Mere Economics

Lessons For and From the Ordinary Business of Life

Art Carden & Caleb S. Fuller

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"The authors have succeeded in their goal of communicating key economic ideas in a clear, accessible, and even entertaining way by cogently weaving Christian perspectives into their 'study of how people expand their options by cooperating.' *Mere Economics* is a valuable resource for those seeking to improve their understanding of economics from a Christian perspective."

—**Robert E. Brooks**, emeritus professor of finance, University of Alabama

"What a brilliantly titled book (if you don't get it, read the book)! Art Carden and Caleb Fuller have written a book that provides an extremely accessible introduction to fundamental economics and links it in eye-opening ways to Scripture. They do it in a way that demonstrates deep learning and understanding—not just of economics but also of theology and moral philosophy. This is much more than a text for introductory economics teaching but also a sustained reflection on how Christians may relate to the market order and the theory of this order."

—**Nicolai J. Foss**, professor of strategy, Copenhagen Business School

"Economic truths are more ingrained into our everyday lives than we realize. They allow us to live out our liberties in ways that promote everyone's well-being. In *Mere Economics*, Art Carden and Caleb Fuller show us that economics is no dismal science. Their achievement is to demonstrate how economics helps us live out our dignity and bolster the dignity of others this side of eternity."

—**Samuel Gregg**, Friedrich Hayek Chair in Economics and Economic History, American Institute for Economic Research

"The Bible tells us to 'love one another,' but the world is big and love is scarce. Adam Smith's great insight was that 'the Author of nature' allows us to serve others in markets *as if* we loved everyone. In *Mere Economics* we learn the fundamentals of markets and how that system can work for all of us."

—**Michael C. Munger**, professor of political science and economics, Duke University

"Did you think economics was boring or inscrutable—or useless? Then you haven't read *Mere Economics.* Do you think economics is depressing, immoral, or dismal? Then you *need* to read *Mere Economics.* If you do, you may be surprised to discover how much of our lives, both historically and in the present, the simple principles of economics can explain. You may also be surprised how much our lives have improved over the last 200 years and how much of that economics can explain too. And you may be even more surprised to discover how consistent a sound economics is with Christian principles of dignity, personhood, purpose, and prosperity. Art Carden and Caleb Fuller have done us a great service by explaining economic elements and errors and having done so not just with relatable examples and illustrations but with wit and even humor. An enlightening and engaging book that somehow also manages to inspire. A delight to read!"

—**James R. Otteson**, John T. Ryan Jr. Professor of Business Ethics, University of Notre Dame

"Art Carden and Caleb Fuller provide a concise, creative, and engaging introduction to the 'dismal science' of economics, treating it as anything but dismal. They accomplish their goal: they present the reader with the state of the science in economics, and they provide an excellent model of theological integration with economics, demonstrating how it could be done with other disciplines. Highly recommended!"

—**Scott B. Rae**, dean of faculty, Talbot School of Theology, Biola University

“Free enterprise is once again under fire. After a brief disorientation that followed the fall of the ‘evil empire,’ much of the left has returned to advocating many of the policies that failed in the past. More recently, large parts of the right have been seduced by the siren song of protectionism into rejecting the economic system that made America the most powerful and richest large country in the history of the world. *Mere Economics* should be read by those who wish to understand the true economic reasons for America’s greatness.”

—**Marian L. Tupy**, senior fellow, Center for Global Liberty and Prosperity, Cato Institute

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Lessons For and From
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We dedicate this book to our extraordinary students—
past, present, and future.
Make More, Take Less.

ACKNOWLEDGMENTS

Hebrews 12:1 says, "Therefore, since we are surrounded by such a great cloud of witnesses, let us throw off every encumbrance and the sin that so easily entangles, and let us run with endurance the race set out for us." The "cloud of witnesses" that has surrounded us as we've written this book is indeed great. Carden thanks his students who provided feedback through reading groups sponsored by the Charles Koch Foundation (CKF). We also thank the CKF for funding meals while Fuller visited Birmingham, Alabama, to work with Carden; our meal-time conversations benefited from discussions with Carden's insightful colleague Joy Buchanan.

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Both of us gratefully acknowledge the services of Sarah Cooper from Samford University's Davis Library for help when Zotero didn't want to play nice. Thanks are also due to Michael McEwen and Logan Pyron at B&H for suggesting edits which significantly improved our manuscript. We'd also like to acknowledge Nicholas Freiling's incisive editorial suggestions. Hire him for your project! We thank Janna Lu and Sam Branthoover, both economics PhD students, for helpful editorial remarks. Likewise, we acknowledge the keen eye of Stephanie Baumgartner, who slew many a typo.

We owe tremendous thanks to our families, especially our wives, for putting up with us while we made last-minute edits (not to mention their putting up with us the rest of the time).

We both wish to thank the many dynamic teachers and collaborators who have blessed us with their knowledge, wisdom, and wit. They include but are not limited to Douglass North (1920–2015), John Nye, Peter Boettke, Deirdre McCloskey, Christopher Coyne, Jeffrey Herbener, Walter Williams (1936–2020), David Lucas, Peter Leeson, and Shawn Ritenour. Of course, none of the fine people mentioned in these acknowledgments are to be held responsible for deficiencies of our text. You know whom to blame for those. Finally, we used

Grammarly's AI tools to improve parts of the manuscript. Who knows? Maybe this will be one of the last books written by actual humans (assuming economists are human . . .).

HOW TO USE THIS BOOK

We have attempted the improbable: write a book explaining the most important ideas in economics while keeping it short enough that people will actually read it. To that end, we have left out a lot and painted with very broad brushstrokes. When you read things like "Economists believe . . . ," see it as our shorthand for a professional consensus, not a statement about literally every single economist ever. For each claim we make, a microsecond with Google will probably turn up at least one person with a PhD in economics who disagrees. We use language about "economics" or "economists" not to obscure or mislead, but to economize—to keep the text from getting bogged down in hedging, nuance, qualifications, subtlety, complexity, digression, exceptions, exposition, intellectual history, and long lists of comma-separated clauses. If you want these, you can find them in a textbook. We hope to have struck the right balance between clarity, completeness, brevity, and accuracy.

Note what's above: how to *use* this book. Here we borrow from the economist Deirdre McCloskey and exhort you not merely to read books but to use them. We've left a lot of detailed explanation to sources and additional reading you can find in the footnotes. These will include links to online encyclopedia articles, commentaries we have written, and Very Serious Research economists have done. We have tried where possible to cite sources and editions for which you don't need a university library, just a web browser. We plan to continue writing on these issues, so let us know if something is unclear, and we will address it at mereeconomics.com and in the next edition.

INTRODUCTION

This Is Our Father's World: Meditations on the Ordinary Business of Life

And God saw everything that he had made, and behold, it was very good. Gen 1:31

The World, the Flesh, and the Devil Walk into a Bar

You learn a lot about God and man in a bar. Just look around.

Creeps buy drinks for women they want to take home. Fans curse the quarterback on the TV. A drunk in the corner babbles as he drinks up his paycheck. A real estate novelist chats with a sailor while a piano man helps people forget about life for a while. A bartender drops a glass on his foot and swears.

In this loud and dingy pub, it's easy to see the World: humanity's fallen values are turned up to eleven. If your team's quarterback doesn't score on this drive, is life still worth living? And if he does? You already knew your team was superior. Pride ("I'm better than you"), Greed ("I want more"), and Envy ("I covet your looks, success, property, or relationships") are grumbling in a corner. The Flesh is well-represented. Gluttony ("I want more sensual pleasure"), Sloth ("I want to take without making"), and Lust ("I want what's not mine to have") are leering at their hurried waitress. And the Devil? Wrath ("I want vengeance") prowls around looking for a wounded bartender to devour.[1]

Surveying the scene, you might ask, "Is this the creation God called 'very good'? Is anything here . . . good?"

Before you abandon hope, the server arrives with your burger and beer and interrupts your morose reflections. You look at what she sets before you: an ordinary burger and an ordinary beer, no different from the millions of burgers and beers served around the world every day. But there's more to this scene than meets the eye.[2] It's more than a meal. It's a social miracle.

"How?" you ask. "It's just an ordinary burger and a beer." Then you bow your head and ask God to "bless this food and the hands that prepared it."

If you want God to bless every hand that prepared your meal, you're talking about *a lot* of hands. Who butchered the meat? Baked the bun? Brewed the beer? Who designed the machinery responsible for burgers and beer on such a vast scale? Who cultivated the amber waves of grain that became the bun? Whose hands typed the code for the bookkeeping software that keeps the numbers straight?

And why did they do it? Did the cattle ranchers, wheat farmers, potato growers, truck drivers, meat packers, app developers, and servers wake up early or go to bed late because they were thinking about feeding you, specifically?

No. They have families to feed, kids to raise, churches to support, and hobbies to pursue. They have their *own* interests. The eighteenth-century Scottish philosopher-economist Adam Smith puts it this way in one of the most famous quotes from one of the most famous books of all time: "It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages."[3]

People go to all this trouble because they care about their family and friends and have found that taking care of you is the best way to take care of them. Similarly, you've found that taking care of them by exchanging money for a burger and a beer is the best way to satisfy your hunger and slake your thirst.

