expense of costs that can be cast into the future and are difficult to identify. 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 re-election. They do not like to tax because taxes impose a visible cost on voters. Debt is an alternative to current taxes; it pushes the visible cost of government into the future. Budget deficits and borrowing allow politicians to supply voters with immediate benefits without imposing higher taxes. Thus, deficits are a natural outgrowth of democratic politics unrestrained by commitment to a balanced budget.

Exhibit 20: Greek General Government Deficit or Surplus as a Share of GDP, 1995–2017

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 the 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 importantly, the benefits of spending cuts and deficit reductions that the watchdog is trying to attain (for example, lower taxes) will accrue equally to voters in the other districts. Thus, even if the watchdog is successful, the constituents in his or her 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 of Ukraine (parliament of Ukraine) has 450 deputies. Suppose these 450 individuals go out to dinner knowing that after the meal each will receive a bill for 1/450th of the cost. No one feels compelled to order less because his or her restraint will exert little impact on the total bill. Why not order shrimp for an appetizer, entrées of steak and lobster, and a large piece of cheesecake for dessert? After all, the extra spending will add only a few pennies to each person's share of the total bill. For example, if one member of the dinner party orders expensive items that push up the total bill by €45, his share of the cost will be less than 10 cents (1/450th of €45). What a bargain! 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 orders*. The result is that everyone ends up ordering extravagantly and paying more for extras that provide little value relative to cost.[62]

The incentive structure outlined here explains why deficit finance is so attractive to politicians. During the seven-year period 2008–2015, E.U. members' deficits pushed up the E.U. debt by more than 30 percentage points as a share of GDP. 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 2016 in all E.U. member states (the largest was in Finland—25.6 percent of GDP).[63] As the proportion of the working population shrinks and the number of those retired expands,[64] 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 E.U. member governments do not bring their finances under control? 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 and keep taxes 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 the 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, there will be a destructive impact on the economy. This has occurred in other countries such as Greece that have failed to control government finances. No country is immune to the laws of economics.

It is vitally important for all governments to control their spending and borrowing in the years ahead. This is unlikely to happen without a change in the political rules to make it more difficult for politicians to spend more than they are willing to tax. There are several ways this might be done. The constitution could be amended to require a government to balance its budget, as Georgia's government is required to do. Or the current year's spending might be limited to last year's level of revenues. Proposed constitutional rule changes of this kind would make it more difficult for legislators to spend unless they were willing to tax or to charge users for the government services.

ELEMENT 3.7

Avoid Subsidies Not Based on Economic Logic

When governments become heavily involved in providing favors to some at the expense of others, inefficiency results and improper, unethical relationships develop between government officials and businesses.

> *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 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.*[(65)]
>
> **— James R. Schlesinger, Former United States Secretary of Defense**

There are two ways individuals can acquire wealth: production and **plunder**[(?)]. 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, the taking from others without their consent. Of course, the victims of plunder will lose what the plunderer gains. But, 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 the citizenry will be greater than the gains obtained by those engaging in plunder. In contrast with 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

(You can see the classic entirety at: https://www.dailymotion.com/video/x2hwqki)

Governments promote **economic prosperity**[?] when they encourage production and exchange, and discourage plunder. When effective law and its enforcement make it difficult to take from others, either via crime or use of political action, few resources will flow into plunder. Moreover, the resources employed defending against plunder will also be small.

In the modern world, however, government itself has become a major source of plunder. Governments often take resources from some in order to provide subsidies and favors to others. While it is not technically theft because it is done through laws, it is still a negative-sum activity that harms the citizenry and slows economic growth.

In France, transfers and subsidies now account for approximately half of the overall budget.[66] Social Protection subsidies comprise the bulk of the transfers (43 percent of the total budget),[67] but the government now supports numerous other activities, including culture, airports, specific manufacturing firms, solar power, fossil fuels, and agricultural goods ranging from chickens to wine. There are 250 different grants and subsidies for small business start-ups in rural areas of France.

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

First, the subsidies distort prices and 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. In order 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 place 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. 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 the taxpayer compromised. The greater the degree of corporate welfare (i.e., 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 to describe the favor-seeking of businesses and other groups.) As politics replaces markets, the economy will be increasingly characterized by cronyism and counterproductive activities, and economic growth will fall below its potential.

Video:

Politics, Economics, and Farm Subsidies

Read:

Energy Production versus Conservation by Dwight Lee

Increasingly, the governments of high-income democratic countries use taxes and borrowing to provide subsidies and other favors to specified voting blocs in exchange for political contributions and support. In a statement widely attributed to Scotsman Alexander Tytler, the following argument is made:

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...[68]

Once businesses and other interest groups become heavily involved in providing politicians with support in exchange for subsidies and favoritism, these forces 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 restored, democratically elected politicians will continue to enact programs that waste resources and impair the general standard of living. As illustrated by the case of Greece—whose government overspent itself into a debt crisis in 2015—this path will eventually lead to excessive debt and economic collapse.

Video:

Rent Seeking

ELEMENT 3.8

Watch out for Inefficiencies Even From Useful Subsidies

The net gain of transfer recipients is less, and often substantially less, than the amount of the transfer.

To non-economists, **income transfers**(?) look like an effective way to help targeted beneficiaries. However, economic analysis indicates that it is actually quite difficult to transfer income to a group of recipients in a way that will improve their long-term well-being. As is often the case in economics, the unintended secondary effects explain why this proposition is true.[69]

"You can collect for disability. I don't know about inability."

CartoonStock.com

Three major factors undermine the effectiveness of income transfers. While the process may be easiest to see in the case of direct income transfers like welfare assistance, the same types of forces occur when the benefits are agricultural subsidies or grants to individuals or corporations.

First, an increase in government transfers will generally reduce the incentive of both the taxpayer-donor and the transfer recipient to earn income and create value. Many transfer programs provide for an inverse relationship between the size of the transfer and the income level of the recipient. As the recipient's income rises, the amount of the transfer is reduced. When this is the case, neither taxpayers nor transfer recipients will produce and earn as much as they would in the absence of the transfer program. As taxes go up to finance greater transfers, taxpayers have less incentive to make the sacrifices needed to produce and earn, and more incentive to invest in tax shelters to try to keep the money they earned. Similarly,

recipients will have less incentive to earn because additional earnings will increase their net income by only a fraction—and in many cases only a small fraction—of their additional earnings. 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 the term that the grading policy for the class will redistribute the points earned on the exams so that no one will receive less than a C. Under this plan, students who earned A grades by scoring an average of 90 percent or higher on the exams would have to give up enough of their points to bring up the average of those who would otherwise get Ds and Fs. And, of course, the B students would also have to contribute some of their points as well, although not as many, in order 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? And so would the students who would have made Cs and Ds, since the penalty for exerting less effort would be cushioned by point transfers they would not be given 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 by everyone in the class, and overall achievement will decline.

The impact of tax and transfer schemes is similar: less work effort and lower overall income levels. Income is not like "manna from heaven." Instead, it is something that people produce and earn. Individuals earn income as they provide goods and services for others willing to pay for them. We can think of **national income**[(?)] as an economic 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 portions of the slices they might earn without simultaneously reducing the work effort and innovative actions that generate the pie in the first place.

Second, competition for transfers can erode most of the long-term gain of the intended beneficiaries. Governments must establish a criterion for the receipt of income transfers and other political favors. If they did not do so, the transfers would bust the budget immediately. Generally, the government will require a transfer recipient to own something, do something, or

be something. For example, the recipient of unemployment pay must be out of a job, and a company must not have more than a certain number of employees to qualify for a small-business grant or loan. Once the criterion is established, people will modify their behavior to qualify for the "free" money or other government favors. As they do so, their net gain from the transfers declines.

Think about the following: suppose that the Polish government decided to give away 300 zloty in cash 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? A person whose time was worth 30 zloty per hour would be willing to spend almost as much as ten hours waiting in line for the 300 zloty cash. But it might take longer than ten hours if there were enough others whose time was worth less, say 20 zloty or 10 zloty per hour. Everyone would find that the time spent waiting consumed much of the value of the 300 zloty transfer. If the proponents thought the program would make the recipients 300 zloty better off, they would have been wrong.

This example illustrates why the intended beneficiaries of transfer programs are not helped as much as is generally perceived. When beneficiaries have to do something in order to qualify for a transfer (for example, wait in line, fill out forms, lobby government officials, take an exam, endure delays, or contribute to selected political campaigns), much of their potential gain can often be lost as they seek to meet the qualifying criteria. Similarly, when beneficiaries have to own something in order to get a subsidy (for example, land with a history of past production of a particular crop or a license to operate a taxicab or sell a product to foreigners), people will bid up the price of the asset needed to acquire the subsidy. The higher price of the asset, such as taxicab licenses, 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 subsidies (grants and low-cost loans) to college students in the

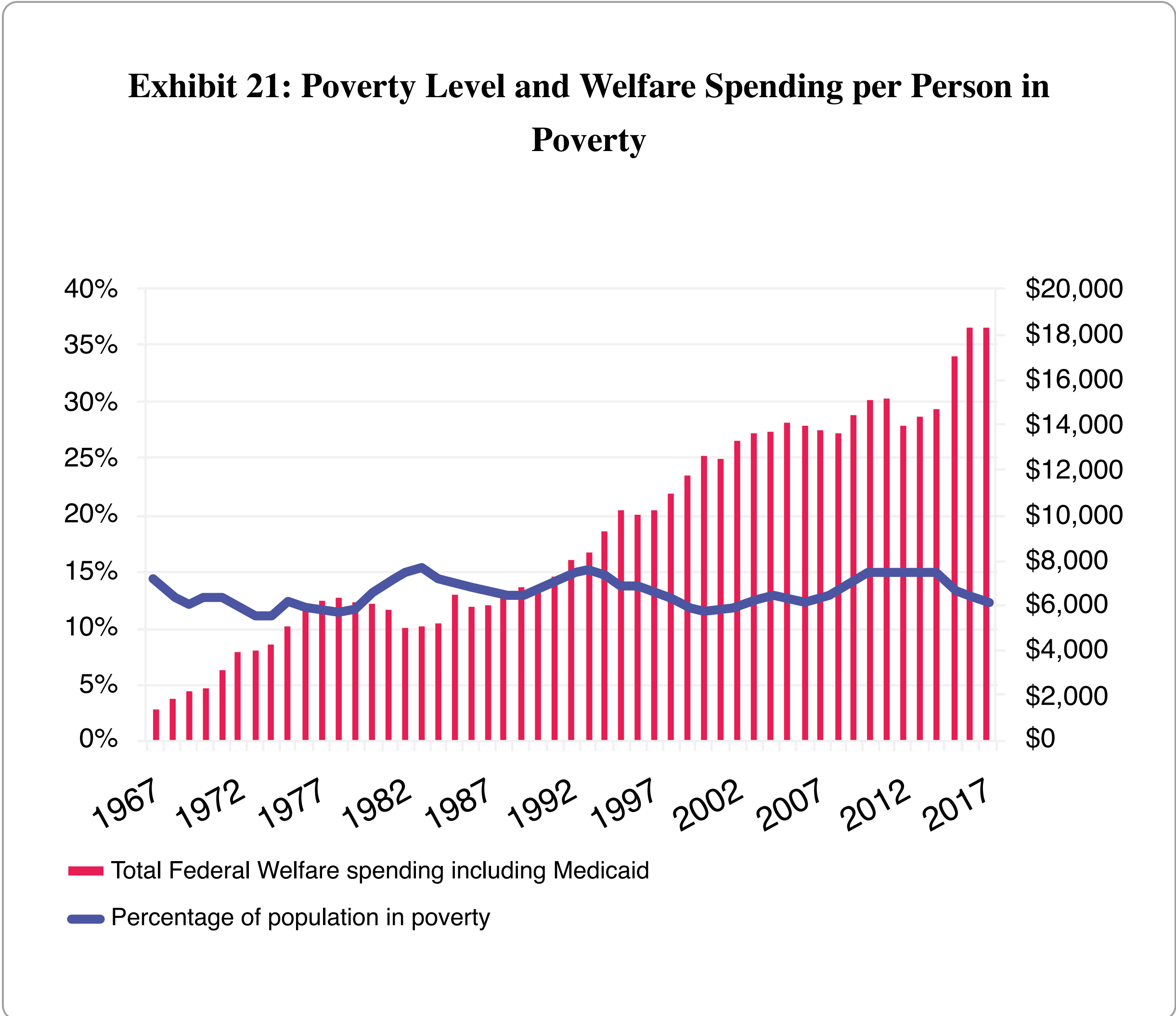
United States. These programs were designed to make college more affordable. But the subsidies also increase the demand for college, which pushes tuition prices upward. A recent study by the Federal Reserve Bank of New York estimates that about 65 percent of the increases in transfers to students was passed through in the form of higher tuition prices. 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 the value of their degrees. 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.[70]

There is a third reason for the ineffectiveness of transfers. Transfer programs reduce the adverse consequences suffered by those who make imprudent decisions, thereby reducing their motivation to take steps to avoid the adversity. For example, government subsidies of insurance premiums in areas prone to hurricanes reduce the personal cost of individuals protecting themselves against economic losses resulting from hurricanes. But there is still a cost to society. Because the subsidy makes the purchase of hurricane insurance cheaper, more people will build in hurricane-prone areas, which results in hurricanes doing more damage than they would otherwise. Unemployment compensation provides another example. The benefits make it less costly for unemployed workers to refuse existing offers and keep looking for better jobs. Therefore, workers spend a longer time searching for jobs, which makes the unemployment rate higher than it would be otherwise.[71]

In understanding poverty and the impact of government programs, it is important to distinguish between "being in poverty," which is an official government statistic, and "being deprived," which is an intuitive understanding about the quality of life. The United States declared a "War on Poverty" under President Lyndon Johnson in the mid-1960s. President 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. As can be seen in the chart below (Exhibit 21), transfers directed toward the poor or near poor have risen

sharply (nine-fold) in real dollars (2017 values) since the 1960s in the United States. The rate of poverty, however, has remained almost constant.[72] As President Ronald Reagan once quipped: "In the sixties we waged a war on poverty, and poverty *won*."

Exhibit 21: Poverty Level and Welfare Spending per Person in Poverty



Video:

Equality vs. Entrepreneurship

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

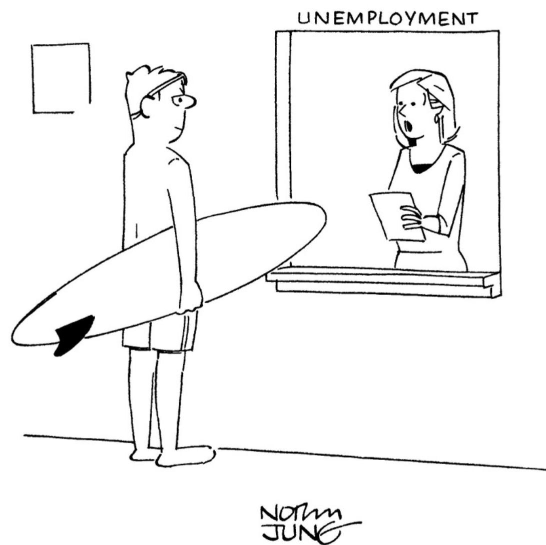
First, the income-linked transfers reduce the incentive of low-income individuals to earn, move up the income ladder, and escape poverty. The benefits from most of these programs are scaled down and eventually eliminated as the recipients' earnings rise. As a result, many low-income recipients get caught 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 a fraction of the additional earnings. 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.(73) 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 is not a new insight. Observing the English Poor Laws in 1835, 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.*(74)

Second, transfer programs that significantly reduce the hardship of poverty also reduce the opportunity cost of risky choices (such as drug use, dropping out of school or the workforce, childbearing by teenagers and unmarried women, divorce, or abandonment of children by fathers), which 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. A 2009 study by Isabel Sawhill and Ron Haskins of the Brookings Institution found that in the United States a person can reduce his or her 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.[75] The effect of personal choices on poverty 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. They should be considered by voters and members of society in general when adopting programs that alter incentives for behavior that can increase or reduce the probability of harmful decisions.



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

Third, government antipoverty 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. The Judeo-Christian concept of tithing and the Islamic obligation of zakat both emphasize individuals' obligations to assist the less fortunate. When taxes are levied and the government does more, predictably, private individuals and groups will do less. Further, private givers are more likely to see the real nature of the problem, be more sensitive to the lifestyles of recipients, and focus their giving on those making a good effort to help themselves. As a result, private charitable efforts will tend to be more effective than those of the government, and therefore the problem worsens as the private efforts are crowded out. Compounding these effects, studies have found that private charities deliver a substantially larger share of their income to the eventual beneficiaries than government programs, which have much larger overhead and administrative costs.[76]

From an economic viewpoint, the poor record of transfer programs ranging from farm price supports to antipoverty programs is not surprising. Ideally, such programs should enable those caught in poverty to sustain themselves as they work to no longer need such transfers. In reality, the evidence suggests that transfer programs can achieve the first part of this mission but may well do so at the cost of inhibiting the second. As a result, assistance programs in both the developing and developed world are increasingly being designed as "conditional cash transfers," where support is provided only if the recipient engages in certain behaviors.

Read:

Social Cooperation and the Marketplace by Dwight Lee

It is worth making some closing observations on the difficult political decisions regarding poverty. When reading discussions in the press or listening to candidates for office, it is important to understand precisely what they are talking about.

1. Even the definition of "poverty" is often confusing. When some people talk about poverty, they are thinking "absolute poverty," which means that an individual or family does not have sufficient resources to purchase a pre-determined "minimum basket of goods and services."
2. Others refer to "relative poverty," where an individual or family is defined as poor if their income falls below a pre-decided position in the income distribution (say is lower than half of the society's median income).
3. Relative poverty relates to, but is not the same as, inequality. Suppose you had two societies with four families in each. Incomes in the first society are $1,000,000, $50,000, $50,000, and $4,000 while incomes in the second were $51,000, $50,000, $50,000, and $24,999. Both societies would have the same relative poverty rate (25%) but very different levels of inequality.
4. Poverty measures are sometimes presented without taking account of taxes (which reduce income) and transfers (which increase income). Which is being used? The first

definition often finds twice as many people in poverty as the latter.

5. Standards of what constitutes a minimum consumption level vary widely across countries and over time. In middle and upper income countries today, societal expectations for reasonable standards of living include goods and services unimaginable for previous generations. (Think cellphones or television sets.)
6. Finally, it is important to distinguish between poverty at a given time compared to over a lifetime. Having a low income as a student is very different from being poor year after year.

ELEMENT 3.9

Central Planning Has Never Worked

The economy is far too complex to be centrally planned and efforts to do so will result in inefficiency.

> *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, although 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.*[77]
>
> **— Adam Smith (1759), *The Theory of Moral Sentiments***

As previously discussed, governments can often coordinate the provision of public goods—a small class of goods for which it is difficult to limit consumption to paying customers—better than markets. Many people also believed that government officials can manage all, or most, of the economy better than markets. Since the Bolshevik revolution in 1917, numerous proponents of central planning claimed 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. Under central planning, the market forces we

discussed earlier are replaced by government diktat involving direct command and control, as under the old Soviet system. To a lesser extent, such government control can occur in any society where elected political officials substitute their verdicts for those of consumers, investors, and entrepreneurs directed by market forces.

It is easy to see why central planning has a certain appeal to the novice. Surely it makes sense to plan. Aren't elected officials and government experts more likely to represent the "general welfare" of the people than business entrepreneurs? Won't government officials be "less greedy" than private businesses? People who do not understand public choice economics and the operation of the political process often find the argument for central planning persuasive. Economics, however, indicates that central planning will be inefficient. There are five major reasons why this will be 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. Various business and unionized labor interests 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. Predictably, the political process will favor older firms with more lobbying experience and political clout, even if they are economically weak, over newer growth-oriented firms. In addition, the chairmen of key legislative committees will often block various programs unless other legislators agree to support projects beneficial to their constituents and favored interest groups ("pork-barrel" projects). Given this incentive structure, only a naïve idealist would expect this politicized process to result in less waste, more wealth creation, and a better allocation of investment funds than 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 of **government enterprises**(?) and agencies to keep costs low, be innovative, and efficiently supply goods is weak. Unlike private owners, the directors and managers of public-sector enterprises have little to gain from improved efficiency and lower costs. Rather than serving customers to build their agencies, they rely on a government budget. Predictably, they will be motivated to pursue a larger budget. 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 the planners that their activities are producing goods or services that are enormously valuable to the general public and, if they were just given more funds, they would do even more marvelous things for society. Moreover, they will argue, if the funding is not forthcoming, people will suffer and the consequences will likely be disastrous.

It will often be difficult for legislators and other government planners to evaluate such claims, not only because there will be thousands of such claims, but also because there is nothing comparable to private-sector profit that the planners can use to measure performance of the enterprise managers. In the private sector, **bankruptcy**(?) eventually weeds out inefficient producers, but in the public sector, there is no parallel mechanism for the termination of unsuccessful programs. In fact, poor performance and failure to achieve objectives is often used as an argument for increased government funding. For example, the police department will use a rising crime rate to argue for additional law-enforcement funding. Similarly, if the achievement scores of students are declining, 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 is going 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. Similarly, 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. As we saw in Part 2, Element 1, private ownership provides a strong motivation to take the future effects of current decisions into consideration. But when money and resources are owned in common there is little motivation to consider the future. 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. All fishermen would be better off if the fish were harvested less rapidly so there would be more opportunity for their populations to reproduce. But, because of the common ownership, each fisherman knows that fish he does not catch today will be caught by someone else tomorrow. Thus, there is little incentive for anyone to reduce his or her catch today so more fish will be available in the future.

Similarly, when interest groups are "fishing" for government spending (that is, lobbying political planners), 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 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. See the discussion in Part 3, Element 6, on the problem of 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 provide enterprise managers with sensible instructions.

Video:

Rinkonomics (Spontaneous Order)

Markets are different. Market prices register and tabulate widely fragmented information. Price information is constantly adjusting to reflect the persistent changes taking place in the economy. Prices reflect this widely dispersed information and send signals to business firms and resource suppliers. These price signals provide businesses and resource owners with the information—and the incentives—required to coordinate their actions and bring them into harmony with the new conditions. Failure to properly interpret these market price signals and respond properly will bring losses to the business or individuals.

It is the information communicated through market prices that informs investors, firms, and workers where their dollars and efforts create the most value for others. Without market prices for their output, government agencies make decisions without any such parallel measure of whether they are creating positive net values or wasting resources.

Nobel Laureate Friedrich Hayek summarized the implications of the information problem confronted by central planners in the following manner:

> *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.[(78)]

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

Video:

The Economics of the Lego Movie

Some years ago it was widely 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, which dominated the popular media and intellectual circles during the 1970s and 1980s. 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. Nonetheless, many still believe that the government can direct various sectors of the economy, such as health care and education. However, given the incentives and information problems accompanying central planning, this is unlikely to be the case.

More than two and a half centuries ago Adam Smith articulated the source of central-planning failures, including those that arise from efforts to plan specific sectors (see the quotation at the beginning of this element). Unfortunately for government planners, individuals have minds of their own, what Smith calls "a principle of motion." When individuals face personal incentives that encourage them to act in ways that conflict with the central plan, problems arise. When governments move beyond the protective function and begin to subsidize various activities, operate enterprises, direct various sectors, and, in the extreme case, centrally plan the entire economy, invariably internal conflicts will arise and living standards will fall well below their potential.

The record of government planning in different countries illustrates this point.
It is fraught with conflicts and internal inconsistencies:

- The federal government of the United States pays some farmers not to produce grain products, and at the same time, provides others with subsidized irrigation projects so they can grow more of the very same grain products. Similar European Union subsidies have resulted in **surplus**[?] production of many agricultural products, leading to the popular expression “butter mountain.”
- United States government programs for dairy farmers keep the price of milk high, while government subsidizes the school lunch program to make the expensive milk more affordable.
- India’s food subsidy program tries to benefit consumers as well as producers. As a result, India has accomplished the extraordinary feat of rationing grain to consumers at artificially low prices, while simultaneously suffering excess supply, because farmers are paid high prices. (Farmers are also subsidized via agricultural inputs—electricity, water, and fertilizer—to the detriment of the environment.) The government has purchased huge stockpiles of rotting rice and wheat, while the limited amount available to consumers is allocated in ways that are corrupt and inconsistent with the stated goal of helping the poor.[79]
- Around the world, countries spend $30 billion a year on fisheries subsidies, 60 percent of which directly stimulates unsustainable, destructive practice. In 2012, the resulting market distortion had a cost of $83 billion to the global economy.[80]
- In 2015 and 2016, the G7 governments gave at least $81 billion in fiscal support and $20 billion in public finance each year for production and consumption of oil, gas, and coal, while simultaneously extensively subsidizing wind and solar energy production. In 2019, the United Kingdom was expected to spend €12bn in support of fossil fuels, and €8.3bn in support of competing renewable energy sources.
- Returning to India, a Comprehensive Action Plan to deal with pollution prepared by the Environment Pollution Control Authority (EPCA) says that Compressed Natural Gas (CNG) should not be promoted because it “is one of the major contributors of Nitrous

Oxides and is also expected to increase Particulate Matter (PM1) in the air." This position is in direct opposition to the Central Pollution Control Board's 42-point Action Plan (2015) for Delhi, which required the city to indicate how it would begin to shift public transport to a CNG mode as rapidly as possible.

In general, conflicting policies result from a fundamental tension between on the one hand a system of market regulation that aims to put citizens and productivity in charge of the economy and on the other a system of governmental rigging of the economy to benefit politically favored sectors and firms.

Economic analysis indicates that extensive use of government planning will lead to both economic inefficiency and cronyism. When government officials decide what is bought and sold, or the prices of those items, the first thing that will be bought and sold will be the votes of elected officials. When enterprises get more funds from governments and less from consumers, they will spend more time trying to influence politicians and less time trying to reduce costs and please customers. Predictably, the substitution of politics for markets will lead to economic regression and, in the words of Ukrainian born economist Ludwig Von Mises, "The worst evils which mankind has ever had to endure were inflicted by bad governments."(81)

ELEMENT 3.10

Competition and External Anchors Are Key

Competition is just as important in government as in markets.

Competition is a disciplinary force. In the marketplace, businesses must compete for the loyalty of customers. When firms serve their customers poorly, they generally lose business to rivals offering a better deal. Competition provides consumers with protection against high prices, poor quality merchandise, poor service, and/or rude behavior. Almost everyone recognizes this point with regard to the private sector. Unfortunately, the importance of competition in the public sector is often overlooked.

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.

Competition among decentralized government units—states in the United States or Germany, regions or oblasts in other countries and local (municipal) governments—can also help protect citizens from government exploitation. A government cannot be oppressive when citizens can easily choose the "exit option," moving to another location that provides a level of government services and taxes more to their liking. Of course, it is not as easy to walk away from your government as from your grocer! But the more government functions are decentralized, the easier it is for citizens to vote with their feet. Moreover, people can benefit from more competition between sub-national governments without moving themselves. The fact that some do move from less efficient to more efficient governments and that others could do the same motivates all governments to become more sensitive to the concerns of their citizens.

Decentralization(?) can also enhance the ability of people to obtain government services more to their liking. 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 more 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 their tax base will choose the exit option.

Video:
Competition and Efficiency of Government

Between 2003 and 2013, the population of the nine U.S. states without a personal income tax grew by an average of 3.7 percent a year as the result of immigration from other states. During the same period, the nine states with the highest income taxes lost an average of 2 percent in population. Employment growth in the nine states without an income tax was more than double that of the high-tax states. 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.[82] These movers are sending a message to high taxing, poorly run 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.

To summarize, decentralization allows people to move toward governmental units that provide desired public services at a low cost. In turn, the movements of voters will discipline governments and help keep them 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 higher levels of government. When the national government (or the European Union) subsidizes, mandates, and regulates the bundle of services provided by lower levels of government, it undermines the competitive process among them. The best thing the central government can do is perform its limited functions well and remain neutral with regard to the operation and level of services of lower levels of government.

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 will not evolve automatically. It will have to be incorporated into the political structure.

Thinking About Constitutional Rules for Prosperity

> *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.*[(83)]
>
> **— Milton Friedman, 1976 Nobel Laureate**

What are the major messages of Part 3? First, economic analysis establishes that monopoly, public goods, and externalities are all problems of the market that encourage self-interested individuals to engage in counterproductive actions. These market failures create an opportunity for government intervention to enhance efficiency. But there is no assurance this will be the case.

Political allocation, even when directed democratically, is an alternative form of economic organization—and, like markets, it has both benefits and shortcomings. There is government failure as well as market failure. Government failures include the following, as discussed above:

- Voters have little incentive to cast well-informed votes.
- When government moves beyond the protection of individual rights and becomes

heavily involved in the allocation of scarce resources, elected political officials have a strong incentive to cater to the views of well-organized interest groups.

- Political favoritism will encourage wasteful rent-seeking.
- The political process tends to be shortsighted (often just until the next election), which results in excessive use of debt and unfunded promises that are difficult, if not impossible, to keep.

If government is going to be a positive force for economic prosperity, the rules of the political game must bring the self-interest of voters, politicians, and bureaucrats into harmony with economic progress. What would this look like and how might it be achieved?

Clearly, equal treatment under the law and restraints on the powers of governments are central to the design of a political structure supportive of economic progress. Although institutional arrangements vary around the world, there are lessons to be learned from the successful (and the failing) options found in various countries. To a large degree, the framers of the United States Constitution got the general structure right. They built checks and balances into the system. Political power was divided among the legislative, executive, and judicial branches. Legislation had to pass through two legislative bodies that, at the time, represented diverse and often-conflicting interests, and the approval of the president was required for passage into law.

The limitations on the powers of the central government provided for a decentralized federal system and still more dispersal of governmental powers. The permissible fiscal powers of the central government were enumerated (Article I, Section 8) and all other powers were allocated to the states and the people (Tenth Amendment). Congress was to levy uniform taxes in order "to provide for the common defense and general welfare." The clear intent was to prevent the use of the federal treasury as a tool to favor some groups and regions relative to others.

The American Constitution also protected the property rights of individuals and their freedom to engage in voluntary exchange. The Fifth Amendment specified that private property shall not be "taken for public use without just compensation." States were prohibited from adopting legislation "impairing the obligation of contracts" (Article I, Section 10).

Perhaps most importantly, states were prohibited from implementing trade barriers, and as a result, the United States of America became the world's largest free-trade zone.

The United States Constitution sought to limit the ability of government, particularly the federal government, to politicize the economy and restrict the rights of citizens. Put another way, the Constitution was designed to promote government action based on agreement rather than coercion. Why is this important? People will agree to an action only when each party gains. Thus, actions based on agreement, whether undertaken through markets or government, will be mutually advantageous and will therefore promote the general welfare rather than the interests of some parties at the expense of others.

With the passage of time governments often seek to become involved in larger and larger portions of citizens' economic and personal lives, so that by now, in most countries, government is involved in almost everything and the results are highly visible: political favoritism, special-interest spending, large budget deficits, excessive regulation, political corruption, and increased influence over many aspects of our lives.

The challenge before all countries, both those with long-established governmental structures and those newly devising the rules under which they will operate, is to design a set of constitutional rules that will promote government action based on broad consensus and bring the political process into harmony with economic progress.

How can this be accomplished? What provisions would a constitution designed to promote economic prosperity and stability contain? Several proposals flow directly from the analyses discussed above. Although others may have different ideas worth discussing, we believe that both economic logic and empirical research support the following general principles that would contribute to a well-functioning government and promote economic progress.

Constitutional Principles for Prosperity

a. ***Decentralization such that economic policy decisions are, to the maximum extent possible, made at the level of government closest to those affected***

Sometimes referred to as **subsidiarity**[(?)], this principle is found in the Tenth

Amendment to the United States Constitution, which states, "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." Subsidiarity is also "a general principle of European Union law" under the 1992 Treaty of Maastricht. As modified by the Lisbon Treaty of 2009 "under the principle of subsidiarity, in areas which do not fall within its exclusive competence, the Union shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by Member States, either at the central level or at the regional or local level…"

The logic of subsidiarity stems from several sources. The more direct contact between government and citizens at the local rather than national (or supranational) level allows better discovery of needs and desires. As discussed earlier, competition among governments results in incentives to better serve citizens. As a result of different local groups of citizens being incentivized to address common problems, the diversity of approaches to problems utilized by different localities will increase the odds that effective policies will be discovered and adopted by other governmental units.

While the specific term "subsidiarity" arose from Pope Pius XI's encyclical *Quadragesimo anno* in the early twentieth century, the idea was understood well before the term came into wide use. Observing early nineteenth-century America, Alexis de Tocqueville concluded:

> *Decentralization has, not only an administrative value, but also a civic dimension, since it increases the opportunities for citizens to take interest in public affairs; it makes them get accustomed to using freedom. And from the accumulation of these local, active, persnickety freedoms, is born the most efficient counterweight against the claims of the central government, even if it were supported by an impersonal, collective will.*(84)

b. ***Checks and balances that keep governmental power clearly divided across***

independent units

Governments typically have three areas of activity:

i. A legislative branch that makes the laws.
ii. An executive branch that administers the laws.
iii. A judicial (court) branch that interprets the laws.

There are, however, a very 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 Queen 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 on the basis of 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 of the above types, research suggests that Presidential systems tend to have smaller governments. This may be due to the fact that 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 systems, 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. An excellent summary of the advantages and disadvantages of various forms of government structure in the context of a post-communist country has been provided by economists Roger Myerson, Gerard Roland, and Tymofiy Mylovanov.[85]

Read:

A Case for Constitutional Reform in Ukraine

Roger Myerson, who won the Nobel Prize in Economics in 2007, has elsewhere 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.

Shoe by Gary Brookins and Susie MacNelly (April 5, 2010)

c. ***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 can be avoided (*de jure*—or independence *in law*).[86] Principles that contribute to such a judiciary include the following:

i. **Separation of powers**. The judiciary must not have any contact with political parties—especially the party in power—and must limit contact with the executive branch to security, financial, and administrative matters.
ii. **Security of remuneration**. The salary of judges should be fixed and secure.
iii. **Guaranteed tenure until retirement or expiry of office**. Judges should be

removed or suspended only for reasons of "incapacity" or "behavior that renders them unfit to discharge their duties." Such behavior would encompass things such as accepting bribes.

iv. **An open court**. Members of the public should have the right to enter the court at any time a trial is in progress and have access to decisions. Guidelines and principles should be applied to the media with maximum freedom about what they can report in order to ensure fair trials.

v. **A requirement to communicate the law to the public.** Even a concerned and involved citizenship cannot hold political leaders and government organs responsible for their actions (or lack of actions) if they do not know what behavior is actually required of their leaders in both local and international law.

vi. **A judicial selection process that is fair**. The selection of judges should be made from people with "integrity" and "ability," with "appropriate training and qualifications" and without discrimination.

This last principle should apply whether the selection process is made by appointment or election. Indeed, given the complex requirements involved in quality adjudication and the fact that judges should not attempt to make policy from the bench, selection of judges by largely uninformed voters is likely to be especially problematic.

d. ***An independent central bank***

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 short 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, perhaps even hyperinflation. Both economic theory

and past evidence say that by changing incentives and introducing uncertainty that makes 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.

e. ***Protection of 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:

i. 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."
ii. The United States Constitution, which contains the widely quoted phrase: "No person shall be … deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation."
iii. The Constitution of the Russian Federation, which is even more specific: "The right of private property shall be protected by law. Everyone shall have the right to have property and to possess, use and dispose of it both individually and jointly with other persons. Nobody may be deprived of property except under a court order. Forced alienation of property for State requirements may take place only subject to prior and fair compensation."