Exchange is a nifty way to tackle a problem at the heart of economics: scarcity. We can always do something with more. Alas, limited time and materials mean we must choose. Two economists put it this way: "Ever since the fiasco in the garden of Eden, most of what we get is by sweat, strain, and anxiety. Since we cannot have *all of everything* we want, we must *choose* how best to use available resources."[4] Saying yes to more of one thing means saying no to more of another. You can't make an omelet with the eggs you just cracked into the waffle batter.

"But that's the problem," we hear you saying. "Doesn't economics teach us to focus on omelets and waffles for ourselves? We should reach for the transcendent, rather than the merely material. Economics preaches love of appetite, instead of love of neighbor."

No. Economics doesn't tell you what to value, only that there are trade-offs. Economics isn't about why you're making the waffles. It just says that the eggs you put into waffles for the homeless shelter across the street can't *also* be served as omelets at the homeless shelter across town. Even good things (e.g., feeding the homeless across the street) cost something (e.g., feeding the homeless across town).

All that can seem grim, which is why it's such good news that exchange expands our options in this vale of tears, by securing our neighbors' peaceful cooperation. It's easier for other people to say yes to what we want when we say yes to what they want. Exchange also respects our neighbor's dignity as God's image bearer. In markets, we don't order people around like they only exist to serve us. In markets, we don't stamp our feet and make demands like overtired toddlers. Instead, we convince other people to help us by helping them. It's why both people say "thank you" after an exchange. We think exchange, the institutions that support it, and the bounty that flows from it are part of the order God created and called "very good."[5]

What Do You Mean by "Mere Economics"?

During World War II, C. S. Lewis explained and defended Christianity in a series of talks on BBC radio. In 1952, the talks were published as *Mere Christianity*, with the "mere" coming from Lewis's emphasis on beliefs common to all orthodox Christians. He set aside questions of doctrinal minutiae and disagreement. We're trying to do something similar here: instead of refereeing squabbles between economists, we are taking what every economist knows and seeing how far it will take us. Hence, *mere* economics: *the study of how people expand their options by cooperating.*

If life isn't going to be "solitary, poor, nasty, brutish, and short," we need help (chapter 1).[6] Way back in *The Wealth of Nations*, Adam Smith explained that man "stands at all times in need of the co-operation and assistance of great multitudes, while his whole life is scarce sufficient to gain the friendship of a few persons."[7] Fortunately, exchange secures "the co-operation and assistance" of great multitudes.

Wealth is whatever people value—"one's trash is another's treasure"—and more wealth means more opportunities to do what we want.[8] Exchange-promoting rules mean more wealth, greater opportunities, and richer lives in every dimension. Exchange-hampering rules mean less wealth, fewer opportunities, and lives that are lonelier, poorer, nastier, rougher, and shorter than they could be.

"So what?" some say. "This world is passing away. Why worry about this side of eternity? Aren't you just trying to baptize greed? Weren't the early Christians socialists? Isn't economics just a pseudointellectual smoke screen for exploitation? Doesn't economics absurdly claim the economy can grow forever even though infinite growth is impossible in a closed system? Economics says that money is all that matters, but haven't you ever heard of Mother Teresa? And doesn't economics teach selfishness when Christianity teaches self-sacrifice and loving our neighbors as ourselves?[9] All this stuff about 'exchange'—would economists applaud Judas for betraying Jesus for thirty pieces of silver?"[10]

These are good questions we've heard before. To the first, we answer "because our Father created it and called it '*very* good.'" To the last, we respond, "no—people have gratified all sorts of evil desires through exchange, and Judas' is the most wicked instance of all." To the ones in between, we answer "consider it possible that you are mistaken." You have heard it said that free markets and the gospel are foes, but we say unto you that economic principles follow from Christian doctrine. Theft isn't just wrong.[11] Here's nineteenth-century theologian Charles Hodge: "[The eighth] commandment forbids all violations of the rights of property."[12] Theft makes the world a lonelier, poorer, nastier, and rougher place. Hodge, once more: "The doctrine of the divine right of property is the only security for the individual or for society."[13]

Do We Really Need Another Book?

Our publisher thinks so. We're inclined to agree.

It may not seem like it. Ecclesiastes says that there is "no end" to the "making of many books."[14] Unsurprisingly, then, bookstores overflow with books about what Christians should believe. They also have a bunch of books about economics. And the best bookstores sell books explaining what Christians should believe about economics.

Something is missing, though. The fifteenth- and sixteenth-century Spanish Scholastics at the University of Salamanca understood that God had set the celestial bodies to rule the heavens. At the same time, they correctly reasoned that God was not going to leave the social world a chaotic mess.[15] They recognized a "humane science" reflecting the mind of God while rendering the social world intelligible. That science was and is economics. Fast forward to today, however, and you'll find that the Scholastics' golden thread linking God's infinite wisdom, power, and goodness to a science of economics has been obscured. Consider two elementary mistakes in Ronald Sider's 1977 classic *Rich Christians in an Age of Hunger*.[16]

First, Sider commits the zero-sum fallacy. If the entire world is a zero-sum game, then arithmetic means one's gain is another's loss.[17] Sider argued that the West's prosperity causes the Rest's poverty. A lot of people believe this, but economists have rejected it since at least the days of Adam Smith (see chapters 1 and 13).[18]

Second, Sider embraced socialism in the first version of his book. Some people hear "socialism" and think "sharing," but we didn't say "sociability." Socialism is when government planners own and control the means of production—that is, all the land, tools, machines, and factories.[19] Can socialism generate prosperity for all? No, and there is no debate to speak of among economists. Almost all contemporary economists believe socialism has been shown unviable, in theory by Ludwig von Mises and the winner of the 1974 Economics Nobel Prize, Friedrich Hayek, and in practice by its failure everywhere it's been tried.[20] And it's not just a narrow subset of economists who reject Sider's claims. Virtually all economists agree that markets generate more prosperity than the alternatives but disagree (somewhat) about the extent to which governments can make them work better.

To his credit, Sider was explicit in an interview about the twentieth anniversary edition of *Rich Christians* that "when the choice is democratic capitalism or communism, I favor democratic political order and market economies."[21]

We hope our book helps Christians (and everyone) to get past "meaning well." Instead, we exhort them to consider how their actions affect others' incentives in ways that produce unintended consequences—to take a humanitarian Hippocratic Oath: "First, do no harm." While Scripture overflows with commands to care for the poor, doing so requires us to mind God's natural and economic laws.[22] In a nutshell, we embrace what iconic American economist Thomas Sowell calls the "constrained vision"—sincerity is overrated, results are underrated, and big talk about good motives is cheap.[23] Ultimately, mere economics helps us grasp the nonnegotiable principles of our Father's world so that our attempts at helping, improving, subduing, filling, and cultivating actually accomplish those goals.

"Filling" and especially "subduing" might sound aggressive, but it's the language in Genesis 1, where God issues his first command: "Be fruitful and multiply and fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth."[24] God's first command to humanity, believe it or not, is "reproduce."

This Creation Mandate establishes people as God's stewards on earth, dispelling a host of fashionable economic misconceptions about creation along the way. That humanity is to "fill" and "subdue" suggests that creation is not a museum where only the daintiest white-glove treatment is permitted. From the beginning, God told people to develop and cultivate creation's potential. The command didn't change after "the creation was subjected to futility" and began "groaning together."[25] The curious phrase "subdue the earth" tells people to "harness the natural world: plant crops, build bridges,design computers, compose music."[26] Crucially, economics informs us about the social conditions necessary to pursue these high callings successfully. See chapter 13 for more.

Genesis 1 also shoots down the opposite error, that we can do whatever we please. God calls his creation "good," which means earth mustn't be stripped bare or treated as a cosmic trash heap, as in 2006's *Idiocracy* or 2008's *Wall-E*.[27]

Humanity is to exercise "dominion"—stewardship that cultivates creation's nascent possibilities for the good of the creature and the glory of God. We are not permitted to exercise "domination," whereby one's gain is another's loss. The fundamental question for mere economics becomes: How do we avoid stumbling headlong into either a refusal to cultivate or a drive to dominate creation? Mere economics has answers.

Economics instructors: Our book has an introduction and fourteen chapters, one for each week in a traditional academic semester. We hope *Mere Economics* can serve as a handy supplement for introductory economics courses. Here's how we organize it. After we introduce the Progress Puzzle (chapter 1) and foundational principles of economic theory (chapter 2), chapters 3 through 8 examine how exchange creates wealth. Chapters 9 through 12 explore what happens when the government overrides people's choices and vetoes their agreements. Chapter 13 revisits the Progress Puzzle with what we've learned in prior chapters. Chapter 14 points our hearts heavenward and directs our hands earthward toward purposeful and productive living.

We hope to show how much you can offer the world by practicing ordinary bourgeois virtues like punctuality, reliability, and doing your job well. We leave out a lot you would see in a normal textbook, but that's because we want to focus on the core principles. If you prefer American football metaphors, *Mere Economics* is about blocking and tackling. If this book sells, maybe we'll write *More Economics*, or if we get ambitious, *Summa Economica*.

Blocking and tackling wins championships in football, and the basics can reveal surprising insights in economics. A contemporary economics textbook observes, "You probably believe economics is only about the business section of the newspaper when, in fact, it covers the entire thing."[28] We agree, and so does renowned economist Alfred Marshall, who said something similar in 1890: "Economics is a study of man's actions in the ordinary business of life."[29]

How Should We Then Live?