Unfortunately, many of these words are, as the saying goes, "not worth the paper they are printed on." Governments frequently erode the protections of

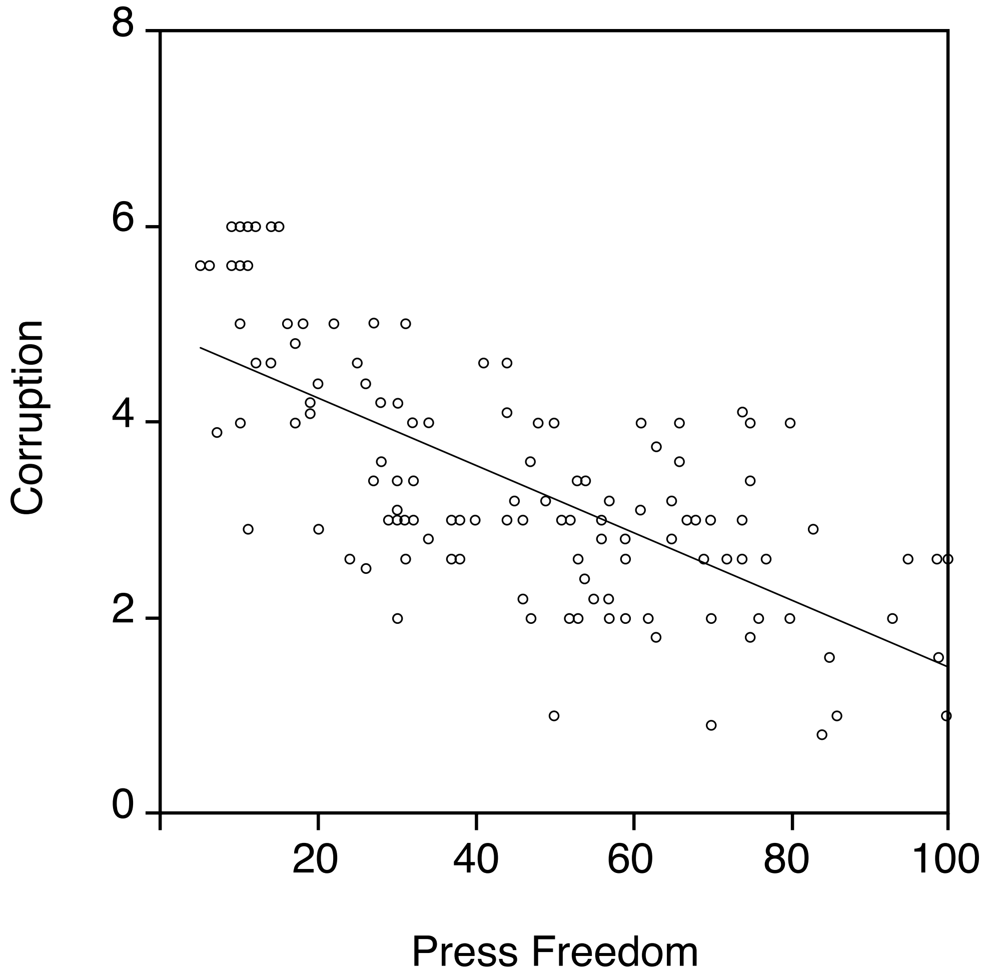
property. Phrases like "public interest," "just compensation," or "fair compensation" are subject to interpretation. Governments frequently use regulations to take or control private property without compensation, even though the property owner had violated the rights of no one. Courts have generally allowed such takings of private property as long as a legislative body deemed that the action was "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?

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.

f. ***Guarantees of freedom of speech and the 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.

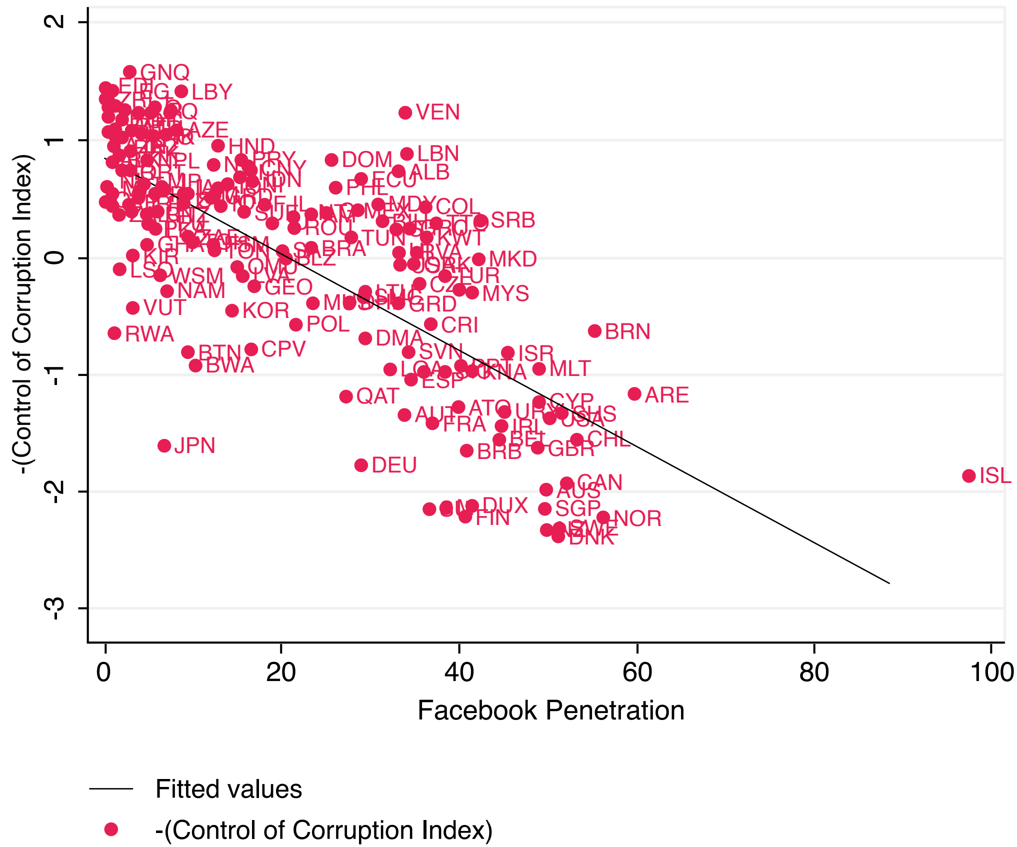
Exhibit 22: Press Freedom Reduces Corruption



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):

Exhibit 23: Social Media Means Less Corruption



Source: C.K. Jha, & S. Sarangi "Does social media reduce corruption?", *Information Economics and Policy*, Volume 39 (June, 2017): 60–71.

The importance of the "Great Firewall of China" in controlling Chinese society is obvious, as is the role of social media in enabling citizen protests to hold governments accountable in many transition economies. Some recent examples include the #RejectSerzh protests in Armenia in the spring of 2018 and Euromaidan in Ukraine in 2013-2014.[87]

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, and television stations and radio stations. While interfering with private owners is always questionable, this is one area where sound public policy may well require limitations.

g. ***Freedom of movement, investment, and trade***

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 why 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, *no matter what 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 twentieth century:

> *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.

h. ***Use of external anchors***

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 may 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 (E.U.) 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 E.U. policies (farm subsidies under the Common Agricultural Policy are an obvious example) 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 E.U. membership. Countries with a reasonable expectation of joining the E.U. made many painful reforms that ultimately benefited their citizens.[(88)]

Other organizations that could have a similar positive influence include NATO, the WTO, the European Court of Human Rights, the 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 debt. An example would be the Greek crisis of 2010–2018. Only pressure from the IMF and the European Central Bank persuaded the Greek government to adopt necessary reforms.

Even external rankings that do not require membership can have a positive influence on government performance. Georgia, for example, takes great 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.

Part 3 Final Thoughts

The provisions outlined above would enhance the protection of private ownership rights, promote competition, strengthen federalism, and help bring government spending and borrowing under control, while limiting the inclination of politicians to serve special-interest groups. They would be a positive step toward the establishment of government based on mutual agreement rather than the power to plunder. There is, however, one important additional issue. All of the above suggestions will work only if citizens insist that the spirit of the law rather than the letter of the law is followed.

An example of what can go wrong comes from an attempt in the constitution of Guatemala to reduce corruption in the judiciary and lessen the influence of politicians and their friends over judges. Deans of law schools were given a major role in the selection of judges. As cynics could have predicted, this “reform” resulted in corruption in the selection of Deans. Those seeking influence over the judiciary bankrolled campaigns of professors seeking to become dean by throwing elaborate parties for students who get a vote in the Dean’s selection. There was also an explosion in the number of law schools, many of which existed in name only.[89]

We conclude with a sentiment attributed to many authors but perhaps best expressed by Aldous Huxley, introducing the 1956 radio version of *A Brave New World:*

> *The price of liberty, and even of common humanity, is eternal vigilance*.

Parts 2 and 3 have focused on national prosperity. The final section of this book will focus on personal prosperity by considering some practical choices you can make that will help you achieve a more prosperous life.

PART 4

Twelve Key Elements of Practical Personal Finance

Elements:

1. Discover your comparative advantage.
2. Cultivate skills, attitudes, and entrepreneurship that increase productivity and make your services more valuable to others.
3. Use budgeting to help you spend your money effectively and save regularly.
4. Don't finance anything for longer than its useful life.
5. Two ways to get more out of your money: Avoid credit card debt and consider

purchasing used items.

6. Begin paying into an emergency or "rainy day" **savings account**(?) every month.
7. Put the power of compound interest to work for you.
8. Diversify—don't put all your eggs in one basket.
9. **Indexed equity mutual funds**(?) or indexed exchange traded funds (ETFs) can help you beat the experts without taking excessive risk.
10. Invest in stocks for long-run objectives, but as the need for money approaches, increase the proportion of bonds or cash.
11. Take steps that will reduce risk when making housing, education, and other investment decisions.
12. Use insurance to help manage risk.

Introduction

Compared to post-communist countries, the countries of the European Union have much higher income levels. Still, many people in Western European countries (and even more in poorer countries) are under financial stress. How can this be? The answer is that financial insecurity is mainly the result of the choices we make, not the incomes we earn.

If you do not take charge of your finances, they will take charge of you. As Yogi Berra, the great American philosopher (and baseball star) said, "You've got to be very careful if you don't know where you are going, because you might not get there.[90]" In other words, each of us needs a plan. If we don't have one, we may end up where we do not want to be. The twelve elements in Part 4 form the core of a practical plan. They focus on practical suggestions—things that you can do immediately—that will help you make better financial decisions whatever your current age, income level, or background.

Often, personal finance and investment decisions seem totally divorced from the world of economics. But they are not. As illustrated in Element 1, the principle of comparative advantage, 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 you do well that are valued highly 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 valuable for individuals as they are for countries.

The principles, guidelines, and tools presented here could be divided into four categories: Elements 1 and 2 focus on how you can earn more; Elements 3 through 6 on how to get more value from your income; Elements 7 through 10 on earning more from your investments; and Elements 11 and 12 on management of risk.

The advice outlined here is basic, practical, and understandable. It will not make you a financial wizard or an instant millionaire, but it will help you avoid major financial errors. More sophisticated plans are available. However, the search for perfection is often the enemy of positive action. Individuals who think they don't have the time or the expertise to develop a sound financial plan may fail even to apply simple guidelines that will help them avoid major financial troubles. This section will provide such guidelines.

Life is about choices. Our goal is to enhance your ability to choose options that will lead to a more successful life. John Morton, one of the United States' leading economic educators, states:

> *I always told my students that life is not a lottery and life is not a* ***zero-sum game***[?]*. Your success will not take away from anyone else's success. Your success depends on your choices, and choices have consequences.*

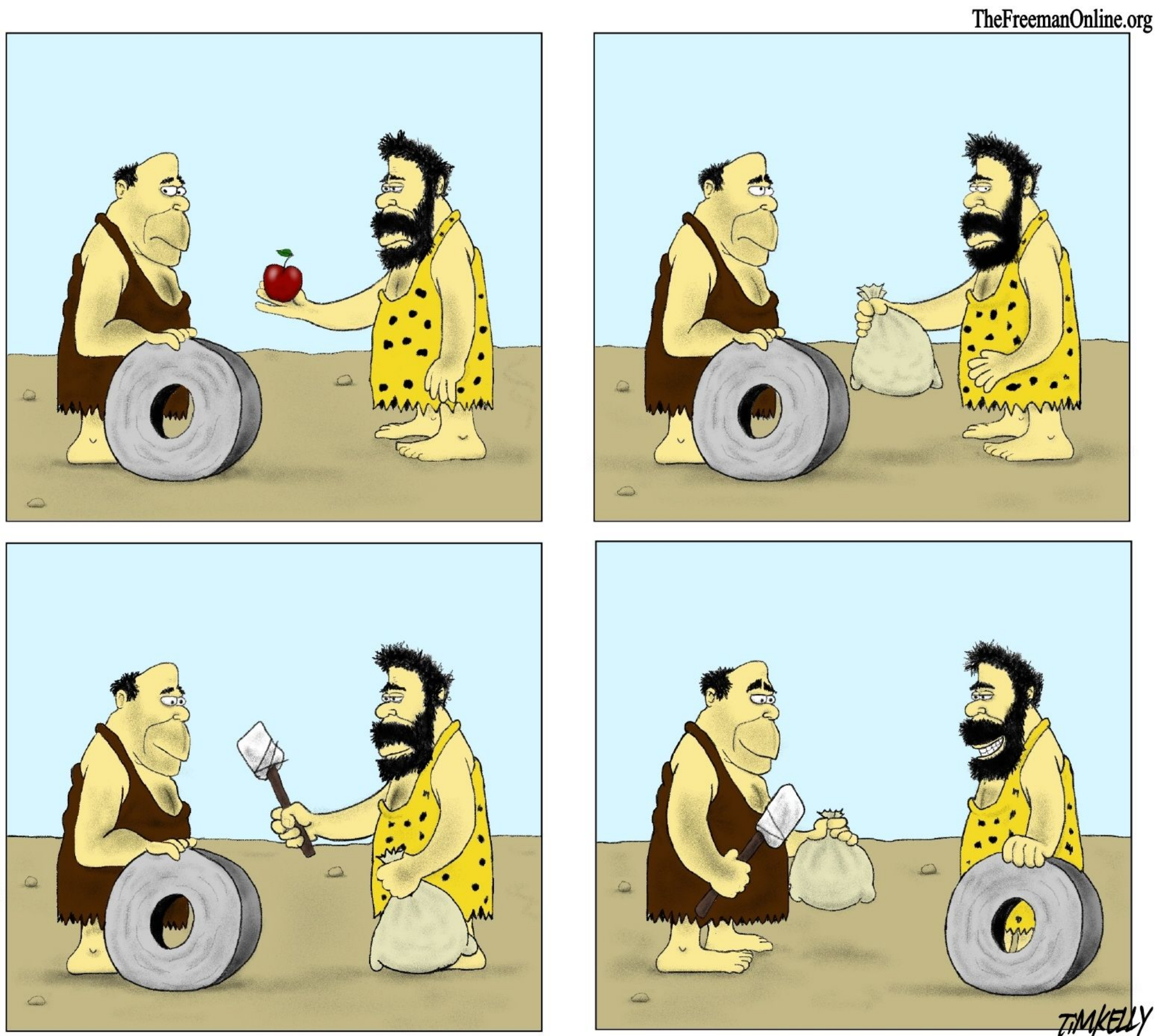
Before examining how you can make better financial choices and get more from the resources available to you, we want to share a couple of thoughts about the importance of money and wealth. There is more to a good life than making money. When it comes to happiness, non-**financial assets**[?] such as a good marriage, family, friends, fulfilling work, religious convictions, and enjoyable hobbies are far more important than money.[91] Thus the single-minded pursuit of money and wealth makes no sense.

At the same time, however, there is nothing unseemly about the desire for more wealth. This desire is not limited to those who are only interested in their personal welfare, narrowly defined. For example, Mother Teresa would have liked more wealth so that she could have done more to help the poor. Many people would like more wealth so they can donate more to

religious, cultural, and charitable organizations, or do more to help elderly parents. No matter what our objectives in life, they are easier to achieve if we have less debt and more wealth. Thus, all of us have an incentive to improve our financial decision-making.

ELEMENT 4.1

Discover Your Comparative Advantage



The principle of comparative advantage is used most often to explain why international trade makes it possible for people in different countries to achieve higher living standards. As illustrated in Element 4 of Part 1, specialization according to the law of comparative advantage makes it possible for trading partners to produce more and achieve a higher income level. The principle of comparative advantage is just as important when individuals are considering occupational and business opportunities.

Like nations, individuals will be able to achieve higher income levels when they specialize—that is, concentrate their efforts on those things where they have a comparative advantage. Think about the relationship between your skills and opportunity costs. To pick one extreme, suppose that you are better than everyone else in every productive activity. Would that mean that you should try to spend some time on each activity? Or to go to another extreme, someone could be worse than everyone else. Would that individual be unable to gain from specialization because he or she would be unable to compete successfully in anything? The answer to both questions is no.

No matter how talented you are, you will be relatively more productive in some areas than others when opportunity costs are taken into account. Similarly, no matter how poor your ability to produce, you will be able to produce some things at a lower cost than others. 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. For example, Mark Zuckerberg, cofounder of Facebook, has the skills not only to be a highly successful innovator and business entrepreneur, but he also has what it takes to be an outstanding computer programmer. It took a lot of programming skills and creativity to jump-start the popularity of a social media network in his dorm room at Harvard. While Zuckerberg was a highly skilled programmer, his comparative advantage was nonetheless in the development of the innovative, social media features of Facebook. Similarly, even though the computer programmers working at Facebook are probably less skilled than Zuckerberg, their comparative advantages still lie in programming rather than in management (or dealing with investors).

Individuals will always be better off if they are really good at something that is highly valued by others. This explains why people like Zuckerberg can make incredible amounts of money. In 2007, at the age of just 23, he became the world's youngest self-made billionaire.[(92)]

Some people may feel that they are at a disadvantage when they trade with others who earn far more money. But remember that trade benefits both parties. Generally, the more accomplished and wealthy the people with whom you trade (working for someone involves trade), the better off you are because your service is typically worth more to them than to those

who are less accomplished and wealthy. For example, if the authors were entertainment agents, we would rather work for Björk, the Rolling Stones, or U2 than for other musicians because we would almost surely make more money that way.

The worst thing you can do is convince yourself, or be convinced by others, that you are somehow a victim and therefore unable to achieve success through your own effort and initiative. Some people start out with fewer advantages than others, but even those who are less advantaged can do extremely well if they make the effort and apply themselves intelligently. You need to take charge of your career development and plan how you can best develop your talents and use market cooperation to achieve your goals. No one else cares more about your personal success than you do. Neither does anyone else know more about your interests, skills, and goals.

We usually perceive of costs as something that should be kept as low as possible. But remember, 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 job at Starbucks to have more money while you're a student? Or should you 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 have very few good choices. For example, a very effective way of reducing the cost of reading this book is to get thrown in jail with it so that reading it is the only opportunity you have other than staring at the walls. This is obviously a bad idea. It would reduce the cost of doing one thing (a very desirable thing in our opinion) by eliminating your opportunity to do many other attractive things. You make yourself better off by increasing your opportunities, not by reducing them.

Young people are encouraged to get a good education so they will have more attractive opportunities later in life. A good education will generally increase your productivity, and the amount employers are willing to pay you. This will enhance your earnings, but it also means you will have to turn down some attractive offers that may come your way while you are hoping to qualify for even better ones later.

Sound career decision-making involves more than figuring out those things that 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. Moreover, real wealth is measured in terms of personal fulfillment. For example, the authors of this book (all economists) have found it satisfying to find answers to economic questions and to express what we know in ways that can help others better understand the corners of the world that we have examined professionally. Even though the hours are sometimes long, we find most of those hours enjoyable. What we do is not for everyone. But for us, with our interests, the joys of what we do more than make up for the rough patches.