The famed environmentalist Hazel Henderson once quipped, "Economics is bankrupt and a form of brain damage."[30] We disagree and think you will, too, once you've had some practice using the economic approach. Borrowing the title of Francis Schaeffer's classic *How Should We Then Live?*, we will close each chapter with thoughts on what the material implies about our individual choices and our public policies, assuming we want people to prosper and flourish.[31]

You are the first of God's image bearers you can influence. Consider the exchange between Peter and Jesus in John 21:20–21. Jesus is giving Peter instructions. Peter directs Jesus to another disciple and says, "Lord, what about this man"?[32] The KJV renders Peter's question more poetically: "Lord,and what shall this man do?' Jesus answered, 'If it is my will that he remain until I come, what is that to you? You follow me!'"[33]

Sharing in God's work of Restoration is a privilege. Embrace it as the fourth chapter of a four-chapter book that begins with Creation, and is followed by Fall and Redemption. Each chapter of the book has implications for our thinking about economics. Creation contains humanity's marching orders. The Fall complicates those. But due to our great Redemption, Christians aren't interested in earning God's favor: Christ accomplished that on the cross. We can love because he first loved us.[34] The implication is joyful—not burdensome. And finally, one way we love is by colaboring in restoration and stewardship. To borrow from John Piper, we could say economics is the art and science of not wasting our neighbors' lives.[35]

In the heat of World War II, C. S. Lewis wrote,

> If you look for truth, you may find comfort in the end: if you look for comfort you will not get either comfort or truth—only soft soap and wishful thinking to begin with and, in the end, despair. Most of us got

over the pre-war wishful thinking about international politics. It is time we did the same about religion.[36]

He could have added "and economics."

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[1] 1 Pet 5:8.

[2] 2 Cor 4:18.

[3] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. Edwin Cannan, vol. 1 (1776; repr., London: Methuen, 1904), 16, https://oll.libertyfund.org/title/smith-an-inquiry-into-the-nature-and-causes-of-the-wealth-of-nations-cannan-ed-vol-1. Also, see Jerry Z. Muller, "The Neglected Moral Effects of the Market: Arguments from the Last 300 Years," *Journal of Applied Corporate Finance* 36, no. 2 (2024): 1–4.

[4] Armen A. Alchian and William Allen, *University Economics*, 2nd ed. (New York: Wadsworth, 1967), 11. A version titled *Universal Economics* was published by Liberty Fund in 2018 and is available at https://oll.libertyfund.org/titles/universal-economics.

[5] See James M. Buchanan, "What Should Economists Do?," *Southern Economic Journal* 30, no. 3 (1964): 213–22.

[6] Thomas Hobbes, *Leviathan, or the Matter, Forme, & Power of a Common-Wealth Ecclesiastical and Civill* (The Green Dragon in St. Paul's Churchyard: Andrew Crooke, 1651; Urbana, IL: Project Gutenberg), https://www.gutenberg.org/files/3207/3207-h/3207-h.htm.

[7] Smith, *Wealth of Nations*, 1:16.

[8] Art Carden, "Wealth," *Journal of Markets & Morality* 23, no. 1 (2020): 139–48.

[9] Phil 2:1–8; Mark 12:31.

[10] Matt 26:15.

[11] Exod 20:15.

[12] Charles Hodge, *Systematic Theology, Volume III* (Grand Rapids: Christian Classics Ethereal Library, 1872 [1940]), 367.

[13] Hodge, 367.

[14] Eccl 12:12.

[15] See Marjorie Grice-Hutchinson, *The School of Salamanca* (Oxford: Clarendon, 1952). Also see Gen 1:16.

[16] Ronald J. Sider, *Rich Christians in an Age of Hunger: A Biblical Study* (London: Hodder and Stoughton, 1977).

[17] Thomas Sowell, *Economic Facts and Fallacies*, 2nd ed. (New York: Basic Books, 2011).

[18] Kristian Niemietz, *Socialism: The Failed Idea That Never Dies* (London: Institute of Economic Affairs, 2019).

[19] Robert Heilbroner, "Socialism," Econlib, Concise Encyclopedia of Economics, 2008, https://www.econlib.org/library/Enc/Socialism.html; Niemietz, *Socialism*.

[20] Ludwig von Mises, *Socialism: An Economic and Sociological Analysis* (Indianapolis: Liberty Fund, 1981); F. A. Hayek, "The Use of Knowledge in Society," *American Economic Review* (1945): 519–30; Friedrich August Hayek, *The Fatal Conceit: The Errors of Socialism* (London: Routledge, 1988); Niemietz, *Socialism*.

[21] Ronald J. Sider, *Rich Christians in an Age of Hunger: A Biblical Study* (Nashville: Thomas Nelson, 2015), xiii.

[22] For just a few, see: 1 Sam 2:8; Pss 12:5; 34:6; 41:1; Prov 19:17; Prov 28:27; Gal 2:10; Jas 2:5.

[23] Thomas Sowell, *A Conflict of Visions: Ideological Origins of Political Struggles* (New York: Basic Books, 2007).

[24] Gen 1:28.

[25] Rom 8:19, 22.

[26] Nancy Pearcey, *Total Truth: Liberating Christianity from Its Cultural Captivity* (Wheaton, IL: Crossway, 2004), 47.

[27] Gen 1:31.

[28] Douglas W. Allen, *Economic Literacy: A Different Approach to Economic Principles*, custom ed. (New York: Pearson, 2017), 4.

[29] Alfred Marshall, *Principles of Economics*, vol. 1 (London: Macmillan and Co., 1890), 1.

[30]"Obituary: Hazel Henderson, 1933–2022," Green Economy Coalition, May 25, 2022, https://www.greeneconomycoalition.org/news-and-resources/obituary-hazel-henderson-1933–2022.

[31] Francis A. Schaeffer, *How Should We Then Live? The Rise and Decline of Western Thought and Culture* (Wheaton: Crossway, 2022).

[32] John 21:21.

[33] John 21:22.

[34] 1 John 4:19.

[35] John Piper, *Don't Waste Your Life* (Wheaton, IL: Crossway, 2018), https://document.desiringgod.org/don-t-waste-your-life-en.pdf?ts=1642086957.

[36] C. S. Lewis, *Mere Christianity* (New York: Macmillan, 1943), 33.

1

They Feast on the Abundance of Your House

Hobbesian Horrors and Walmart Wonders

The rich got rich through economic growth, and the poor didn't become *poor at all, but rather* remained *poor because of an absence of economic growth.* Dan Moller[1]

The much-maligned "capitalism" has raised the real income per person of the poorest since 1800 not by 10 percent or 100 percent, but by over 3,000 percent. Deirdre McCloskey[2]

Joan of Arc, Beethoven, and the Sun King Walk into a Walmart

Have you ever felt like the fate of the world was riding on one assignment?[3]

In the 1989 comedy *Bill and Ted's Excellent Adventure*, high school students Bill S. Preston (Alex Winter) and Ted Logan (Keanu Reeves) didn't know it, but the fate of the world *was* riding on their report. Their mission: to describe how historical figures would think of life in 1980s San Dimas, California. Their problem: they were terrible students without a clue. If they failed, Ted would be sent to an Alaskan military school, and their band Wyld Stallyns would never make the music that created a future utopia.

Fortunately, a time traveler from 2688 arrived to help. Bill and Ted traveled through history, picking up Billy the Kid, Socrates, Sigmund Freud, Genghis Khan, Joan of Arc, Napoleon Bonaparte, Ludwig van Beethoven, and Abraham Lincoln. These befuddled icons visited a water park, ice cream parlor, bowling alley, and mall before appearing as part of Bill and Ted's report. The future was saved.

If we got this assignment, we would take this crew to a Walmart Supercenter.[4] We can't take *them*, of course, but we can take *you.* This chapter will document the "facts of flourishing" and set the stage for subsequent chapters. So, let's grab a cart and go shopping.[5]

In our opinion, Walmart is the poster child for what legendary twentieth-century economist Joseph Schumpeter called the "capitalist achievement" of improving goods at falling prices.[6] The largest private employer in history welcomes any and all into a brightly lit, air-conditioned palace stocked from floor to ceiling with food, clothing, office supplies, garden implements, electronics, books, exotic fruits, furniture, sporting goods, and much more that even our ancestors' rulers could not have imagined. *Save money, live better.*

The goods don't tell the whole story, however. The mega-store is remarkable for its clientele. Walmart is a palace open to the peasantry. Walmart wonders are not only available to powdered lords, Party members, or ostentatiously coiffed Capitol residents. Walmart's customers are overwhelmingly ordinary people of underwhelmingly modest means. At Walmart, they can exchange the fruit of a few hours' labor for a shopping-cart-sized cornucopia.

A 1979 episode of the game show *The Price Is Right* displayed a microwave oven with a retail price of $499—roughly $2,000 in today's money. Today, you can get a much better microwave from Walmart, Target, or Amazon for under $100. You don't even have to go to the store. With a few flicks of your thumb, a microwave will arrive on your porch tomorrow. If this is the much-maligned "late-stage capitalism," then sign us up.