ELEMENT 4.2

Increase Your Value to Others

Cultivate skills and attitudes (including entrepreneurship) that increase productivity and make your services more valuable to others.

In a market economy, financial success reflects the 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 thinking entrepreneurially. 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.[(93)] Economists have often not focused on these vitally important sources of personal productivity.[(94)]

How does one's personal attitude 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, unreliable, quarrelsome, contempt for education, vulgarity of speech, blaming others for problems, dishonesty, and reliance on alcohol and drugs. If you were the employer, which would you hire? Predictably, most would hire the first candidate because those attitudes are success-oriented. Other things being equal, employees with these positive attitudes are more productive. 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. They need to become habits—the core values of your life. Equally important, you need to cast the second set out of your life. Do not let anyone, including friends, convince you that any of the failure attributes are "cool." They are the path to trouble, and you do not want to go down that route.

There is some good news here: You can choose the 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.

Video:

The Economics of Ghostbusters

Of course, if you choose the failure attitudes, you can blame others: your family, 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 troublesome 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.

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 we'll call Misha has this perspective. Misha ignores the wishes of consumers and instead provides what he or she thinks consumers should value. Misha is free to make this choice. By doing so, however, Misha will

pay a price in the form of lower sales, possibly even leading to losses and 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, people who ignore how their attitudes and behavior influence their productivity will pay a price in the form of poor opportunities and low earnings. 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 a highly important determinant of financial success. You cannot buy these attitudes. Neither can someone else provide them to you. You must choose them and integrate them into your life. Further, if you do so, it is a near certainty that you will have a substantial degree of economic success. But the opposite is also true: If your life is largely a reflection of the failure set of attributes, it is a virtual certainty that your future will be characterized by financial troubles and personal bitterness.

Entrepreneurial thinking is also a personal attribute that can enhance your productivity. Entrepreneurship is often associated with decision-making in business, but in a very real sense all of us are 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.

Video:

CreAction

Providing others with goods and services that are highly valued compared to their cost is the key to financial success. Consider the hypothetical case of Robert Jones, a land developer. Jones purchases large land tracts, subdivides them, and adds various amenities such as roads, sewage disposal, golf courses, and parks. Jones will profit if he is able to sell the plots for more than the cost of the land, the various amenities he has constructed, and his labor services, including the earnings forgone in his best alternative pursuit. If his actions are profitable, they will increase the value of the resources and help others by providing them with better home sites than are available elsewhere. Jones's financial success or failure is dependent on his ability to enhance the value of resources.

Once you begin to think entrepreneurially and 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 former Soviet state would become one of the world's most advanced digital nations? Welcome to Estonia, the birthplace of Skype and TransferWise, a country that runs completely online, a place where Internet access is declared a basic human right.[95]

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 started by Adi Dassler in his mother's kitchen in 1924 would grow to $20 billion in sales?[96] Did anyone in the 1950s expect Ingvar Kamprad, founder of IKEA, to take his first small showroom in the small town of Älmhult, in Sweden and make it the largest furniture retailer in the world?[97]

These are high-profile cases, but the same pattern occurs over and over. Successful business and professional leaders often come from diverse backgrounds that appear to be largely unrelated to the areas of their achievement. But they have something in common. They are good at discovering better ways of doing things and strategically acting on opportunities to

increase the value of resources that have been overlooked by others.

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. For example, in 2015 about 17 percent[98] of employed people were self-employed and about 80 percent of working millionaires were self-employed in the Netherlands.[99] 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 risk. Greater risk and the possibility of 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 a high investment rate. Self-employed business owners often channel a large share of their income into the growth and expansion of their business. Fourth, they generally love what they do and therefore work long hours.

It should be noted that in the countries of Central and Eastern Europe (CEE) and the former Soviet countries, rates of small business ownership vary significantly by country and region within countries. This may reflect government policies along with cultural attitudes that influence the ability to start an independent business.[100] However, having an entrepreneurial attitude will be useful under all circumstances.

Employees, too, can adopt the characteristics that contribute to the high-income status and wealth of self-employed entrepreneurs. They can invest their savings in stocks and thereby achieve the above-average returns that can come with the risk of business ownership. If they desire, they can also generate more income and accumulate more wealth through higher rates of investment and more hours of work.

Perhaps most important, employees can gain by "thinking like entrepreneurs." Just as the incomes of business entrepreneurs depend 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 high earnings, they need to develop skills, knowledge, attitudes, and work habits that are highly valued by others.

The entrepreneurial way of thinking is also crucially important when making decisions about education. Education will not enhance your earnings very much unless you acquire

knowledge and develop skills that make your services more valuable to others. These include the ability to write well, communicate with clarity, use basic math tools, and collect and interpret data and information, as well as specific skills that can set you apart from the crowd and raise your productivity. Developing skills that make you more valuable to others is vitally important both in and outside of the brick-and-mortar institutions of secondary and postsecondary education.

Today, having a university degree is no longer guaranteed to catch an employer's eye and result in a ticket to a high-paying job. In 2019, unemployment rates among university graduates were close to 25% in Armenia and many other post-communist countries. Employment and educational markets change rapidly. The best way to find a job is to think entrepreneurially and discover ways to serve others through formal education and showcasing your job readiness. Massive open online courses, certificate programs, and internships can be helpful in this area.

Development and use of your talents in ways that provide large benefits to others is a key to financial success. It is also central to what Arthur Brooks calls "earned success." Moreover, earned success is a central element of happiness and life satisfaction. 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 with regard to 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, fulfilling, and happy life.

Video:

Giving While Living

Video:

Lending to the Poor

ELEMENT 4.3

Budget Your Spending and Saving

Use budgeting to help you spend your money effectively and save regularly.

> *Money is only a tool. It will take you wherever you wish, but it will not replace you as the driver.*
>
> **— Ayn Rand, Atlas Shrugged (New York: Random House, 1957): 411.**

Most financial insecurity today is the product of unsound choices. Spending more than you earn, building up debt without concern for how to repay it, lack of budgeting, 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 successful building of wealth also 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**(?). 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.

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 that identifies all of your planned or expected income and spending for a period of time. Most people create a monthly budget, but a yearly budget is also common. It is important to carefully consider all of your spending, not just the highly visible spending like groceries, car payments, and rent or mortgage. Don’t forget about birthday gifts, annual pet license fees (€112.80 a year in the Hague, another good reason to avoid becoming a war criminal), magazine 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 that saving and investment be specific, planned, items in your budget, not just the leftover balance (if there is any).

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 include it in your new budget next time. Suppose you budget €50 for restaurant meals for the month but then realize that you actually spent €80. You will know to change your planned spending somewhere else to account for this difference. The documentation of your actual spending provides you with a feedback mechanism that will help you make adjustments to your budget and spending in the future.

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.[(101)] A free budgeting app (there are many good ones online) can be useful here.

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, a significant increase in your savings for

coverage of unexpected expenditures, or money for an upgrade of your phone or other technological device. Mid-term goals are achieved over a longer period—anywhere between one and three years. Purchasing a pre-owned car with cash, putting 20 percent down 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 provide examples of longer-term goals that many will want to pursue.

As indicated earlier, saving and investing should be a specific category in your budget. Obviously the sooner you start saving and spending strategically, 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 very big difference. Consider the following long-range plan.

Start regularly saving €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, or snacks or have in loose change at the end of the day. Then from your twenty-fourth until your twenty-sixth birthday, begin saving €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 a small amount every day really adds up.

But here's the real surprise. By the time you retire at age sixty-seven, the saving from just this early nine-year period can add more than €150,000 to your wealth if invested wisely. Even better, this amount is in today's purchasing power. This will be the case if you earn a rate of return equal to about what the stock markets have yielded over the last eight decades (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. In addition, some of the smartest investors, including Warren Buffett and Shark Tank's Mark Cuban, owner of the NBA's Dallas Mavericks, agree that it's important to avoid getting into debt—and starting early with savings will help you prevent that.

Step 3. Get tools to assist with your budgeting. Don't 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 money cost. Literally, they are available at your fingertips. 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 those goals. Make a habit of using your selected budgeting tool. Keeping track of your spending and income can be easy with the right tools.

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 most of us are required to have beyond adequate food, clean water, basic shelter, and simple clothes. 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 effectively remove a patient's appendix without coordinating her plans with the 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—the 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.

The next time you are thinking about all the things you "need," recognize that you do not really have to have many of them. Remember that spending today costs you in terms of your future wealth. We aren't suggesting that you live a life of deprivation so you can be rich in the future. That makes no sense. But there are many creative ways to reduce spending and increase saving. Budgeting and laying out a savings plan will produce immediate satisfaction, help you gain a sense of financial control and security, and build wealth for the future.

Video:

How to Save Money on Everyday Expenses

Dave Ramsey, a leading financial advisor in the United States, highlights the importance of making a personal commitment to forming sound money habits. He claims: "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."[(102)] 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?

Elements 4 through 12 will provide additional details on how to get more out of your spending, avoid imprudent debt, plan for unexpected expenditures, earn an attractive return on your investments, and minimize your vulnerability to the risks of life.

ELEMENT 4.4

Finance Wisely

Don't finance anything for longer than its useful life.

What happens when you borrow money to purchase vacations, clothing, or other goods that are quickly consumed or that depreciate in value? What happens when you take out a forty-eight-month loan in order to purchase a used automobile that will be worn out in two years? The answer to both questions is the same: You will soon be making payments on things that have little or no value to you or anyone else. These payments will lead to frustration, bitterness, and financial insecurity.

Financing an item over a time period lengthier 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. It is a path to financial disaster.

Does it ever make sense for an individual or family to purchase something on credit? The answer is "yes," but, with rare exceptions, only if what you are buying is a long-lasting asset and if the borrowed funds are repaid before the asset is worn out. This way you pay for what you bought as you use it.

Very few purchases meet these criteria. Three categories of major expenditures come to mind: housing, automobiles, and education. If maintained properly, a new dwelling unit may provide useful life for forty or fifty years into the future. Under these circumstances the use of a thirty-year mortgage (if such are available to you) to finance the expenditure is perfectly sensible. Similarly, if an automobile can reasonably be expected to be driven five or six years, there's nothing wrong with financing it over a time period of forty-eight months or less. When long-lasting assets are still generating additional income or 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 time period. Young

people investing in their 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 your 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 Part 4, Element 11.)

For most households the implications of this guideline are straightforward: Do not borrow funds to finance anything other than housing, automobiles, and education. Of course, depending on the design of health insurance in your particular country, it obviously is a good idea to borrow for critical medical care if you have not yet had time to build up a sufficient emergency fund. An appendectomy is a good use of debt. A facelift probably is not (unless you are a TV star!) 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.

Another debt-mismatch risk is borrowing in a currency other than the currency of your income. The values of currencies can change relative to each other without warning.

For example, in the early 2000s, homebuyers in countries including Poland, Hungary, Croatia, and Romania were able to secure very low mortgage interest rates by borrowing in Swiss francs. Most of their incomes, however, were in their home currencies.

In the 2008 financial crisis, the value of CEE currencies fell relative to the Swiss franc as the franc's value rose in comparison to the euro and other currencies. The Swiss tried to stabilize by pegging their currency to the euro in 2011. Then in 2015, Switzerland unpegged its currency from the euro and its currency spiked upward further.

Both times, borrowers were shocked to find they owed a lot more money in their own currencies than they had anticipated. While a business might have been able to lock in its exchange rate using a forward contract, such contracts are not likely to have been available to individuals. It is best to match the currency of your spending obligations to that of your income, in order to avoid unpleasant surprises.

ELEMENT 4.5

Two Ways to Get More out of Your Money

Avoid credit-card debt and consider purchasing used items.

Most of us would like to have more in the future without having to give up much today. Many, including those with incomes well above average, do two things that undermine this objective. First, they go into debt to buy things before they can afford them. Second, they insist on buying new items even when used ones would be just as serviceable and far more economical.

Imprudent use of **credit cards**[?] can be a huge stumbling block to financial success. Although many people are careful with cards, others act 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. If you have funds in your **checking account**[?], you can use your credit card to access those funds —if you pay off the bill every month. If you don't have sufficient funds in your account, don't make the purchase.

While credit cards and their electronic counterparts (such as PayPal, or Yandex Money) are convenient to use, they are also both seductive and a costly method of borrowing. 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.[103] If you have this problem you need to take immediate action! You need to get your hands on a pair of scissors and cut up all of your credit cards. If you do not, they will lead to financial misfortune.

Making purchases on your credit card makes it look as though you are buying more with your money, but the bill invariably comes at the end of the month. This presents another temptation: the option to send in a small payment to cover the interest and a tiny percentage of the balance and keep most of your money to spend on more things. If you choose this option and continue to run up your balance, however, you will quickly confront a major problem—the

high interest rates being charged on the unpaid balance.

It is common for people to pay interest charges of 15 to 18 percent on their credit card debt. This is 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 poverty.

Consider the example of Sean, a young professional who decides to take a few days relaxing in the South of France. The trip costs Sean €1,500, which he puts on his credit card. But instead of paying the full amount at the end of the month, Sean pays only the minimum, and he keeps doing so for the next ten years, when the bill is finally paid off. How much did Sean pay for his trip, assuming an 18 percent interest rate on his credit card? He pays €26.63 per month for 120 months, or a total of €3,195.40. So Sean pays his credit card company more than he paid for the air travel, hotel, food, and entertainment.

Sean could have taken the trip for a whole lot 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 7) for twenty months, Sean could have had €1,560.89 for the trip, and not the €3,195.40 he ended up paying (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, Sean could take two trips for less than what he ended up paying for one on credit.

In some cases, you may already have a sizeable credit card bill. It would have been better if you had avoided that debt, but it does provide an opportunity for you to get a very high return. Everything you save to pay down a credit card debt effectively earns an interest rate of 18 percent, or whatever you are paying on the debt.

Look at it this way. If you put a euro in an investment that is paying 18 percent rather than spend that euro, then one year from now you have added €1.18 to your net worth. If you save a euro to pay off your credit card debt, then one year from now it has also added €1.18 to your net worth. Your debt will be that much lower—first, from the amount you saved that

reduced your debt initially and, second, from the 18 cents you would have otherwise owed in interest.

Even if your credit card rate is less than 18 percent, it is still much higher than what you will consistently earn on any other savings program you will ever have, unless you are extraordinarily lucky or a spectacular investor. Of course you may not feel as though your savings are really earning 18 percent, since the money isn't actually being paid into your investment accounts. But it amounts to the same thing. The very first thing anyone who has a credit card debt and is serious about achieving financial success should do is *pay that debt off*, from savings if necessary.

Video:

Strategies for Paying Down Debts

What if you do not have the funds to pay off your credit card bill? Then take out a bank loan—the interest rate will be lower than your credit card rate—and, based on the budgeting principles presented in Element 3, develop a plan to pay off the loan as quickly as possible. Of course, you also need to make sure that you do not run up any other credit card debt.

In addition to avoiding credit card debt or paying it off immediately, 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. Thus, while new items can be purchased, they cannot be owned as new items for long.

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 reap substantial savings. Consider the cost of purchasing a new automobile compared with a used one. For example, if you buy a brand-new Toyota for about €30,000 (in 2019, this was the average price for Toyotas, which were the most popular car in Kiev), and trade it in after one year, you will receive about €18,000, or €12,000 less than you paid for it. If you drove the car twenty thousand kilometers, then your **depreciation**(?) cost—the cost to you of the decline in the car's value—is 60 cents per kilometer.

But instead of buying a new car, you can buy one that is a year old. You might pay about €20,000, or €10,000 less than the cost of a new car. This consists of the €18,000 the previous owner got for selling it plus €2,000 in “transaction costs” such as ads, sales, commissions, or whatever.

Given how long cars last if you take care of them, you should easily be able to get excellent service from your used Toyota for eight years, at which time you can probably sell it for about €10,000. Assuming that you drove 20,000 kilometers a year, your depreciation cost per kilometer will be €10,000/160,000 kilometers, or just over 6 cents. This is 54 cents per kilometer less than the cost of driving a new car every year. Staying with the assumption that you drive 20,000 kilometers a year, the depreciation saving from the used car is *nearly eleven thousand euros every year*. Of course your repair bills may be higher after the car is a few years old, but the savings will still be enormous from sacrificing that new car smell.

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 outdoor markets and secondhand stores. The “thrill of the hunt” is, in itself, a recreational activity—and is free! Given the value of your time, however, there are other ways to find used items. On-line apps provide alternatives that reduce time spent and transaction costs. In a few “touches,” you can find items that are both in excellent condition and priced significantly below retail. Of course, there are some cases when buying new is economical. We are merely encouraging you to consider the potential savings that can often be derived from used purchases without giving up much in terms of consumer satisfaction. Look for opportunities to get more value from your money.

Young people worldwide are exploring the possibilities of a post-consumerist culture with green, minimalist, or zero-waste living. Resources such as iFixit, RREUSE.org, makeresourcescount.eu, and many other YouTube channels promote repairing rather than trashing useful objects, and living a fun and happy life within your means. A web search for “frugal green living” will lead to many practical resources and other like-minded individuals to provide support. Cities across the globe have begun to promote the sharing economy.[104]

Video:

The Sharing Economy

You can choose among the frugal strategies in order to be able to afford other things you might want to spend money on, or you can subscribe to many of them. The important thing to realize is that you have many more choices than thoughtlessly buying new things.

ELEMENT 4.6

Plan for the Unexpected

Begin paying into a savings account for emergencies (a "rainy day" or "black day" fund) every month.

We have talked about the value of saving for your future. But you also need savings for emergencies. Life has an endless string of surprise occurrences: the car breaks down, the roof leaks, a drought withers your crops, your child breaks an arm—just to name a few.[105] We can't predict which ones will occur, or when. But we can predict that over any long period of time, each household will confront such costly items. Thus, it makes sense to plan for them. This is what your emergency savings account is for. It will help you deal with unexpected bills that could otherwise put you under severe emotional stress and into a financial bind.

The alternative is to wait until the surprise events occur and then try to devise a plan to deal with them. This often means running up credit card balances or some other method of borrowing funds on highly unfavorable terms. Then you have to figure out how you're going to cover the interest charges and eventually repay the funds. At other times it might mean turning

to your family and neighbors who have had the foresight to assemble their own emergency funds. All of this leads to anxiety that 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 and your relatives and neighbors faced in the past year and estimate how much each one cost. Think about car repairs, unexpected travel, doctor's visits, a home appliance replaced—anything that was not expected to happen last year. Add the costs up, divide that number by twelve, and begin channeling that amount monthly into your rainy day savings account.

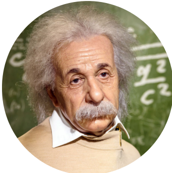
You might even want to pay somewhat more than the average needs into the account just in case you have unusually bad luck in the future. After all, if you pay too much into the account, you can build up a little cushion. If the funds in the account continue to grow, eventually you can use some of them for other purposes or allocate them into your retirement savings program. The key point is to consider the monthly allocations into your savings account 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.

A savings account set aside for emergencies allows you to purchase a little peace of mind rather than worrying about the financial bumps of life. With such an account, you will be able to deal confidently with expenditures that, while unpredictable as to timing, can nonetheless be anticipated with a fair degree of accuracy. During periods when your surprise expenditures are below average, the balance in your account will grow. When the surprise expenditures are atypically large, the funds in your account will be drawn down, but you can remain calm because you are prepared. This is an important 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

The Power of Compound Interest

Make compound interest (returns on investment) work for you.



Compound interest is the most powerful force in the universe.

— Mignon McLaughlin. N.d. BrainyQuote.com. Retrieved October 24, 2015, from BrainyQuote.com website: http://www.brainyquote.com/quotes/quotes/m/mignonmcla158995.html. There is some controversy about whether this statement was made by Albert Einstein, but he clearly made similar statements highlighting the power of compound interest.

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 hard 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. Recall the example in Element 4.3 of the additional retirement wealth a young person could have by saving a modest amount from age twenty-two to thirty. Giving up just a little more than €9,000 in purchasing power for those nine years can easily add over €150,000 to retirement wealth at age sixty-seven. 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[(?)] is not really a miracle, but sometimes it seems that way. It's also not necessarily just interest—if you keep money invested in the stock market and reinvest all

the gains you get, that's also a compound return, which we sometimes call compound interest for the sake of simplicity.[106] Despite the fact that it is easy to explain how compound interest works, the results are truly amazing. Compound interest is simply earning interest on interest. If you don't 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, etc. This may not seem like much, and for the first few years it doesn't 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's like a small snowball rolling down a snow-covered mountain. At first it increases in size slowly. But each little bit of extra snow adds to the size, which allows even more snow to be accumulated, and soon it is huge, growing rapidly, and coming right at you.

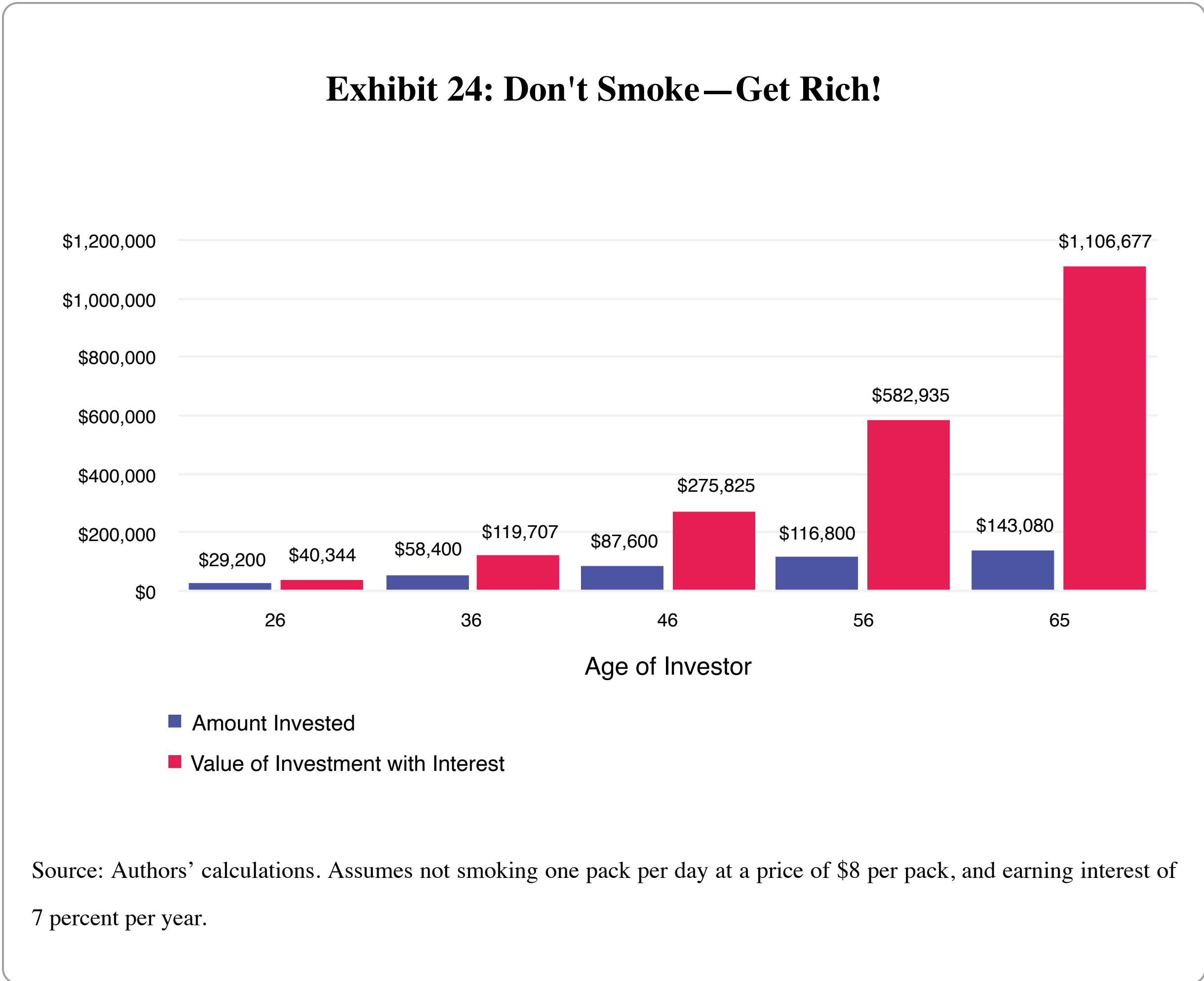
The importance of starting your savings program early is explained by how compound interest sets the stage for its accelerating effect later. The savings you make right before retirement won't add much more to your retirement wealth than the amount you save—a little but not much. The snowball that starts near the bottom of the mountain won't be much bigger when it stops rolling. So 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 sixteen-year-old is deciding whether or not to start smoking. This is an important choice for several reasons, health considerations being the most important. In addition to the health factor, however, there is a financial reason for not smoking. The average price of cigarettes in Europe varied from about $3 to $13 a pack in 2017,[107] so let's assume for simplicity that it is $8 per pack. So if our teenager—let's call him Honza—decides against smoking, he will save $2,920 a year (assuming he would have smoked a pack a day). Suppose that instead of spending this amount on something else, Honza invests it in a retirement account or fund that earns 7 percent per year and is protected from income taxes. As Exhibit 24 illustrates, if Honza keeps this up for ten years, when he is twenty-six he will have accumulated $40,344 from savings of $29,200. Not bad for a rather small sacrifice—one that is, in fact, good for Honza.

But this is just liftoff; the payoff from compound returns is merely getting started. If Honza keeps this savings plan going until he is thirty-six, he will have $119,707 from savings

of $58,400. Continuing until he is forty-six will find him with $275,825 from savings of $87,600. And now the afterburners really start kicking in. By the time Honza is fifty-six he will have $582,935 from saving contributions of $116,800. As Exhibit 24 shows, when he retires at age sixty-five he will have $1,106,677 from direct contributions of only $143,080. Thus, by choosing not to smoke and investing the funds, Honza accumulates about $1.1 million in retirement benefits—and this figure is in dollars with today's purchasing power.[108]

Exhibit 24: Don't Smoke—Get Rich!



Source: Authors' calculations. Assumes not smoking one pack per day at a price of $8 per pack, and earning interest of 7 percent per year.

Alternatively, consider what would happen if Honza smoked from age sixteen to twenty-six, then stopped smoking and started saving the price of a pack of cigarettes every day. It is good that he stopped smoking, and he will still benefit from the savings. But by postponing his savings program by ten years, instead of having $1,106,667 at age sixty-five, Honza will have only $542,070. Delaying a forty-nine-year saving program by ten years costs

Honza $564,597 at retirement!

You don't have to completely give up something in order to achieve substantial savings. Making small sacrifices in consumption can yield equally powerful results. Instead of buying the premium cup of coffee every morning, purchase the generic one or make the cup at home. Instead of eating lunch at a restaurant every day, bring your lunch one or two days a week. Skip the high-priced mineral water offered at a restaurant and drink free tap water instead (at least in countries where this is safe to do). Walk or cycle to work instead of taking the tram (which will even reduce your medical care bills). If you have a weekend cottage, can you get there on the bus or train? Honza gave up smoking to save $56.00 per week and invested it instead. You, too, can make changes in your 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's the advantage in becoming rich in the future by living in poverty until the future arrives? Instead, we are stressing that ordinary people 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 $1,106,677 Honza accumulated by not smoking, only $143,080 came from reducing his consumption. Indeed, people who save and invest will be able to consume far more than those who do not. At retirement—or sooner—Honza can start spending his wealth and end up having much more than if he had never saved.

All it takes is an early savings program in a tax-advantaged retirement account, a little patience, knowing how to get a reasonable return on your savings (see the next two elements), and taking advantage of the power of compound interest.

Note: Sharia or Islamic banking

Sharia or Islamic law forbids the payment of interest on debt. In order to compensate lenders for the use of their money, Sharia banking has developed different types of financial arrangements that are in keeping with the law, such as profit sharing. Investments in products

such as alcohol and pork, which Muslims are forbidden to consume, are also forbidden for investment. In addition, based on the concept of fairness, all parties involved in a business transaction should share profits and losses—which implies that in order to gain a return on investment, you have to be exposed to business risks. So, if you want to buy a car, for example, an Islamic bank would buy the car, and agree to resell it to you for a fixed number of payments totaling a slightly higher amount. You still have car payments, and the bank still makes money on the transaction, and the transaction remains compliant with Islamic banking laws. Deposits you make into a Sharia bank, instead of earning interest, will earn a set share of the bank's profits during the time the money is deposited.

Banks that are involved in Islamic banking must be separate legal entities, but some big international banks have Islamic subsidiaries.

ELEMENT 4.8

Diversify Your Assets

Don't put all your eggs in one basket.

After savings accounts at banks, the two most common financial assets are stocks and bonds. Let's make sure you understand the nature of these two instruments. **Stocks**(?) represent ownership of corporate businesses. Stock owners are entitled to the fraction of the firm's future revenues represented by their ownership **shares**(?). If the business generates attractive future revenues, 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 of the funds used to purchase the stock. (Note: "Equity" is another term for stock.)

Video:

How the Stock Market Works

Bonds(?) 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**(?) (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 short period of time. Even if the **nominal return**(?) is guaranteed, as in 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

ownership of a small number of corporate stocks (or even worse, a single stock), you are especially vulnerable.

You can reduce your risk through **diversification**[?]—holding a large number of unrelated assets. Diversification puts the law of large numbers to work for you. While some of the investments in a diversified **portfolio**[?] 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 rate of return (real means adjusted for inflation) of approximately 7 percent per year, compared to a real rate of return between 2 and 3 percent for bonds.[109]

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. That risk, known as volatility, is a big reason why stocks yield a significantly higher rate of return than saving accounts, **money market certificates**[?], and short-term **government bonds**[?], all of which guarantee you a given amount in the future. Since most people value the additional certainty in the yields that bonds and savings accounts provide over stocks, the average return on stocks has to be higher to attract investors away from their less risky counterparts with more predictable returns.

Mutual funds[?] and exchange-traded funds (ETFs) can help investors diversify and reduce risk. Mutual funds and ETFs 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**[?]. Thus, there are a variety of mutual fund categories.

An **equity mutual fund**[?] 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 lowered if you continually add to or hold a diverse portfolio of stocks over a lengthy period of time, say thirty or thirty-five years. Historically, when a diverse set of stocks has been held over a lengthy time frame, the rate of return has been high and the variation in that return has been relatively small.

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 the 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, the 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 relative 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 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.[110]

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 even 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 of time reduces the risk of stock ownership to a low level. All investments have some uncertainty. But if the past century and a half are any guide, we can confidently expect that over the long haul, a diverse portfolio of corporate stocks will yield a higher real return than will savings accounts, bonds, **certificates of deposit**(?), money market funds, and similar financial instruments. Ownership of stock through mutual funds is particularly attractive for young people saving for their retirement years.

Even with bank deposits, which are far lower in risk than stocks or even bonds, you should be aware of the risk of bank failure. If a bank becomes insolvent and can no longer return your money to you, most countries offer national deposit insurance that will pay you money up to a limit, which they publish. If you have more money than the limit, it is a good idea to divide your money between two or more banks in order to keep the amount in each bank below the insured limit. If a bank, like any investment, is offering you higher than normal returns, always ask yourself “why?” It could be that smart investors are avoiding that bank because they know trouble is likely. This leaves the failing bank desperate to attract money. Don’t let that money be yours in pursuit of a slightly higher interest rate! We know one very good economist in a post-communist country who managed to lose money in three straight banks where “they were paying the best (highest) rate.” Fortunately, he is a theorist, not a finance professor.

It’s also important to be aware of the possibility of fraud, especially in the cases when you are being sold an investment that purports to have a higher rate of return than the rest of the market (you could call this, “too good to be true”).

One illustration of this is the Albanian Ponzi (or Pyramid) Schemes of 1996: when Albania moved to a market economy from a command economy, individuals were not very familiar with investments. Certain criminals collected cash investments by promising to return 5% per *month* or more, or 60% per year; the 60%, instead of coming from business profits, came from collecting more investments and paying the cash to the original investors.

Therefore, each month, the criminal operators had to collect more and more money to pay out on the scheme, creating the "pyramid" of the name. Eventually these schemes were discovered to be fraudulent, and people lost their money in the collapse of the scheme.[111]

Video:

The Pyramid Scheme that Collapsed a Nation

Similar schemes have emerged in many countries. Examples include MMM in Russia in the 1990s. Another famous fraud that has spread over much of the world is sometimes called the "Nigerian prince" scam, but it can be done by someone posing as any rich person or person who has access to wealth. In the scam, which spread by letter and then by fax machine in the 1980s, and now spreads by social media or email, you receive a letter from a person whose money is trapped in a war-torn country or a country that is undergoing regime change. The person says he will be happy to pay you a large sum to help him get his money safely out of his country—and he asks for your bank account number so you can receive the funds. If you give him your account number, guess what happens? He uses it to transfer all your money to himself, and there is very little you can do to get it back! There are many variations on this scheme; sometimes the scammer asks for money to pay some kind of fees, and there will be more and more fees and you will never get paid back.

ELEMENT 4.9

Realize No One Can Consistently "Beat the Market"

Indexed equity mutual funds can help you beat the experts without taking excessive risk.

Despite the advantages of stocks discussed above, many people refrain from investments in stocks because they feel they do not have either the time or expertise to identify businesses that are likely to be successful in the future. This may be especially true in countries where capital markets are just emerging and both investors and regulators have little experience. Even in long-established markets it is difficult to forecast the future direction of either individual stocks or a broad measure of their 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**[?]. 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. Future changes of stock prices therefore will be driven by surprise occurrences, things 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 will do well, as Apple, Google, and Microsoft have, 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 unforeseen 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, because 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 launch pad or crash after takeoff.

You may be able to improve your chances a little by studying the stock market, the details of particular corporations, and economic trends and forecasts. For most of us, however, the best option will be to channel our long-term (that is, our retirement) savings into an equity mutual fund.

Video:

What is a Mutual Fund?

There are two broad categories of equity mutual funds: managed funds and indexed funds. A **managed equity mutual fund**(?) 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 in an effort to identify those stocks that are most likely to do well in the future. The manager seeks to pick and choose the stock holdings 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, merely holds stocks in the same proportion as their representation in broad indexes of the stock market such as the **S&P 500** (**Standard & Poor's (S&P) 500 Index**(?) of the 500 largest U.S.-listed companies), the STOXX Europe 600, or the FTSEurofirst 300. Very little trading is necessary to maintain a portfolio of stocks that mirrors a broad index. Neither is it necessary 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 1 or 2 percentage points lower, than those of managed funds. As a result, index funds charge lower fees and therefore a

larger share of your investment flows directly into your purchase of stock.

An equity mutual fund indexed to a broad stock market indicator such as the S&P 500 for the United States 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 those 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. [112] 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 when held for long periods. That means that the **real value**[?], the value adjusted for inflation, of your stock holdings doubles approximately every ten years. That's 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 individual stock prices with any degree of accuracy.