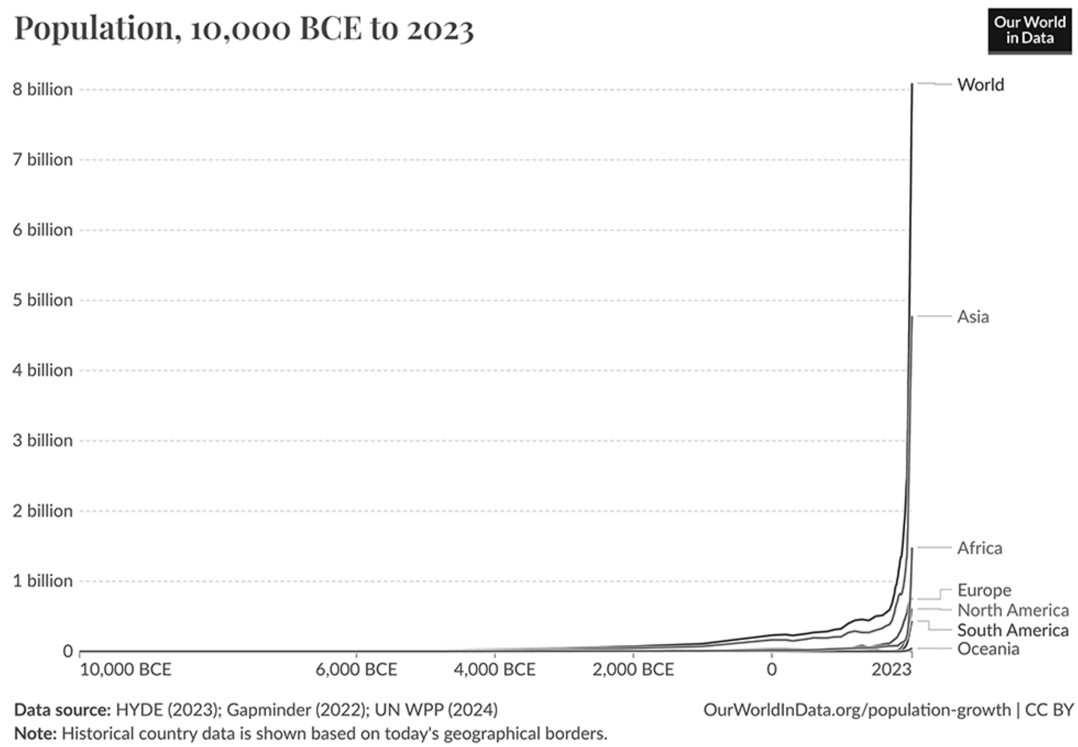
The difference between "then" and "now" is astounding. The English philosopher Thomas Hobbes (1588–1679) described our ancestors' lives in the hypothetical stateless "state of nature" as "solitary, poor, nasty, brutish, and short."[7] People fight "a war of all against all" in the Hobbesian jungle, where people's rights to their possessions and persons are not secure. Hobbes got much wrong. For one, his governments often make life nastier (chapter 12), and people have sometimes escaped Hobbesian horrors without the creation of a state. Still, Hobbes's adjectives are colorful and analytically useful for describing our ancestors' plight. Things started changing mightily in Northwest Europe about two and half centuries ago, with the improvements having since gone global. The data tell a compelling story about lives that are no longer solitary, poor, nasty, brutish, and short but connected, rich, clean, peaceful, and long.

Solitary?

We haven't "filled and subdued" the earth yet, but life with 8 billion neighbors is less solitary.[8] Our ancestors knew very few people and rarely ventured beyond their villages. Jesus didn't go far. The five-day walk from Jerusalem to Nazareth is a two-hour car ride today, and travel time from one side of the world to the other is measured in hours rather than months. You can converse with people from every tribe and tongue and nation online in real time.[9]

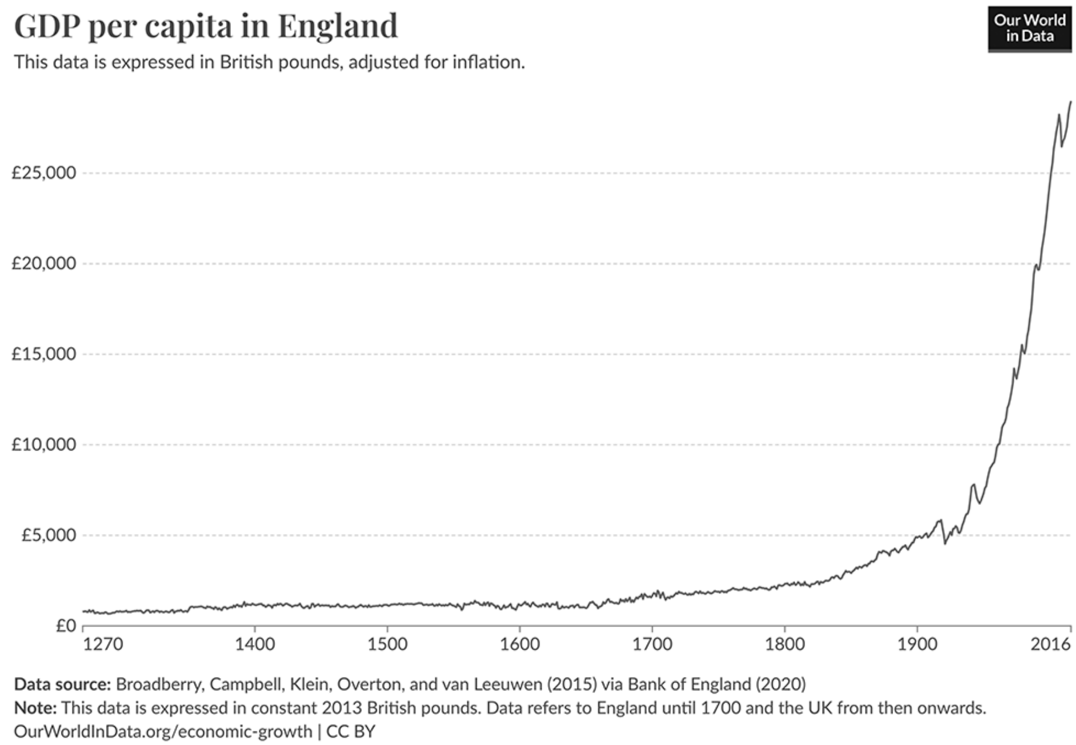
Poor?

But we *must* be much poorer with all these new people, right? Estimates from Great Britain going back eight centuries suggest things didn't change much for eons, but then average income per person in the United Kingdom has increased about thirty-fold since the 1700s. Two weeks' income now equals a year's worth in the not-too-distant past.[10] Global historical estimates of per capita gross domestic product since 1820 show where the action is. The increases in western Europe and its overseas offshoots (the US, Canada, Australia, and New Zealand) have been most remarkable—so remarkable that they obscure the not-much-less remarkable growth in the rest of the world. Even in sub-Saharan Africa, per capita income has roughly tripled.



"Data Page: Population," part of the following publication: Hannah Ritchie, Lucas Rodés-Guirao, Edouard Mathieu, Marcel Gerber, Esteban Ortiz-Ospina, Joe Hasell, and Max Roser, "Population Growth," Our World in Data, 2023, https://ourworldindata.org/population-growth. Data adapted from PBL Netherlands Environmental Assessment Agency, Gapminder, United Nations, https://ourworldindata.org/grapher/population.

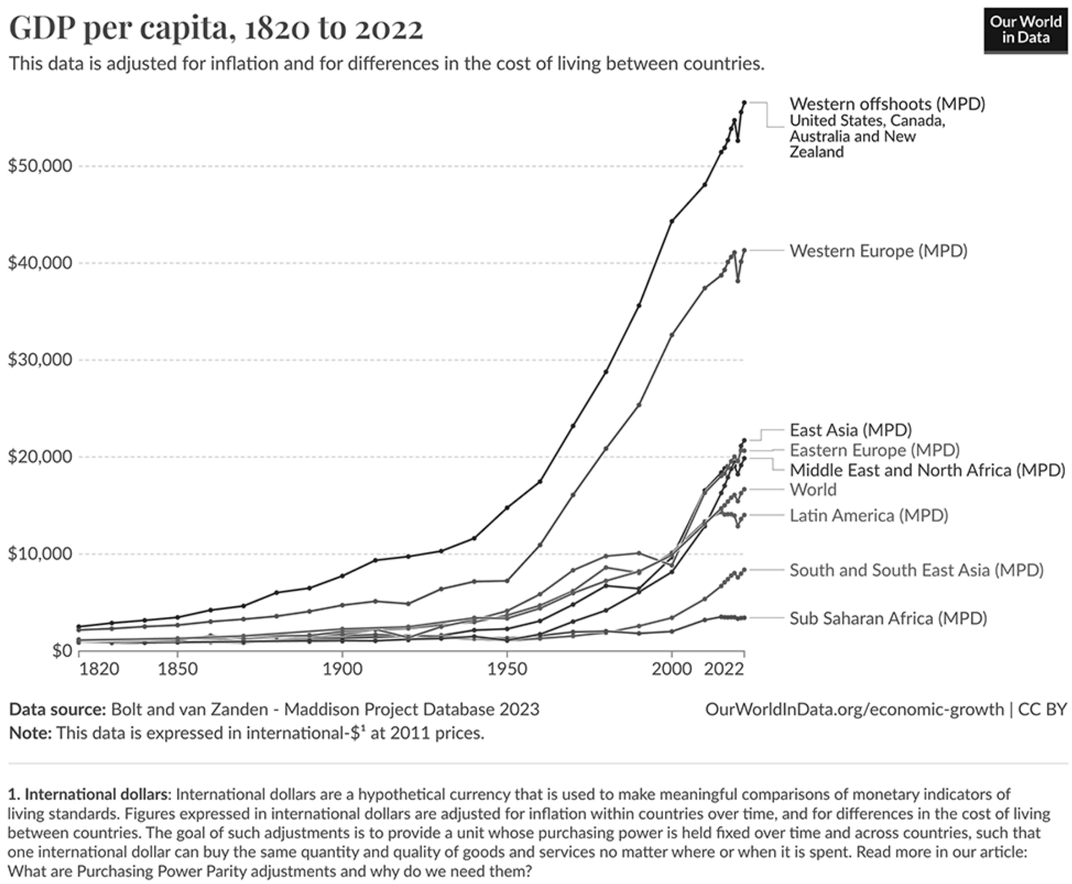
Spreading prosperity has not been confined to a few islands in Northwest Europe. About four in five people worldwide lived in extreme poverty 200 years ago, and the fifth guy was poor by today's standards. Today, it's about one in ten in a population eight times larger. The actual number of people—not just the share of the population—living in extreme poverty has declined in our lifetimes. Between 1950 and 2019—a period shorter than US life expectancy—average inflation-adjusted per-person US income quadrupled, from $15,183 to $62,589.[11] Methuselah saw less economic progress in his 969 years than moderns see in a decade.[12]