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.[113] Over twenty-year periods, mutual funds indexed to the S&P 500 have generally outperformed about 98 percent of the actively managed funds.[114] Thus the odds are very low, about one in fifty, 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 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 United States 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 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.[115]

The "hot" funds during the stock market bubble of the late 1990s were an even more misleading investment indicator. Over the two-year period 1998–1999 the top-performing managed fund was Van Wagoner Emerging Growth, with a 105.52 percent average annual return. But over the two-year period 2000–2001, this fund experienced an average annual return of *minus* 43.54 percent, one of the lowest during this period.[116]

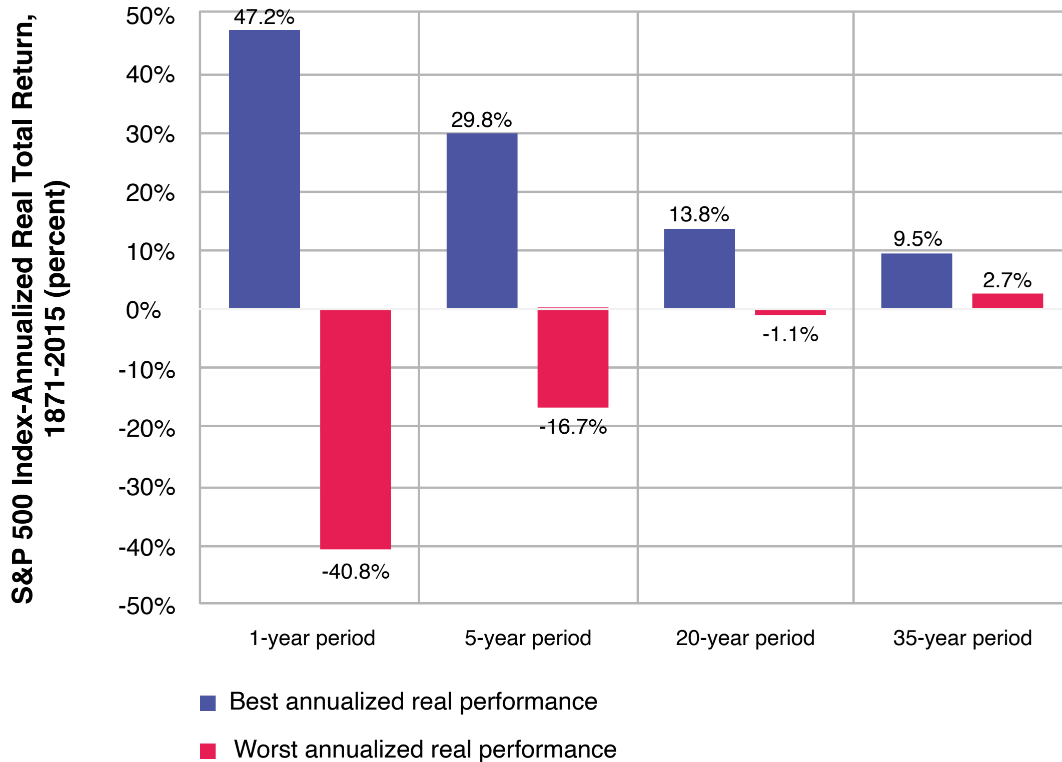
These examples actually understate the advantage of a mutual fund indexed to the S&P 500 compared to a managed equity fund because of the survivorship bias. The S&P 500 index is highly unlikely to go out of business, but over the time period relevant to saving for retirement, a managed fund is quite 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 43 years, 274 funds—over 75 percent of the total—ceased to exist. Out of the remaining 84, only 4 had outperformed the S&P 500 index by 2 percentage points or more on an annual basis.[117]

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 that have data going back that far showed that stock market returns outperformed bond returns over the period for every country.[118] 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 fairly 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 the following element). 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.[119]

As Exhibit 25 illustrates, when held over a lengthy time 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 (the return adjusted for inflation) derived from broad stock market investments for periods of varying length between the years 1871 and 2014 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.[120] Clearly, huge swings are possible when stocks are held for only a short time period. During the 1871–2014 period, the single-year returns of the S&P 500 ranged from 47.2 percent to minus 40.8 percent. Even over a five-year period, the compound annual returns ranged from 29.8 percent to minus 16.7 percent.

Exhibit 25: Stocks Are Less Risky When Held for a Lengthy Period of Time



Source: Liqun Liu, Andrew J. Rettenmaier, and Zijun Wang, "Social Security and Market Risk," National Center for Policy Analysis Working Paper Number 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 2015.

However, note how the "best returns" and "worst returns" converge as the length of the investment period increases. When a thirty-five-year period is considered, the compound annual return for the best thirty-five years between 1871 and 2014 was 9.5 percent, compared to 2.7 percent for the worst thirty-five 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 attractive method of saving for retirement.

The same pattern of variance in gains falling as time passes can be seen in the markets of almost every free country. (This may not apply when a country's economic policies are controlled by a non-democratic government whose values do not place a great deal of weight on citizens' well-being).

Here is the most important takeaway from this element: Do not allow a lack of time and expertise to keep you out of equity investments. You do not have to do a lot of research or be a "super stock picker" in order 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, 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 its fund, so be sure to read the description to determine the one that best fits your needs.

ELEMENT 4.10

Match the Length of Your Investments to the Timing of Your Needs

Invest in stocks for long-run objectives, but as the need for money approaches, increase the proportion of bonds or even cash.

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, the value of the latter is more stable over short time periods. As the time approaches when the funds from an investment plan may be needed, it will make sense to shift funds toward investments of more stable value. 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 a down payment on a home or income during retirement. If you aren't sure about the timing, you can spread your investment across bonds with different maturities.

The risks of owning bonds include credit risk (that is, the risk that you won't get your principal back), unanticipated inflation, and changes in interest rates because the government is attempting to pursue fiscal policy. If you invest in government bonds and highest-quality corporate bond funds, the greatest risk of owning bonds is inflation, which lessens the value of both the principal and the fixed-interest payments. However, that risk can be reduced or eliminated with the use of Inflation-Protected Bonds, such as **Treasury Inflation Protected Securities (TIPS)**[?] in the United States, or Obligations Assimilables du Trésor (OATs) in France, which are fixed-rate Government bonds indexed on inflation, which means they pay a fixed interest rate *plus* compensation for the loss of purchasing power due to inflation. 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. These types of bonds are particularly attractive for retirees seeking to generate a

specific stream of real purchasing power from their assets.[(121)]

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 €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 is more volatility (or risk) than you want to take if you are saving for something you expect to buy in five years. If you hold the bond for the full thirty years, however, you will get back your entire €1,000 and the price changes that happened while you held the bond no longer matter. So this is a good reason to match the maturity of the bond to when you need the money.

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 in order to place 20 percent down to buy a house or flat may be better off avoiding the stock market entirely—for that portion of their savings *only*—and investing it in bonds. That is because purchasing a house or condominium often involves saving for just a few years. In contrast, a couple might save for eighteen years to finance a university education for a newborn or thirty-five to forty-five 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 the 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. As the plunge in stock prices during the Great Recession of 2008–2009 illustrates, however, even with an eighteen-year horizon, stock holdings 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. Investing a certain amount each month has an important role in improving your returns: If the market drops, you will be buying the new stocks more cheaply, which smooths out the impact of the downturn.

As people earn more and live longer, saving for retirement expenses becomes ever more important. We don't 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 probably makes the best investment portfolio. For the more conservative saver, having 10, 20, or even 40 percent of one's portfolio in bonds or cash 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 most wealthy among us to begin to switch 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 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.

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% of the person's salary, and investment return is not taxed, so the total accumulates faster.(122) 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.(123) While some CEE countries do not have private pension investments available yet, there is a global trend to increase voluntary pension contributions through tax incentives. If you can't access tax-advantaged private retirement accounts, continue to save; that way, when the accounts become available, you will be able to save the maximum allowed amount each year.

So far we have talked about risks from the financial market, but there is another,

perhaps much more important risk in saving for retirement. No one knows for sure how much longer they will live. All we know is the average life expectancy (perhaps adjusted for past behavior such as smoking or drinking). In Poland or the Czech Republic, a 60 year old can expect to live for another 21 years, but some will die next year and some will live to be 100. How do you plan for such uncertainty? One possibility would be to save as much as you might need if you lived a very long life. Then, if you died sooner, arrange to leave your savings to your family or a worthy charity (perhaps supporting economic education!). Most risk-averse people, however, choose another option. While it is impossible to know how long any given individual will live, demographers can predict very accurately the average remaining life among any group. Just like other types of insurance discussed in Element 4.12, you can insure yourself against living "too long." Since actuaries can precisely predict how long the average member of a group will live, why not just pool everyone's savings and let those who die soon subsidize those who live longer? Such an agreement is called an "annuity."

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 any favorable tax treatment provided for retirement plans.

There are many things to watch out for in deciding how and where to invest. You should keep these warnings in mind.

Video:

Availability Bias

Video:

Loss Aversion

Video:

Home Country Bias

Video:

Herding

ELEMENT 4.11

Reduce Your Risks

Take steps that will reduce risk when making housing, education, and other investment decisions.

The purchase of housing is one of the most important decisions most of us will confront during our 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, as is illustrated by the **housing crisis of 2008–2009**[?] in the United States, 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 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. During the first few years of a mortgage, however, almost all of the monthly payment is for interest and very little is actually building equity. So if you sell the home within three years, for example, you will have accumulated little or no equity. You've simply paid 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**[?] plus **VAT**[?] levied on commissions, which vary across countries (in Austria, 3 percent: Croatia, 3 percent; Italy, up to 7 percent).[124] 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 (or flat) until you have saved for a down payment. In the United States, this should be at least 20 percent. If your down payment is less than 20 percent,

you will have to pay mortgage insurance, also called lenders mortgage insurance or mortgage indemnity 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.[125] Also, do not use a mortgage with a low initial "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. And, as mentioned previously in Element 4.4, don't borrow in a currency that is different from your income, because if your income currency drops in value, you could owe a lot more money than you expected.

Fourth, just because you can afford a mortgage payment doesn't mean you can afford the dwelling you are considering. The mortgage is only the first and most obvious payment made each month. Housing, however, requires other regular payments and obligations that you need to consider. If they are not included in the mortgage, property and/or land taxes must be paid. Homeowner's insurance is required. The roof may leak one day, the hot water heater, the air conditioning unit or plumbing system may need repair, or any number of other items may result in maintenance costs. 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 home, do not give in to the temptation to 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 United States, 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 home. 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 bankruptcy or foreclosure. Thus, safety dictates that it is important to maintain a sizeable 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 investments in education.

For many people, postsecondary education—that is, education beyond secondary school—provides an attractive investment opportunity because it can lead to a higher salary. It is not, however, for everyone. Going to university or college 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 a profitable 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 the education are less than the costs involved in obtaining the education. Even if tuition is subsidized (or fully paid) by the government, living expenses often exceed any grants to students and no one will reimburse the income lost from working less while in school.

According to the Statistical Office Of The European Communities (Eurostat), the median annual earnings in 2016 for workers holding tertiary education were over €10,000 higher than for those who had only a lower secondary education (in Croatia the difference is €4,000; in Romania, €3,000; in Poland, €4,000).[126] But there is substantial variation in the earnings of university graduates. The actual earnings after graduation depend on many factors, including the skills acquired, university major, and the overall demand and supply conditions of a particular labor market. According to PayScale.com, which has compiled the world's largest database of salary profiles, the university majors with the highest earnings potential include engineering, actuarial, and applied mathematics, computer science, physics, statistics, economics, and management information systems. Majors with low earnings potential include child and family studies, education, social work, exercise science, athletic training, music, and culinary arts.[127] When choosing a field of study, it is important to look beyond earnings you see around you. You will have 40 or more years to work. What occupations will be in demand 20 years from now? You also need to think about whether you might decide to move somewhere else. Will the credentials you earned in your home country be recognized where you end up? An economist trained in Russia can get a job at a Canadian university (if she is good enough), but a physician may have to undergo many additional years of training before she can practice.

It is risky to borrow a large sum of money to finance an education expected to result in

low future earnings. As we indicated in Part 4, Elements 1 and 2, it is important to choose a work activity that you enjoy. Your choice, however, needs to be well informed. Search for and discover the expected earnings in the occupations for which you are training. We want you to make informed choices that will lead to the largest possible return on your educational investment—including the personal satisfaction you derive from the employment.

Let's consider why students sometimes choose educational options that result in negative returns. First, many students have unrealistic expectations about future income. With inflated expectations, they may be willing to pay more for their education than what their future income 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, which provide information on main occupations, including their requirements, job outlook and growth prospects, and median pay. 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? Might you find your credentials more easily accepted in Russia?

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 money provided in a student loan 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 €138 per month for fifteen years to repay €20,000 in loans. You will pay €276 per month to repay €40,000. Will your future earnings be sufficient to make the monthly payment on your loans taken to finance education, within the context of your overall budget? Think seriously about this issue prior to taking out a loan.

We are not saying that you should never borrow to finance education. There are times

when this option makes sense. We are aware that education is financed in many different ways in different countries and that, in the past at least, tuition forms a higher fraction of costs in the United States than in many other countries. This is rapidly changing in transition countries, however, with the rise of private universities and the shift in many countries away from direct government funding to tuition-based finance of universities. College education is often a good investment, but like all investments it should be examined carefully.

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. The United States' Cultural Centers, the offices of the British Council, or the Institut Français are good places to start investigating opportunities abroad. 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.

While housing and education 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 motives 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 than 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.

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 (or the equivalent in your local currency). 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 a reputation to protect. Established companies with a solid reputation will be reluctant to direct their clients into unsound investments. For example, an initial public stock offering by an upstart brokerage firm with which only a few are familiar is far more likely to result in loss than the offering of an established firm with a substantial reputation on the line.
3. Never purchase an investment solicited by telephone or e-mail. Such marketing is a technique used by those looking to prey on those 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, 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, grab your checkbook 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**[?] 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

For as long as money has existed, people have schemed to take it away from each other by fraud. New products and fast-moving markets are tempting to investment fraudsters—for example, there are many bitcoin frauds. In some cases they offer a free bitcoin giveaway for a small registration fee. Other scams set up fake bitcoin exchanges, and offer very competitive prices which lull investors into thinking they are getting a good deal.[128] It is important to educate yourself about how to spot fraudsters; Rule 3 above is a good starting point.

We have discussed fraud extensively, but even transactions that are legitimate in a legal sense may be very bad investments. History is full of "bubbles" when irrational thinking that the price of something that has gone up a lot is bound to continue to do so has had disastrous results. In the early 1600s, speculators in Holland drove the price of a single tulip bulb to over six times average annual incomes. A perhaps apocryphal story tells of the despair of a man who came home and found that his cook, not familiar with the tulip, thought it was a new kind of onion and put it in that evening's soup. Few bubbles could match the technology stock bubble of the 1990s. The introduction of the Internet triggered a massive wave of speculation in "New Economy" businesses, and as a result, hundreds of dot-com companies achieved multi-billion dollar valuations as soon as they went public. The United States NASDAQ Composite, the exchange where most of these dot-com companies were traded, soared from a

level of under 500 at the beginning of 1990 to a peak of over 5,000 in March 2000. The index crashed shortly thereafter, plunging nearly 80% by October 2002 and triggering a United States recession. Investments need to be based on an asset's real useful value, not an unjustified assumption about the future.

ELEMENT 4.12

Use Insurance to Protect Yourself

Life involves risks. The risks of life range from the small and financially insignificant, like receiving poor service at a restaurant, to the large and financially devastating, such as a severe illness or having your home destroyed by a tornado. 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 seatbelt 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. Decreasing sugar consumption and eating low-cholesterol foods reduce the chance of illness and disease. While your choices can reduce risk, it can never be totally eliminated.

How can you manage risk and protect yourself from the most adverse consequences? Insurance can reduce the financial loss resulting from damages 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 risks in order to offset the losses of members actually damaged by an adverse event. The principle of sharing risk is often forgotten because individuals pay premiums to an insurance company and have no interaction with the group members. 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 covered loss occurs.

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 €100. The five of you agree to instruct the waitress to randomly give 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 €100 bill; or (2) pay a premium of €20 to an insurer, who will pay the €100 bill if you are selected. Many people will prefer option 2 because it is less risky. While you have to pay the €20 premium, you protect yourself against the 20 percent possibility of having to pay the entire €100 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 have to be somewhat 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 they might end up with the €100 bill, it would have to charge each a little more than €20, perhaps €22, in order 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 of people. In the lunch situation, the €100 bill is coming 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 it will also reduce the chance of any individual member receiving the bill.

When it comes to large sums, most of us are risk-averse. That means we are willing to pay a premium in order to reduce the adverse consequences of various events. Buying insurance is one way of reducing exposure to risks. An easy way to see why this is so is to ask yourself if you would accept a bet that paid you €1,000 if a fair coin[129] came up heads but would make you pay €1,000 if tails came up. Most of us would not take such a bet even though it is “fair” in currency terms. Why not? You must value the things you would have to give up (not purchase) if you lost the bet more than you value those you would buy if you won. This is clear because without the bet you chose the first group over the second one.

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 severe illness that prevents you from working for an extended period of time, 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 is generally not cost-effective. Providing the risk-sharing service will be expensive relative to the potential harm. Thus, it will generally be more economical to accept these risks and use a rainy day account (see Part 4, Element 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 generally low relative to the potential damages of an adverse event. We now turn to those topics.

Many countries require car owners to maintain some level of automobile insurance. Make sure to check with your insurance company so that you meet the minimum requirements. Customers will pay a premium based on a number of factors. Those 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. Generally, 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 with a few basic coverages, or types of loss. Collision pays for damages to your car in the event of an accident. Comprehensive pays for non-collision damages such as theft, vandalism, and acts of nature like a tree branch falling on your windshield. Liability coverage, sometimes known as Motor Third-Party Liability (MTPL), comes in two forms. First, it pays others for damages to their person or vehicle caused by the operation of your automobile. Second, it pays damages 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 consider carefully the size of your coverage limits and deductible levels. Do you have enough in your emergency account or

other funds to pay the deductible?

As discussed in Part 4, Element 11, housing is the largest investment most people will make. It makes sense to insure against the loss of your biggest asset. Sometimes it is required to have some level of insurance, mandated by country regulations or the financial institution holding a mortgage that financed your purchase. Make sure to consult with your insurance company so that you are meeting the required minimum standards. Similar to auto policies, housing insurance will have deductibles and coverage limits. 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 to bear yourself.

Healthcare insurance varies a lot by country, and can be a complicated issue because of the financing and payment methods for customers and the variety of plans available. Some people are insured by their country's government, and they may or may not be able to choose additional private coverage. Some people obtain their insurance through their employer while others buy directly from an insurance company. Some people pay all of their premiums while others have third parties pay (for example, the government or employer). Plans vary, depending on who pays and what is covered. In the United States, the **Patient Protection and Affordable Care Act**[?], enacted by Congress in 2010, added further complexity by mandating broader coverage and implementing a system of taxes, penalties, and subsidies. In other countries, there is complete government control of the healthcare system. The complexities surrounding healthcare insurance and international comparisons 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 office visit or prescription. Fourth, coinsurance is the percent 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. In some countries, supplementary private insurance is available to cover the copay or the coinsurance.

There are circumstances where having insurance protection actually increases risk. This is known as moral hazard. Consider the following scenarios. Rachel trades in her twelve-year-

old car and buys the most recent model, which has all the latest technological advances and safety devices. Since Rachel feels safer in the new car, she might actually drive a little less carefully knowing that her chance of becoming injured in a collision is less because of the safety devices. Jacob's mother insists he wears a helmet, knee and elbow pads, and long pants when he rides his skateboard. Emboldened with a sense of security and protection, Jacob might attempt more dangerous jumps and maneuvers on his skateboard, knowing that an injury is less likely. Ivanka 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 each of these scenarios, the risk increases because of the change in behavior from feeling safer.

Other types of insurance to consider, but not covered here, include life, disability, and long-term care. The need for these (or any type of insurance) is highly dependent on the social protection policies of individual countries. It is impossible in a general interest book to offer appropriate advice for each individual's situation. What we can say is that it is a wise policy to examine your own situation carefully and not merely to assume that "everything will be fine." 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 generally best to either absorb their cost in your monthly budget or cover them with funds from your emergency savings. The most important objective of an insurance strategy is to prevent devastating financial losses.

While insurance is generally associated with middle or high-income countries and families, it is usually the poor who have the most to gain when they can find appropriate insurance products. Many such products are currently being developed.