Max Roser and Estaban Ortiz-Ospina, "GDP per capita in England," Our World in Data, August 13, 2024, https://ourworldindata.org/grapher/gdp-per-capita-in-the-uk-since-1270.

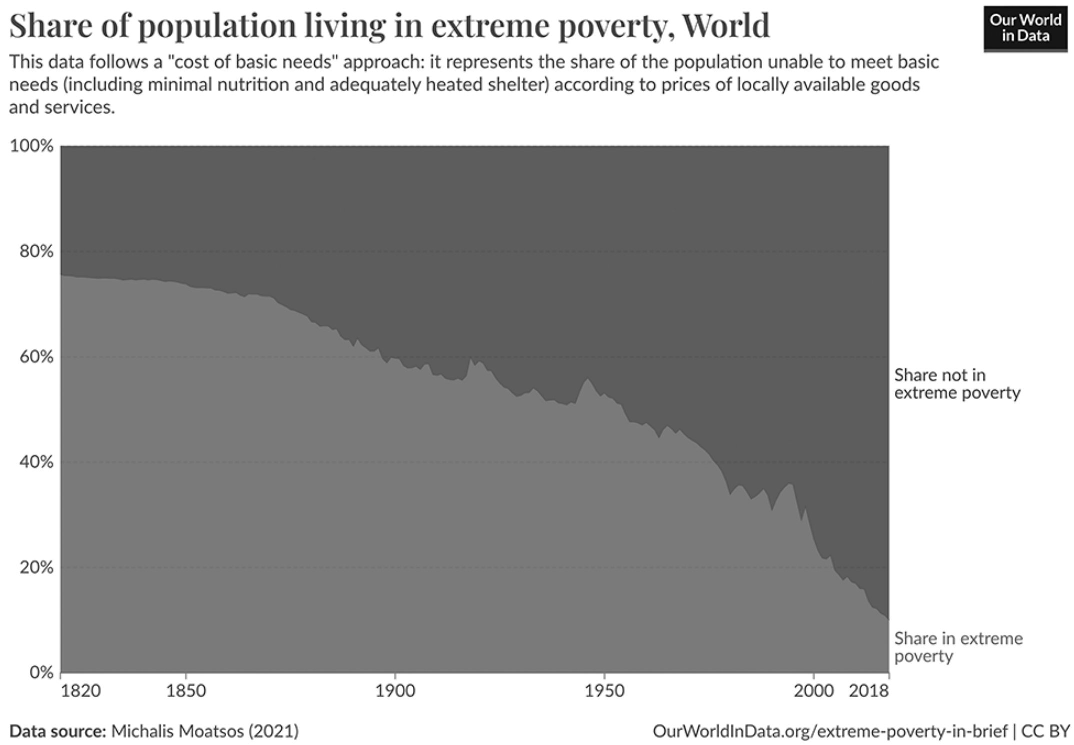
Worldwide, people put in fewer hours for these higher incomes. Industrial workers in Western European countries and the United States used to work an astonishing average of more than 3,000 hours annually. Now? In hard-working Germany, the 2017 average was 1,354 hours.[13] The upshot: more time for friendship, spiritual pursuits, family, and leisure. Whether we use our new time for these noble pursuits is a separate question.

Time cost—the amount of time the average person must work to afford something—has plummeted worldwide. An American worker buying a twenty-five-inch color TV in 1980 would have required, on average, 68 hours of work. A much better TV in 2022 took 4.4 hours.[14] Similar jaw-droppers exist for washers, dryers, ovens, clothing, tools, exercise equipment, and food. In India, the time cost of daily rice fell from 7 hours in 1960 to less than 1 hour today. In Indiana, it has fallen from 1 hour to 7.5 minutes.[15] Notice too that the gains going to the relatively poor (Indians, 6 hours) are far larger in absolute terms than those accruing to the relatively wealthy (Indianans, 52.5 minutes).



"Data Page: GDP per capita", part of the following publication: Max Roser, Pablo Arriagada, Joe Hasell, Hannah Ritchie, and Esteban Ortiz-Ospina, "Economic Growth," Our World in Data, 2023, http://ourworldindata.org/economic-growth. Data adapted from Bolt and van Zanden, https://ourworldindata.org/grapher/gdp-per-capita-maddison.

These massive gains mean today's American or European has three first-world problems: obesity (too much food, not too little), clutter (too many possessions, not too few), and packed calendars (too many opportunities to connect, not unending stretches of isolation).[16] What's more, these gains are spreading around the world. If he were writing it today, Ronald Sider would have to title his book *Rich Christians in an Age of Obesity*.

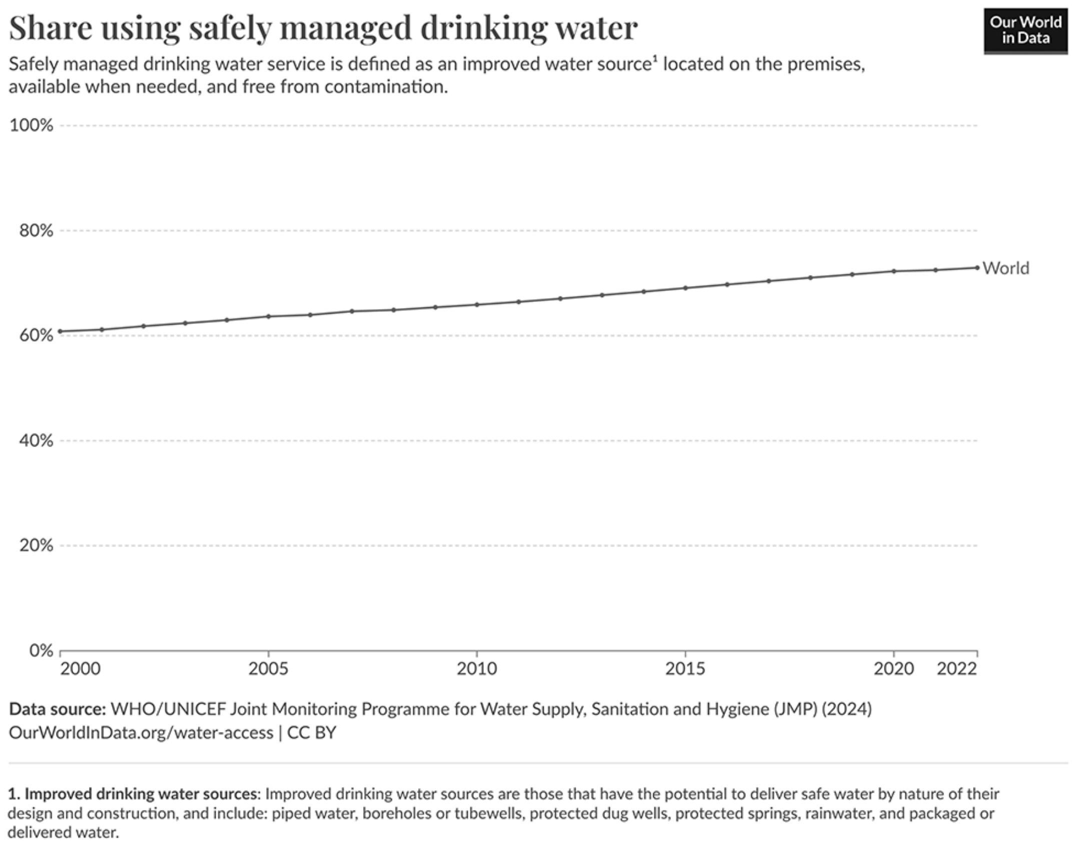


“Data Page: Share of Population Living in Extreme Poverty, World,” part of the following publication: Max Roser, Pablo Arriagada, Joe Hasell, Hannah Ritchie, and Esteban Ortiz-Ospina, “Economic Growth,” Our World in Data, 2023, http://ourworldindata.org/extreme-poverty-in-brief. Data adapted from Michalis Moatsos, https://ourworldindata.org/grapher/share-of-population-living-in-extreme-poverty-cost-of-basic-needs.

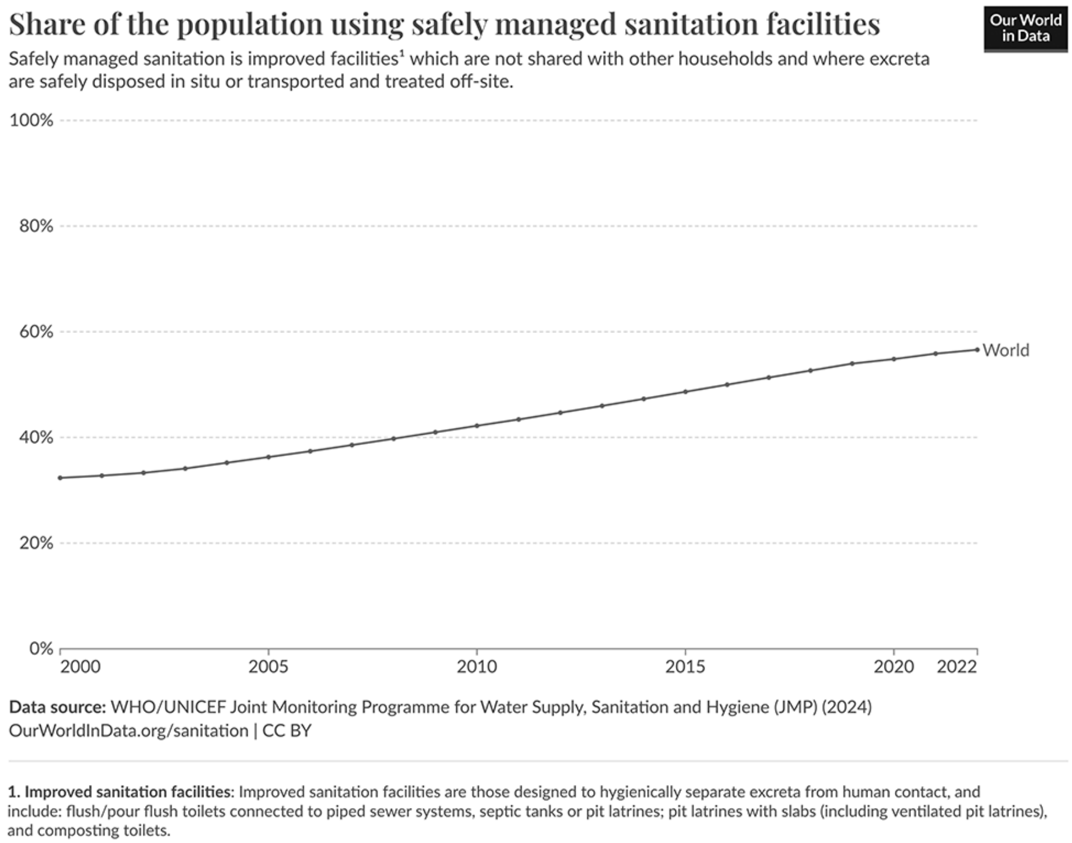
Superabundance is everywhere.[17] You may see a homeless person with a smartphone in your local park. In housing projects, clotheslines are unused and many units have DirecTV. We wouldn’t care as much about the “Great Enrichment” if it only helped the wealthy, but the Walmart-shopping poor have gained the most.[18] Truly, our cart runneth over.

Nasty?

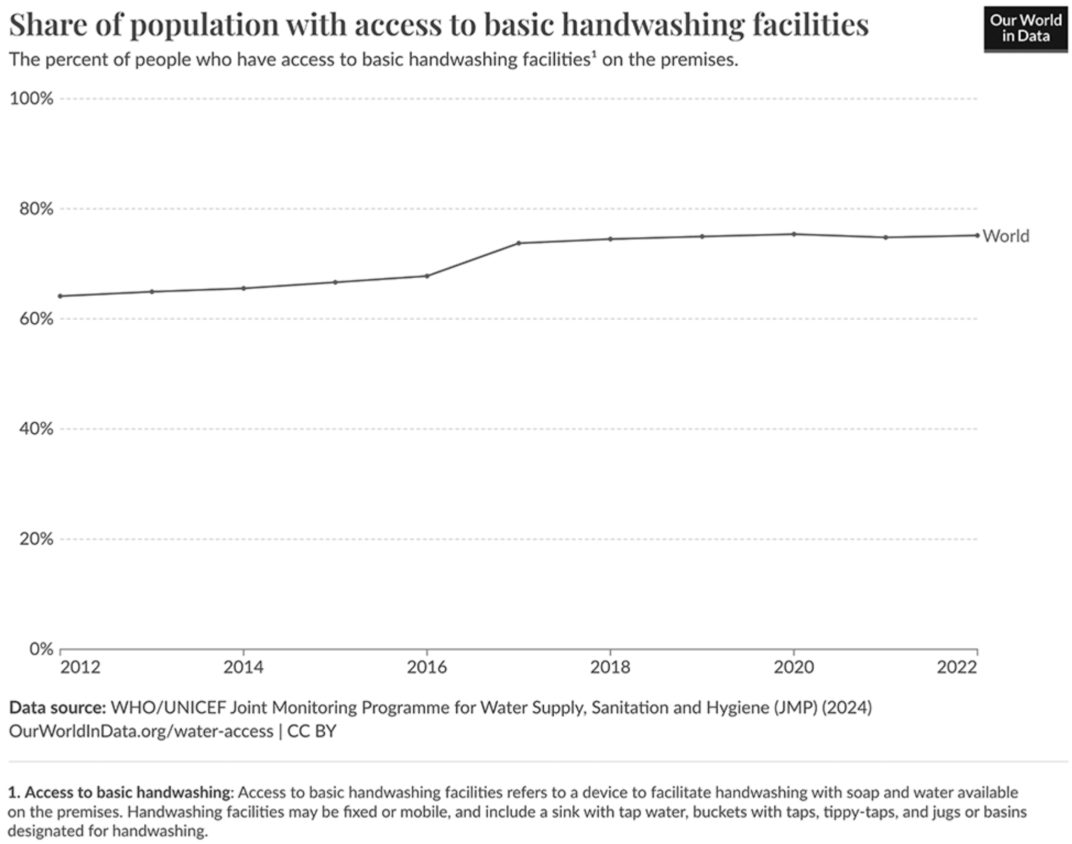
Life today is cleaner than it has ever been. Garbage trucks and indoor plumbing whisk waste away.[19] We bathe regularly instead of mucking about in our own filth for months at a time, and our closets overflow with clean clothes.[20] We use clean tools and clean electricity or natural gas to cook in cleaner kitchens than our ancestors could have imagined. While we might try to avoid Walmart bathrooms whenever possible, that is only because our standards have changed. Data on safely managed drinking water sources, safely managed sanitation, and handwashing facilities show steady improvements over the last two decades.



Hannah Ritchie, Fiona Spooner, and Max Roser, "Clean Water," Our World in Data, 2019, https://ourworldindata.org/clean-water.



"Data Page: Share of the population using safely managed sanitation facilities," part of the following publication: Hannah Ritchie, Fiona Spooner and Max Roser, "Clean Water and Sanitation," 2021. Data adapted from WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP), https://ourworldindata.org/grapher/share-using-safely-managed-sanitation.



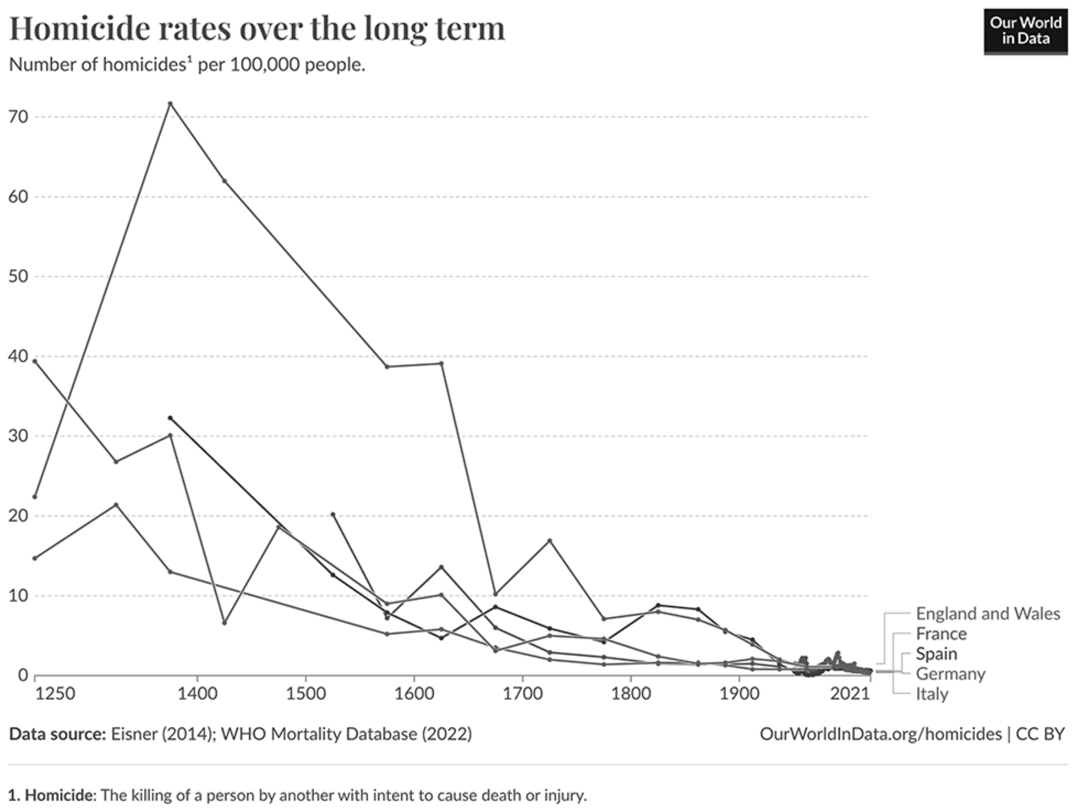
"Data Page: Share of population with access to basic handwashing facilities," part of the following publication: Hannah Ritchie, Fiona Spooner, and Max Roser, "Hygiene and Handwashing," Our World In Data, 2021, https://ourworldindata.org/hygiene.