Video:

Crop Insurance, an Idea Worth Seeding

Part 4 Final Thoughts

Smart financial management may seem complex, but the rules 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 or work, family and fun. Set aside a regular time to review your situation, with your partner if you have one. 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.

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Through the years, the authors have had approximately fifty thousand students in our classes. Numerous discussions with students, both in and outside of class, have provided us with meaningful insights and presented us with challenging questions. We cherish these interactions. With luck our paths will cross with many of you who have read this book. Until we do meet in person, we encourage you to continue to "think like an economist" in your lives and pass along the insights you have gained to those around you. Our futures depend on it.

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. ↩

2. The most powerful waterfall in Europe, which lies in Iceland. ↩

3. Philip K. Howard, *The Death of Common Sense* (New York: Random House, 1994): 3–5. ↩

4. *Country Gender Assessment for Ukraine 2016,* The World Bank, 48: http://documents.worldbank.org/curated/en/128891470822320083/pdf/107673-PUB-P156988-ADD-ISBN-PUBLIC-SoltisBookENweb.pdf. ↩

5. See Charlotte Web, "Swedes now spend more on fun than on food: study," *The Local Sweden,* September 30, 2009: https://www.thelocal.se/20090930/22392. ↩

6. 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. ↩

7. See *Parable of the broken window*, Wikipedia (last edited June 2019): https://en.wikipedia.org/wiki/Parable_of_the_broken_window. ↩

8. Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations,* Volume II Glasgow Edition (Indianapolis: Liberty Fund, Inc., [1776] 1981): 454. Also available at: http://www.econlib.org/library/Smith/smWN.html. ↩

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. See "SCIENCE WATCH: Seat Belts and Pedestrians." *The New York Times* (June 18, 1985). Section C, 9: https://www.nytimes.com/1985/06/18/science/science-watch-seat-belts-and-pedestrians.html. ↩

12. Luxembourg: Publications Office of the European Union, 2012. "The Common Agricultural Policy—A Story to be Continued" http://doi.org/10.2762/35894. ↩

13. See Patrick Jomini, Pierre Boulanger, Xiao-guang Zhang, Catherine Costa, and Michelle Osborne, "The common agricultural policy and the French, EU and global economies," Groupe d'Économie Mondiale (GEM), (October 2009. Revised

February 2, 2010): https://ecipe.org/wp-content/uploads/2014/12/Jomini_boulanger-The_Common_Agricultural_policy_and_the_French.pdf. ↩

14. See Pierre Boulanger and Patrick Jomini, "Of the benefits to the EU of removing the Common Agricultural Policy" Groupe d'Économie Mondiale (GEM), (November 19, 2009. Revised February 2, 2010): https://ecipe.org/wp-content/uploads/2014/12/BoulangerJomini_removingCAP112009.pdf. ↩

15. This chart comes from a much larger project started by Hans Rosling and currently maintained by his son and daughter-in-law. You can see many more such charts and create your own at https://www.gapminder.org. ↩

16. Robert E. Lucas Jr., "On the Mechanics of Economic Development," *Journal of Monetary Economics* 22, No. 1 (1988): 3–42. ↩

17. The most widely used measure of total output and income is gross domestic product (GDP). Changes in GDP are also widely used to measure the growth of an economy. ↩

18. While a diverse set of factors influences growth and development, the modern view recognizes the central role of institutions and policies. Leading contributors to the modern view include Nobel Laureate Douglass North, English economist Peter Bauer, Daron Acemoglu of the Massachusetts Institute of Technology, and James Robinson of Harvard. See Peter T. Bauer, *Dissent on Development: Studies and Debates in Development Economics* (Cambridge: Harvard University Press, 1972); D.C. North, *Institutions, Institutional Change, and Economic Performance* (Cambridge: Cambridge University Press, 1990); and Daron Acemoglu and James A. Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* (New York: Crown, 2012). ↩

19. See, for example, Randall K. Filer and Jan Hanousek, "Output Changes and Inflationary Bias in Transition," *Economic Systems*, Vol. 24, Issue 3. Available at: https://ideas.repec.org/p/wpa/wuwpma/0012010.html. ↩

20. Tom Bethell, *The Noblest Triumph* (New York: St. Martin's Press, 1998): 10. ↩

21. 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 anti-poverty program the world has ever seen." ↩

22. For a discussion of buffaloes, see: Lueck, Dean "The Extermination and Conservation of the American Bison" in *The Journal of Legal Studies* Vol. 31, No. S2, The Evolution of Property Rights: A Conference Sponsored by the Searle Fund and Northwestern University School of Law (June 2002), pp. S609–S652. There have been other cases where humans have hunted an animal species to extinction. Passenger pigeons are an example. They were hunted for meat while whales were hunted mainly for oil. But pigeons were such a small part of the market for meat that even as they began to disappear, the price of meat did not increase enough to call forth either preservation efforts or a large-scale increase in the production of meats. There was no crisis. So their disappearance became complete. If whales had been intensively hunted only for their meat, and not mainly for oil, they also might have disappeared. But whale oil was so important in the market for light that when its price rose sharply, a substitute was found that reduced the demand for whale oil and its price, saving the whales. ↩

23. 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, D.C.: United States Government Printing Office, 1940). ↩

24. Adam Smith. *An Inquiry into the Nature and Causes of the Wealth of Nations*, Volume I Glasgow Edition (Indianapolis: Liberty Fund, Inc., [1776] 1981): 18. Also available at: www.econlib.org/library/Smith/smWN.html. ↩

25. World Bank, *Doing Business Project* (doingbusiness.org). "*Time required to start a business (days)*." https://data.worldbank.org/indicator/ic.reg.durs. ↩

26. For a comprehensive analysis of the impact of minimum wage legislation on the poor, see Thomas MaCurdy, "How Effective Is the Minimum Wage at Supporting the Poor?" *Journal of Political Economy* 123 (2015): www.jstor.org/stable/full/10.1086/679626. ↩

27. For evidence on this point, see Edward Bierhanzl and James Gwartney, "Regulation, Unions, and Labor Markets," *Regulation* (Summer 1998): 40–53. ↩

28. Muravyev, A., Oshchepkov, A. (2016) "The effect of doubling the minimum wage on employment: evidence from Russia." *IZA J Labor Develop* 5, 6. ↩

29. Maria Koumenta and Mario Pagliero, 2018. "Occupational Licensing in the European Union: Coverage and Wage Effects," CEPR Discussion Paper 12577*, CEPR Discussion Papers Series*. ↩

30. 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. ↩

31. 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?" ↩

32. These figures are from the Center for Responsive Politics, "Lobbying: Top Spenders," (2008) available at: http://www.opensecrets.org/lobby/top.php?indexType=s. (For additional details, see Peter J. Wallison and Charles W. Calomiris, "The Destruction of Fannie Mae and Freddie Mac," *American Enterprise Institute* [2008] available at https://www.aei.org/research-products/report/the-last-trillion-dollar-commitment/). ↩

33. See Peter Nyberg (2011) *Report of the Commission of Investigation into the Banking Sector in Ireland* (Dublin) https://merrionstreet.ie/en/News-Room/Releases/commission-of-investigation-into-the-banking-sector.38671.shortcut.html, and Ron Wright *Strengthening the Capacity of the Department of Finance* (Dublin)

https://web.archive.org/web/20110310164641/http://www.finance.gov.ie/documents/publications/reports/2011/deptreview.pdf. ↩

34. Note that credit cards (and debit cards) are *not* money. A credit card is simply a means of getting an automatic loan that will not carry interest if paid back soon, while a debit card is merely an easy way to transfer bank account deposits, which are the real money. ↩

35. 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." ↩

36. Frye, T. (2002). "The Perils of Polarization: Economic Performance in the Postcommunist World." *World Politics,* 54(3), 308–337. http://doi.org/10.1353/wp.2002.0008. ↩

37. The size of the actual fall in GDP in post-communist countries is extremely hard to measure. Under central planning, producers had an incentive to over-report output in order to meet quotas. In a market economy the incentive shifted to under-reporting to avoid taxes. In addition, improvements in quality to meet consumer demands in a competitive environment were almost impossible to capture. See, for example, Randall Filer and Jan Hanousek (2003) "Output Changes and Inflationary Bias in Transition", *Economic Systems*, Vol. 24. http://dx.doi.org/10.2139/ssrn.1516073. ↩

38. Anders Aslund, *Ukraine: What Went Wrong and How to Fix It* (Peterson Institute, 2015): 48–49. ↩

39. See https://www.doingbusiness.org/en/methodology/paying-taxes. ↩

40. The World Bank takes seriously the concept of "one country, two systems," and evaluates Hong Kong's tax system independently from that of mainland China. ↩

41. Henry George, *Protection or Free Trade* (New York: Robert Schalkenbach Foundation, 1980). ↩

42. Many of the "job savers" act as if foreigners are willing to supply goods without ever using their acquired dollars or euros to purchase things. This is not the case. If foreigners were willing to sell things to Americans for dollars or Europeans for euros but never use the dollars or euros to buy products, it would be as though Americans and Europeans could write checks for imports without anyone ever cashing them or export pretty pieces of paper with pictures of national heroes (United States bank notes) or even fictional bridges (Euro bank notes) on them. Wouldn't that be great? In fact, however, producers of imported goods and services do cash the checks they receive. They don't actually want the pieces of paper; they want the purchasing power represented by them to buy things they want or to invest in productive assets. And often what they want to buy are the products that America and Europe exports. Thus, imports help to generate the demand for exports. ↩

43. When the exchange rate is determined by market forces, equilibrium in this market will bring the purchases of goods, services, and assets (including both real and financial assets such as bonds) from foreigners into balance with the sale of these items to foreigners. During the last couple of decades, United States imports of goods and services have persistently exceeded exports. With market-determined exchange rates, such trade deficits will be largely offset by an inflow of capital of similar

magnitude. The **capital inflow**(?) will result in lower interest rates, more investment, and additional employment. Thus, even in this case, there is no reason to anticipate that there will be a negative impact on employment. Even though trade deficits were present throughout most of the 1980–2005 period, employment in the United States expanded by more than 35 million. ↩

44. The same logic applies to "outsourcing," undertaking certain activities abroad in order 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 higher productive activities. As a result, output will be larger and income levels higher. ↩

45. "Cheap" does not mean "low quality." We are explicitly holding quality constant. To economists things of different quality are different products. West Texas Intermediate Crude Oil is a different product from Louisiana Light, just as a Mercedes and a Kia are different products, not a generic "car." ↩

46. S. Hong, H. Han, and C.S. Kim, "World distribution of income for 1970–2010," *Empirical Economics* (2019). https://doi.org/10.1007/s00181-019-01657-w. ↩

47. As quoted in Frank Whitson Fetter, "Congressional Tariff Theory," *American Economic Review,* 23 (September 1933): 413–27. ↩

48. 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. ↩

49. Ibid., p.7. ↩

50. Ibid., p.2. ↩

51. See, for example, Havrylyshyn, and Tupy (2016) "25 Years of Reforms in Ex□Communist Countries: Fast and Extensive Reforms Led to Higher Growth and More Political Freedom," CATO Institute Policy Analysis No. 795. ↩

52. These figures are in 2011 "International Dollars" to make comparisons more meaningful. The international dollar adjusts for differences in prices in different countries. ↩

53. 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, California: The Independent Institute, 2011). ↩

54. A. C. Pigou, who many consider to be the father of welfare economics, makes this same point. In his 1932 classic *The Economics of Welfare* (Part II, Chapter 20, Section 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 whole-heartedly 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 organized for votes, may easily outweigh the whole." ↩

55. Thomas Sowell, *Is Reality Optimal and Other Essays* (Stanford: Hoover Institution Press, 1993). ↩

56. 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). economics21.org/commentary/sugar-subsidies-are-bitter-deal-american-consumers. 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. ↩

57. Jeffrey Frankel, "The arguments against food and energy subsidies," World Economic Forum, August 18, 2014. https://www.weforum.org/agenda/2014/08/food-energy-subsidies-egypt-india-indonesia. ↩

58. See Holman W. Jenkins Jr., "How Uber Won the Big Apple," *Wall Street Journal*, July 24, 2015. http://www.wsj.com/articles/how-uber-won-the-big-apple-1437778176. ↩

59. See John Voelcker, "Where Can Tesla Legally Sell Cars Directly To You? State-By-State Map: LATEST UPDATE." *Green Car Reports,* April 22, 2015, n.p. www.greencarreports.com/news/1095337_where-can-tesla-legally-sell-cars-directly-to-you-state-by-state-map; Phil Kerpen, "Tesla and Its Subsidies." *National Review Online*, January 26, 2015, n.p. http://www.nationalreview.com/article/397162/tesla-and-its-subsidies-phil-kerpen. ↩

60. James Buchanan, *The Deficit and American Democracy* (Memphis: P. K. Steidman Foundation, 1984). ↩

61. Ashley Kirk, "European debt crisis: It's not just Greece that's drowning in debt," *Daily Telegraph*, February 8, 2017. https://www.telegraph.co.uk/news/0/european-debt-crisis-not-just-greece-drowning-debt. ↩

62. We are indebted to E. C. Pasour Jr., longtime professor of economics at North Carolina State University, for this example. ↩

63. Eurostat, Statistics Explained, "Government expenditure on social protection." http://ec.europa.eu/eurostat/statistics-explained/index.php/Government_expenditure_on_social_protection. ↩

64. Eurostat, Statistics Explained, "Population structure and ageing." http://ec.europa.eu/eurostat/statistics-explained/index.php/Population_structure_and_ageing. ↩

65. James R. Schlesinger, "Systems Analysis and the Political Process," *Journal of Law & Economics* (October 1968): 281. ↩

66. World Bank, "Subsidies and other transfers (% of expense)," International Monetary Fund, *Government Finance Statistics Yearbook* and data files. https://data.worldbank.org/indicator/GC.XPN.TRFT.ZS. ↩

67. Eurostat, Statistics Explained, "Total general government expenditure on social protection, 2016 (% of GDP % of total expenditure." http://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Total_general_government_expenditure_on_social_protection,_2016_(%25_of_GDP_%25_of_total_expenditure).png. ↩

68. 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: http://www.lorencollins.net/tytler.html. ↩

69. 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. ↩

70. 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. ↩

71. 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. ↩

72. Federal Safety Net, "Poverty and Spending Over the Years." Figures exclude spending on medical insurance for the poor (Medicaid). http://federalsafetynet.com/poverty-and-spending-over-the-years.html. ↩

73. OECD Data (2019), "Financial disincentive to return to work" (indicator). http://doi.org/10.1787/3ef6e9d7-en. ↩

74. Seymore Drescher, translator (London: Civitas, 1997): 27–28. ↩

75. Ron Haskins and Isabel V. Sawhill, *Opportunity Society* (Washington, D.C.: Brookings Institution Press, 2009). ↩

76. Michael Tanner of the Cato Institute has testified that in the United States only 30% of government entitlements reach the intended beneficiaries as opposed to 82% of the funds of similar programs run by private charities. ↩

77. Adam Smith, *The Theory of Moral Sentiments*, Glasgow Edition of Oxford University Press (Indianapolis: Liberty Fund, Inc., [1790] 1976): 233–34. Also available at: https://www.econlib.org/library/Smith/smMS.html?chapter_num=7 - book-reader. ↩

78. Friedrich Hayek, "Pretence of Knowledge." Nobel Prize Lecture in Economics. Stockholm, Sweden. December 11, 1974. ↩

79. Jeffrey Frankel, "The arguments against food and energy subsidies," World Economic Forum, August 18, 2014. https://www.weforum.org/agenda/2014/08/food-energy-subsidies-egypt-india-indonesia. ↩

80. Oby Ezekwesili, "Why we need to end fisheries subsidies," World Economic Forum, October 2, 2015. https://www.weforum.org/agenda/2015/10/why-we-need-to-end-fisheries-subsidies. ↩

81. From *Omnipotent Government: The Rise of the Total State and Total War* (New Haven: Yale University Press, 1944). ↩

82. M. Czaika and C.R. Parsons, "The Gravity of High-Skilled Migration Policies," *Demography*, 54 (2017): 603. ↩

83. Freidman, Milton, *Capitalism and Freedom* (Chicago: University of Chicago Press, 2002). ↩

84. Alexis de Tocqueville, *Democracy in America* (New York: George Dearborn & Co., Adlard and Saunders, 1835): Volume 1, Chapter 5. We will not discuss whether the United States maintains the same degree of power in local governments today.