Brutish?

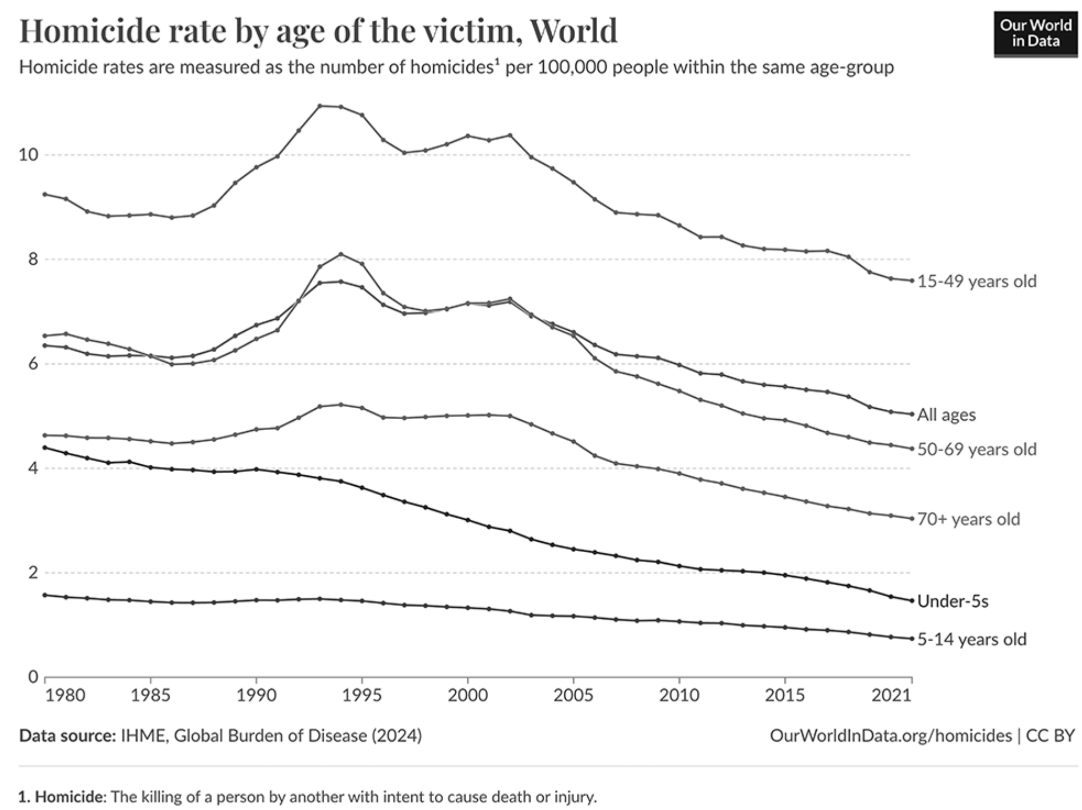
Homicide rates in European countries have fallen steadily over the last millennium, and despite the popular view that the world has never been more dangerous, the world's homicide rate has fallen in our lifetimes. Today, we get our brutal thrills vicariously through spectator sports, and worldwide, you're less likely than ever to die at someone else's hands. Journalists took to the internet with articles lamenting football's violence after the Buffalo Bills' Damar Hamlin nearly died on the field on January 2, 2023. But we'll take football's vicarious war over actual war every time.

Short?

Again, no. Today's poor countries feature longer life expectancies than rich countries did on the eve of industrialization. Boxer George Foreman named each of his five sons "George," and people laughed at the quirk. Parents in the Middle Ages named each of their five sons "John" because only one or two would reach adulthood. No one was laughing.



"Data Page: Homicide rates over the long term," part of the following publication: Bastian Herre, Fiona Spooner, and Max Roser, "Homicides," Our World in Data, 2024, https://ourworldindata.org/homicides. Data adapted from Eisner (2014) and WHO Mortality Database (2024), https://ourworldindata.org/grapher/homicide-rates-across-western-europe.

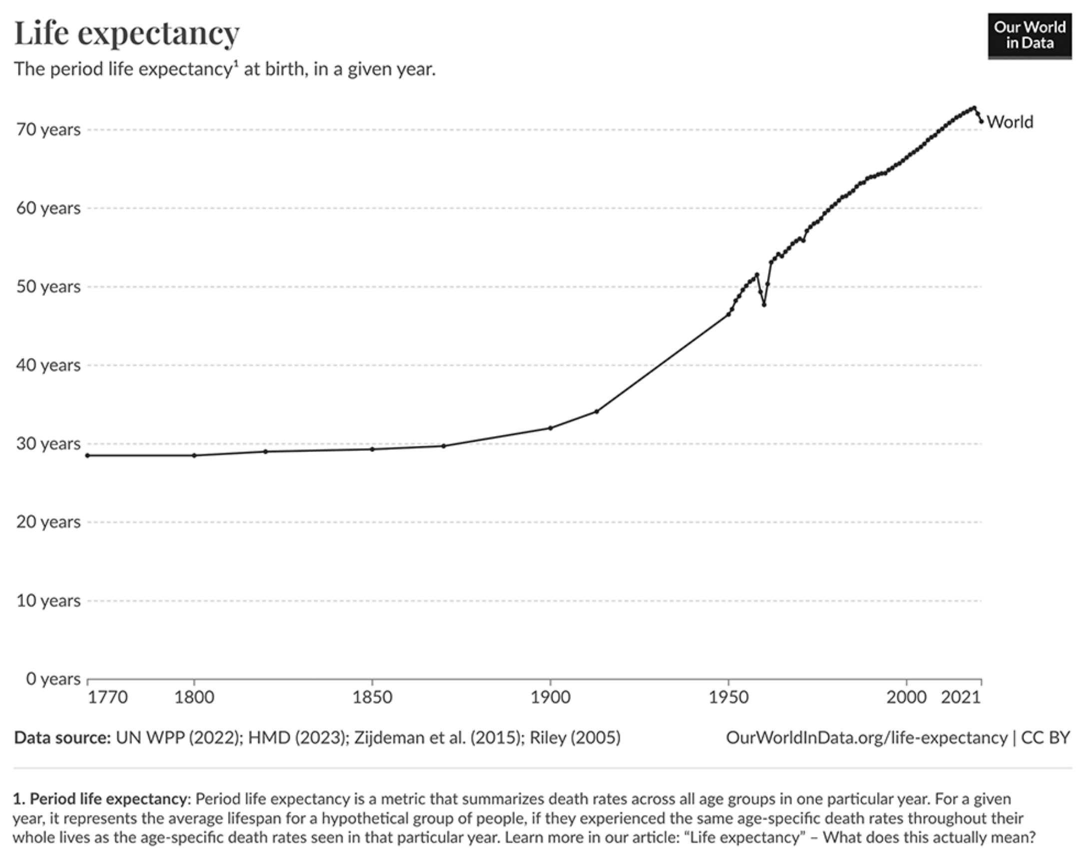


"Data Page: Homicide rate for 15- to 49-year olds," part of the following publication: Esteban Ortiz-Ospina and Max Roser, "Global Health," Our World in Data, 2016, http://ourworldindata.org/homicides. Data adapted from IHME, Global Burden of Disease, https://ourworldindata.org/grapher/homicide-rate-in-15--to-49-year-olds.