This is an open question. ↩

85. As of late 2019 Professor Mylovanov left his professorship at the University of Pittsburgh to become Minister of Economic Development, Trade and Agriculture in the government of Ukraine, a position he held until March 2020. ↩

86. See 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. ↩

87. Of course, technology can be a force for repression as well, as seen by the use of facial recognition capabilities to track dissidents or minorities. ↩

88. For a discussion of how the possibility of E.U. 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). ↩

89. "Buy any deans necessary, Letting academics pick magistrates has not worked in Guatemala," *The Economist (*July 25, 2019): 37. https://www.economist.com/the-americas/2019/07/25/letting-academics-pick-magistrates-has-not-worked-in-guatemala. ↩

90. Yogi is also responsible for advising, "When you come to a fork in the road, take it." ↩

91. Arthur Brooks, President of the American Enterprise Institute, is one of the leading scholars on the determinants of happiness. For an overview of his views, see "A Formula for Happiness," *New York Times*, December 14, 2013 at: http://www.nytimes.com/2013/12/15/opinion/sunday/a-formula-for-happiness.html. ↩

92. Often there seems a difference between what is highly valued by consumers and what "planners" would like them to value. In 2019 the world's youngest billionaire was Kylie Jenner. We make no judgment on her line of lip glosses other than to observe that citizens with free choice over thousands of alternatives seem to select them. ↩

93. See "What is Emotional Intelligence (EQ)?" by Michael Akers and Grover Porter at: http://psychcentral.com/lib/what-is-emotional-intelligence-eq/. ↩

94. One of the earliest studies establishing the relationship between attitude traits and economic success was by one of the authors of this book. See: Randall K. Filer, "The Influence of Affective Human Capital on the Wage Equation," in Ronald Ehrenberg, ed., *Research in Labor Economics, Vol. 4* (Greenwich: JAI Press, 1981). ↩

95. Theresa Harold, "How a former Soviet state became one of the world's most advanced digital nations," Alphr.com, (30 Oct 2017) http://www.alphr.com/technology/1007520/how-a-former-soviet-state-became-one-of-the-worlds-most-advanced-digital-nations. ↩

96. Adidas AG, Financial Publications: https://www.adidas-group.com/en/investors/financial-reports. ↩

97. 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/2018/02/ikeas-success-cant-be-attributed-to-one-charismatic-leader. ↩

98. The World Bank, “Self-employed, total (% of total employment) (modeled ILO estimate),” International Labour Organization, ILOSTAT database data retrieved in April 2019. https://data.worldbank.org/indicator/SL.EMP.SELF.ZS. ↩

99. Janene Pieters, “A Fifth Of Dutch Millionaires Are Farmers,” *NLTimes.NL,* September 12, 2017. https://nltimes.nl/2017/09/12/fifth-dutch-millionaires-farmers. ↩

100. Bruno Dallago, Kier Discussion Paper No. 968, “Diverging Paths of Entrepreneurship in Post-Transformation Countries, a Comparative View”; Kyoto Institute of Economic Research, March 2017. http://www.kier.kyoto-u.ac.jp/DP/DP968.pdf. ↩

101. 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. ↩

102. See “Your Top Debt Management Questions Answered.” Dave Ramsey. N.p., October 25, 2014. https://www.daveramsey.com/blog/the-truth-about-debt-management. ↩

103. Some may need creative methods of controlling impulse purchases with a credit card. If this is the case, economist and financial adviser 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. ↩

104. Justin Higginbottom, “Governments Finally Embrace The Sharing Economy,” Ozy.com, September 30, 2018. https://www.ozy.com/fast-forward/governments-finally-embrace-the-sharing-economy/89688. ↩

105. 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.” ↩

106. In addition, for some Muslims, the payment of interest is not allowed under Sharia law, and the return will reflect some type of profit sharing that achieves a similar goal, as will be described at the end of this element. ↩

107. Nils-Gerrit Wunsch, “Retail price of a premium pack of 20 cigarettes in selected European countries in 2017 (in GBP),” April 3, 2019. https://www.statista.com/statistics/415034/cigarette-prices-across-europe. ↩

108. Our calculations assume that your investments yield a return of 7 percent every year. Obviously this is unlikely to happen. Even though you can expect an average annual return of approximately 7 percent, this return will vary from year to year. This can make a difference in how much you accumulate at retirement, but the difference is likely to be small. ↩

109. These average returns are for the United States market, but those in other advanced economies will be pretty much the same. If they were better in the United Kingdom than the United States, for example, global investors would move funds into the United Kingdom until this were no longer true. When a country has continually high returns on bonds, it suggests that investors feel that there is also greater risk associated with that country, especially if either default (failure to pay) or devalue (due to currency depreciation). In other words, high apparent rates of return on government bonds is usually a strong signal of bad government. A 7 percent real (after inflation) rate of return may not sound like much compared to what some stocks, such as Dell and Microsoft, have yielded. But a 7 percent **compounded annual 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 or, for those who like a little more precision, the Rule of 72. ↩

110. Krystyna Krzyzak, "CEE: A System In Flux," *Investment & Pensions Europe, January 2018* (Magazine). https://www.ipe.com/pensions/country-reports/cee/cee-a-system-in-flux/10022463.article. ↩

111. 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. https://www.imf.org/external/pubs/ft/fandd/2000/03/jarvis.htm. ↩

112. 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. ↩

113. Dimitar Boyadzhiev et al., *Morningstar* Manager Research EMEA, "Morningstar's European Active/Passive Barometer," February 2019. https://www.morningstar.com/en-uk/lp/european-active-passive-barometer. ↩

114. See Jeremy J. Siegal, *Stocks for the Long Run*, 3rd edition (New York: McGraw Hill, 2002): 342–43. ↩

115. See Burton G. Malkiel, *A Random Walk Down Wall Street: The Time Tested Strategy for Successful Investing* (New York: W. W. Norton & Company, 2015): 177–78. ↩

116. See Burton G. Malkiel, *A Random Walk Down Wall Street: The Time-Tested Strategy for Successful Investing* (New York: W. W. Norton & Company, 2003): 189–190. 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," *The Journal of Finance* 52, No. 1 (March 1997): 57–82. ↩

117. See Burton G. Malkiel, *A Random Walk Down Wall Street: The Time-Tested Strategy for Successful Investing* (New York: W. W. Norton & Company, 2003): 180–181. ↩

118. Abraham Okusanya, "Lessons from 118 years of asset class returns data," *FinalytiQ*, March 28, 2018. https://finalytiq.co.uk/lessons-118-years-capital-market-return-data/. ↩

119. 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, etc., which do require input from specialists. ↩

120. 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. ↩

121. Inflation-indexed bonds are also issued by the United Kingdom, Germany, the Russian Federation, and Sweden, among other countries. ↩

122. OECD, Directorate for Employment, Labour and Social Affairs: Pension systems: "Ukraine: Pension system profile." https://www.oecd.org/countries/ukraine/45336467.pdf. ↩

123. OECD Project on Financial Incentives and Retirement Savings, Policy Brief N°1, "The tax treatment of retirement savings in private pension plans," December 2018. https://www.oecd.org/daf/fin/private-pensions/Tax-treatment-of-retirement-savings-Policy-Brief-1.pdf. ↩

124. Tranio, "Real estate agency commission rates in different countries," September 18, 2017. https://tranio.com/articles/real_estate_agents_commissions_in_various_countries. ↩

125. Bank for International Settlements, Joint Forum, "Mortgage insurance: market structure, underwriting cycle and policy implications," August 2013. https://www.bis.org/publ/joint33.pdf. ↩

126. Eurostat, "Mean and median income by educational attainment level–EU-SILC survey." Last update: 27 August 2019. https://ec.europa.eu/eurostat/en/web/products-datasets/-/ILC_DI08. ↩

127. Pay Scale, Inc. *College Salary Report Updated for 2019*. Retrieved from www.payscale.com/college-salary-report/majors-that-pay-you-back/bachelors. ↩

128. *Bitcoin.org*, "Avoid Scams: Familiarize yourself with some of the most commonly observed bitcoin scams to help protect yourself and your finances—Free Giveaways." https://bitcoin.org/en/scams#free-giveaways. ↩

129. A fair coin is one that has a 50% chance of landing on either side when flipped. The "heads" and "tails" is a convention when coins show images of kings, queens, or presidents on one side ("heads"). By convention, on Euro coins the side with the national symbol is regarded as "heads." Interestingly some research has found that the typical EU coin is not "fair," tending to more often land on heads. (The authors are not responsible if you try this and end up losing money ☺). ↩

Readings Featured in the Elements

1. The Power of Incentives
2. The Road Not Taken
3. Opportunities and Costs
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5. Specialization and Wealth
6. Sacrificing Lives for Profits
7. I, Pencil, My Family Tree
8. Creating Jobs vs. Creating Wealth
9. What Is Seen and What is Not Seen
10. Gross Domestic Product—What is it and how is it measured?
11. Private Property and Opportunity Costs
12. Running Out of Agricultural Land
13. Censoring Pleas for Help
14. Markets and Freedom
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19. Social Cooperation and the Marketplace
20. A Case for Constitutional Reform in Ukraine

Return to Element 1.1

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.(1)

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.[2]

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?

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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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Return to Element 1.2

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.

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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?

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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[(1)]), 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).[(2)] 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.

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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?

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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.[(1)]

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?

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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 configurating 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?

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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' "What Is Seen and What Is Not Seen."[1] *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 p roduces 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[(2)] 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[(3)] 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,[(4)] 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?[5] 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. ↩

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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 2005. 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 quay and uses these calculations to offer an overview of the U.S. economy. The BEA prrterloduces 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.

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This article is courtesy of Common Sense Economics.

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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?

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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.[(1)] 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?

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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?

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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.[1] 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."[(2)] 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?

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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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"Not Yours To Give from the Life of Colonel David Crockett" by Edward S. Ellis; courtesy of The Foundation for Economic Education, under a Creative Commons Attribution 4.0 International License.

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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.(1)

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.

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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.[(1)]

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.[(2)]

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.

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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 Element 3.10

This article is courtesy of VoxUkraine.

Suggested Additional Readings

We hope that reading this book has convinced you that economics is not only important, but also interesting and a great deal of fun. If you want to learn more, there are a number of introductory textbooks available (including one by two of the authors of the current work), and these present the ideas we have discussed in greater detail, including with a lot more graphs. Below we have listed a number of books, some classical and some recent, that will increase your economic insight and which should be accessible even for those not mathematically inclined. Please feel free to let us know at suggestions@econfun.org which titles you enjoy and any others you think we should include in the next edition. 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. Happy exploring!

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Sources for Videos

We have included links to a number of videos in this work. These are, of course, a very small fraction of what is available and new videos are being created every day. Some sources you might check include:

http://www.econlib.org/videos/

https://reason.com/video/

https://mru.org/everyday-economics

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http://broadwayeconomics.com/

https://standupeconomist.com/

Again, please visit our website where we will, from time to time, post a list of new videos we especially like. Also do let us know if you come across a video you would like to share.

Glossary

Alt-A loans: Loans extended with little documentation and or verification of the borrowers' income, employment, and other indicators of their ability to repay. Because of this poor documentation, these loans are risky. ↩

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. ↩

barter system: The exchange of goods or services directly for other goods or services without using money. ↩

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. ↩

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 inflow: The flow of expenditures on domestic stocks, bonds, and other assets undertaken by foreign investors. ↩

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. Certificates 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. ↩

checking account: Deposit account held at a financial institution that allows withdrawals and deposits. Also called demand accounts or transactional accounts, checking accounts are very liquid. ↩

checking deposit: A deposit on which checks may be drawn. ↩

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. ↩

compounded annual rate of return: The amount of compound interest paid on a sum of money over a twelve-month period. ↩

constitution: A body of fundamental principles or established precedents according to which a state or other organization is acknowledged to be governed. ↩

corporate stock: A type of ownership equity in a company or corporation for an investor. Each share owned by an investor represents a proportionate share of interest in that company, although the creditors of that company have first right to any claims on assets and earnings. ↩

corporation: A legal entity that has the rights and privileges of a person with respect to owning property, taking loans and signing contracts. Derived from the Latin word "corpus," meaning a body. To "incorporate" literally means to "form into a body." ↩

cost-effective: Activity is cost-effective when the value of an activity is good for the amount

of money paid. ↩

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. ↩

credit card: A card issued by a financial company which enables the cardholder to borrow funds. The funds may be used as payment for goods and services. Issuance of credit cards has the condition that the cardholder will pay back the original, borrowed amount plus any additional agreed-upon charges. ↩

crony capitalism: A situation where the institutions of markets are maintained, but the allocation of resources, and the profit and loss of businesses, are substantially influenced by political decision-making rather than consumer purchases and market forces. To a large degree, the activities of business firms are directed and controlled by government subsidies, contracts, and regulations. In turn, many of the business firms will use contributions and other forms of political support to compete for government favors. ↩

decentralization (of government): The transfer of authority from central to local government. ↩

depreciation: A fall in the value of an asset or a currency. ↩

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. ↩

division of labor: A method that breaks down the production of a commodity into a series of specific tasks, each performed by a different worker. ↩

down payment: An amount of money that you pay at the time you buy something but which is only a part of the total cost. ↩

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 growth: An increase in the real Gross Domestic Product (real value of the production and services produced in a given period in a given economy) from period to period. ↩

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. ↩

economics: The study of how individuals, government, businesses, and other organizations make choices that affect the allocation and distribution of scarce resources. ↩

economies of scale: Reductions in the firm's per-unit costs that occur when large plants are used to produce large volumes of output. ↩

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: Shares of stock in a company. They represent fractional ownership of the company. ↩

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. ↩

exports: Goods and services produced domestically but sold to foreign purchasers. ↩

externalities: Spillover effects of an activity that influence 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. ↩

favoritism: Unfair support shown to one person or group, especially by someone in authority. ↩

financial asset: Assets such as money, shares, bonds, etc. rather than a physical asset such as property or machinery. ↩

financial institution: A company that provides financial services, such as stock exchanges,

banks, insurance companies, mutual funds, and investment firms. ↩

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 investment: When a company or individual from another nation invests in assets or ownership stakes of a company in your country. ↩

free trade: The ability of people to undertake economic transactions with people in other countries free from any restraints imposed by governments or other regulators. ↩

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. ↩

government regulation: Rules (imposed by the government) which control the way that a business can operate. ↩

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. ↩

household: A group of people, often a family, who live together. ↩

housing crisis of 2008–2009: A major decline in housing prices in many countries at around the same time. Between 2007 and 2010 house prices in Ireland fell by approximately 35%, while in the US housing prices fell by about 16% during the same period. These declines led to many borrowers having negative value in their houses (market price less outstanding mortgage). Many borrowers chose to default on their mortgage, causing problems for banks around the world and leading to various forms of government "bailouts." ↩

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. ↩

incentive structure: The types of rewards offered to encourage a certain course of action, and the types of factors intended to discourage alternative courses of action. ↩

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.

index fund: Type of mutual fund with a portfolio constructed to match or track the components of a market index, such as the Standard & Poor's 500 Index (S&P 500).

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.

industrial policy: A government plan that is designed to encourage the development of industry or of a particular type of industry.

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.

insolvency: The state of financial distress in which an individual or entity is unable to pay their bills. This can be due to an underlying lack of resources (assets) or an inability to turn these resources into cash (liquidity).

insurance: An arrangement by which a company or the state undertakes to provide a guarantee of compensation for specified loss, damage, illness, or death in return for payment of a specified premium.

international trade: see **free trade**[?].

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. ↩

labor market: Also known as the job market, this refers to the supply and demand for labor in which employees provide the supply and employers the demand. Workers and employers interact with each other—employers compete to hire the best, and the workers compete for the most satisfying job. ↩

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. ↩

lobbyist: LOBBY (verb) To "lobby" in a political context is to argue for lawmakers to adopt rules or laws that benefit a particular financial or other interest. (noun) A "lobby" is a group of people seeking to influence politicians or public officials on a particular issue. An individual member of such a group is called a "lobbyist." The term originates because lobbyists often approached lawmakers in the vestibules or lobby of legislative buildings. ↩

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 economy: An economic system in which economic decisions and the pricing of goods and services are guided solely by the aggregate interactions of a country's individual citizens and businesses. There is little government intervention or central planning. ↩

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. ↩

marketing: Activities of a company associated with buying and selling a product or service. It includes advertising, selling, and delivering products to people. ↩

merchant: A person or company involved in wholesale trade, especially one dealing with foreign countries or supplying goods to a particular trade. ↩

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. ↩

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 market characterized by (1) a single seller of a well-defined product for which there are no good substitutes; and (2) high barriers to the entry of any other firms into the market for that product. ↩

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 rate: The percentage of 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. This rate is sometimes referred to as the serious delinquency rate. ↩

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 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). ↩

occupational licensing: A requirement that a person obtain permission from the government in order to perform certain business activities or work in certain occupations. ↩

open markets: Markets that suppliers can enter without obtaining permission from governmental authorities. ↩

opportunity costs: The highest valued alternative good or activity that must be sacrificed as a result of choosing an option. ↩

output: An amount of something produced by a person, machine, factory, country, etc. ↩

Patient Protection and Affordable Care Act (PPACA): More commonly referred to as the Affordable Care Act or Obamacare, this is the landmark health reform legislation signed into law by President Barack Obama in 2010. ↩

personal income: The total income received by domestic households and non-corporate businesses. ↩

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. ↩

political business cycle: A business cycle that results primarily from the manipulation of policy tools (fiscal policy, monetary policy) by incumbent politicians hoping to stimulate the economy just prior to an election and thereby improve their own and their party's re-election chances. ↩

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. ↩

pork-barrelling: Government projects or appropriations yielding rich patronage benefits. Often included in legislation unrelated to the use of these funds. ↩

portfolio: The holdings of savings, investments, and real assets such as real estate owned by an individual or financial institution. ↩

poverty: State or condition in which a person or community lacks the financial resources and essentials for a minimum standard of living. ↩

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 (of government): 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 (of government): A system of rules and laws that protect individuals and their property from damages associated with the use of force, fraud, or theft. ↩

protective tariffs: A tax intended to increase prices of imports and protect a country's industries from foreign competition. ↩

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 goods: 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. ↩

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. ↩

rate of return: The amount of profit that an investment earns calculated as a percentage of the

money that was originally invested. ↩

rational ignorance effect: 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 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. ↩

reform: An action by the government to make changes in something (especially an institution or practice) in order to improve it. ↩

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. ↩

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. ↩

savings account: An account, in a bank or similar financial organization, that earns interest.

savings plan: Pooled investment account provided by an employer which allows employees to set aside a portion of their pre-tax wages for retirement savings or other long-term goals, such as paying for college tuition or purchasing a home.

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.

self-employed: Situation in which an individual works for themselves instead of working for an employer that pays a salary or a wage.

share: A legal instrument giving the holder (the shareholder) the right to vote on actions taken by the corporation. Each shareholder has a vote equal to the number of shares owned divided by the total number of shares issued by the corporation. A share is really a share of stock. The term "stock" is a carry-over from the very first corporation. These were trading companies, and "stock" literally meant the stock of goods to be traded.

shareholder: (also known as **stockholder**(?)) An individual or institution (including a corporation) that legally owns one or more shares of stock in a public or private corporation. Each share represents an equal fraction of ownership of the entity.

shortage: A condition in which the amount of a good offered for sale by producers is less than the amount demanded by buyers because government has imposed a below-equilibrium price.

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 tariff: Legislation passed in the United States in June 1930 that increased tariff rates by approximately 50 percent. Other countries retaliated and international trade fell sharply. The legislation was a major contributing factor to the Great Depression. ↩

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 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. ↩

stagnation: A situation in which the economy stays the same and does not grow and develop. ↩

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. ↩

stock exchange: see **stock market**(?). ↩

stock market: The collection of markets and exchanges where the regular activities of buying, selling, and issuance of shares of publicly held companies take place. ↩

stockbroker: A person or company that buys and sells stocks and shares for other people. ↩

stockholder: see **shareholder**(?). ↩

subprime loan: A loan made to a borrower with blemished credit or who provides only limited documentation of his or her income, employment history, and other indicators of credit worthiness. The interest rates on subprime loans are generally higher than for loans to prime credit customers. An important institution that helps define what interest rate is charged to borrowers is a "credit rating" provided by an independent institution that tracks individuals' past borrowing behavior. ↩

subsidiarity: An organizing principle that matters ought to be handled by the smallest, lowest, or least centralized competent authority. Political decisions should be taken at a local level if possible, rather than by a central authority. ↩

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). ↩

surplus (in a market): A condition in which the amount of a good offered for sale by producers is greater than the amount that buyers will purchase because the government has set the price above the equilibrium. ↩

tariff: A tax levied on goods imported into a country. ↩

tax-deductible: If an amount of money that you spend is tax-deductible, it can be taken away from the total amount of income you must pay tax on. ↩

transaction costs: 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. ↩

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