Life expectancy at birth in England and France in 1800 was about 40 years, half of what it is today in the United States, England, and Japan. Even in low-income countries like Nigeria, life expectancy is over 60. Economics Nobel laureate Angus Deaton writes, "A white, middle-class girl born in affluent America today has a 50–50 chance of making it to 100. This is a remarkable change from the situation of her great grandmother, born in 1910, say, who had a life expectancy at birth of 54 years."[21] Global average life expectancy rose from 52.6 to 72.4 years between 1960 and 2017.[22] Child mortality has also plummeted worldwide. Statistician Hans Rosling notes that in 1960, 242 out of every 1,000 children born in Saudi Arabia would die a child. In the blink of an eye—thirty-three years—that figure dropped to 35 out of 1,000, roughly an 85 percent decrease in a single generation.[23] Of course, all people of goodwill want the number to be zero, but wanting something and effecting something are not the same.[24]

Life today is far, *far* better than life has ever been, and this is true for almost everyone.[25] If you don't believe us, go to the website *Our World in Data* and refute us.[26] We will be in your debt.

Whereas the average American takes Walmart for granted, France's so-called Sun King, Louis XIV (1638–1715), would have been dumbstruck by what Walmart offers. He had legions of servants and lived in the magnificent Palace of Versailles. Enviable? Not after you consider what he didn't have: antibiotics, lightbulbs, painkillers, airplanes, modern toilet paper, modern dentistry, endless consumer goods, and the internet.[27] "Kings and queens lived under conditions that were better than average," observes philosopher Dan Moller, "but ones that we would nevertheless view as unbearable by contemporary standards."[28]



"Data Page: Life expectancy," part of the following publication: Saloni Dattani, Lucas Rodés-Guirao, Hannah Ritchie, Esteban Ortiz-Ospina, and Max Roser, "Life Expectancy," Our World in Data, 2023, https://ourworldindata.org/life-expectancy.

Yet, importantly, we're not primarily interested in royals like Louis the Sun King.[29] No. We want to know how billions of descendants of ground-scratching peasants, slaves, and factory girls can pick from 142,000 items at a Walmart Supercenter or 400 million units in inventory from Walmart.com.[30] We want to know how we all came to live better than the Sun King. *That* is "the capitalist achievement." As the economist Joseph Schumpeter put it:

> There are no doubt some things available to the modern workman that Louis XIV himself would have been delighted to have yet was unable to have—modern dentistry for instance. On the whole, however, a budget on that level had little that really mattered to gain from capitalist achievement. Even speed of traveling may be assumed to have been a minor consideration for so very dignified a gentleman. Electric lighting is no great boon to anyone who has money enough to buy a sufficient number of candles and pay servants to attend to them. It is the cheap cloth, the cheap cotton and rayon fabric, boots, motorcars, and so on that are the typical achievements of capitalist production, and not as a rule improvements that would mean much to the rich man. Queen Elizabeth owned silk stockings. The capitalist achievement does not typically consist in providing more silk stockings for queens but in bringing them within the reach of factory girls in return for steadily decreasing amounts of effort.[31]

Progress continues. Schumpeter wrote in the dark years of World War II, arguably Western civilization's nadir, but the wealth explosion was obvious even then. "Good Things in Life Up a Gazillion Percent" is a headline you haven't seen but should have.

The West and the Rest

"But," some object, "surely, the West got this way by impoverishing the Rest!"[32] If you keep up with current events, you might have heard that we owe modern prosperity to long legacies of cruelty, oppression, and exploitation. High standards of living in the West, it is said, descend from an unholy trinity of slavery, imperialism, and colonialism.

So goes a popular and emotionally wrenching attempt at explaining the Progress Puzzle. But it's a fantasy. As historian Niall Ferguson puts it, imperialism was "the least original thing Europeans did after 1492."[33] And if slavery leads to widespread economic progress, then the Great Enrichment would have happened thousands of years before it did, and it would have happened somewhere other than Northwestern Europe and its overseas extensions. Portugal and Brazil, not England and the United States, would have been the great industrial powers of the last two and a half centuries. Regions where slavery existed recently would be the world's biggest economic winners, but they're so obviously not. Mauritania didn't abolish slavery until 1981, but we've never heard of anyone planning to move to its prosperous shores. In fact, it is one of the poorest countries in the world precisely because we can't create prosperity with brutality.

That's not to say people didn't try. Revolutionary movements have tried to create economic progress through widespread theft and slaughter with miserable results. In the 1970s, revolutionary economic change for the poor happened with Walmart in Bentonville, Arkansas, not in the killing fields of Cambodia.[34]

Exploitation didn't do it. Rather, the world was Greatly Enriched by *rules* that protected private property and by changing *rhetoric* that honored the merchants, managers, entrepreneurs, and innovators people had formerly disdained. "Innovation" went from meaning "heretical readings of Scripture" to "introducing new and better ways of doing things." Our ancestors embraced hierarchy and stability. In the 2020s, everyone wants to be a "disruptor."

These rules and rhetoric in turn emerged from a complex interplay of various social forces. First, reading material poured forth from difficult-to-censor presses in a politically fragmented Europe. “Political fragmentation” sounds negative, but it actually meant that no sovereign had the power to tax his people into the ground, which gave commercial enterprise room to breathe.[35] Reformation of the church and our understanding about the relationship between God and humanity changed to grant more dignity and agency to the everyman. Revolt by the Dutch against the Spanish decapitated (literally?) the Dutch nobility and left the merchants to rule the bourgeois towns. Finally, Revolution in England (1688), the United States (1776), and France (1789) changed our political relationships. Did we get it perfect? No, but we did better than before, and it was enough to create a world where nearly everyone has “First World Problems” like obesity, clutter and FOMO (“fear of missing out”).[36]

Fuller recently talked with someone who challenged him that “humans weren’t ready for this level of wealth.” Wealth means new problems, including new spiritual problems, but who among us would choose our ancestors’ travails over our own? Which of us would forsake superabundance to live a medieval peasant’s short, dirty, disease-ridden, and isolated life? These aren’t hypothetical questions. Our ancestors’ lives are waiting in the wilderness and the desert. Lamentations notwithstanding, almost everyone opts enthusiastically for the wealth for which we are allegedly “not ready.”

But were people in the past more virtuous than we are? Surveying history and its expansive account of prodigal, profligate domination it’s hard to say “yes.” True, the modern world is chock-full of atrocities no Christian should have trouble reciting. Guess what? So was the ancient world.

How Should We Then Live?

First, rejoice. If you are reading these sentences, your "lines have fallen in pleasant places."[37] Take a few moments to reflect on what you have inherited. Spend time in prayer thanking our good God for showering his children with good gifts.

Second, lament. Over 500 million people still live in grinding poverty. We write amid wars and rumors of wars. The 1,187 chapters (inclusive)between Genesis 4 and Revelation 22 testify to humanity's depravity and the misery it creates.

Third, zoom out and embrace hope. Whether 500 or 5,000 years ago, you would have almost certainly been an illiterate, ground-scratching peasant covered in scat and lice. But today, the poorest person living in Rome, Georgia, enjoys wonders the Roman Caesars could not have imagined. One-way tickets on a time machine to the past would not cost much. The past is a nice place to visit, but you wouldn't want to live there.[38]

Lastly, heed Scripture's admonition to "Get wisdom, and whatever you get, get insight."[39] Mere economics is insight's wellspring, and it helps us understand the world we're told to fill and subdue. Chapter 2 explains some economic essentials and errors, then chapters 3 through 8 explain cooperation's causes and consequences. Chapters 9 through 12 explore what happens when we obstruct cooperation. Chapter 13 revisits our magnificent economic inheritance in light of what the earlier chapters teach. Chapter 14 will urge you "further up and further in!"[40]

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[1] Dan Moller, "Justice and the Wealth of Nations," *Public Affairs Quarterly* 28, no. 2 (2014): 95.

[2] Deirdre N. McCloskey, *Why Liberalism Works: How True Liberal Values Produce a Freer, More Equal, Prosperous World for All* (New Haven, CT: Yale University Press, 2019), x.

[3] This section is adapted from Art Carden, "Bill and Ted Take Joan of Arc to Walmart," American Institute for Economic Research, May 29, 2023, https://www.aier.org/article/bill-ted-take-joan-of-arc-to-walmart/.

[4] Art Carden, "Retail Innovations in American Economic History," in *Routledge Handbook of Major Events in Economic History*, ed. Randall E. Parker and Robert Whaples (London: Routledge, 2013), 402–14; Art Carden and Charles Courtemanche, "The Evolution and Impact of the General Merchandise Sector," in *Handbook on the Economics of Retailing and Distribution*, ed. Emek Basker

(Cheltenham, UK: Edward Elgar, 2016), https://doi.org/10.4337/9781783477388.00028; Art Carden and Charles Courtemanche, "Wal-Mart, Leisure, and Culture," *Contemporary Economic Policy* 27, no. 4 (2009): 450–61; Art Carden, Charles Courtemanche, and Jeremy Meiners, "Walmart and Values: Painting the Town Red?," *Business and Politics* 11, no. 2 (August 2009): 1–16; Art Carden, Charles Courtemanche, and Jeremy Meiners, "Does Wal-Mart Reduce Social Capital?," *Public Choice* 138, no. 1–2 (January 2009): 109–36; Charles Courtemanche and Art Carden, "Supersizing Supercenters? The Impact of Walmart Supercenters on Body Mass Index and Obesity," *Journal of Urban Economics* 69, no. 2 (March 2011): 165–81; Charles Courtemanche and Art Carden, "Competing with Costco and Sam's Club: Warehouse Club Entry and Grocery Prices," *Southern Economic Journal* 80, no. 3 (2014): 565–85; Charles Courtemanche et al., "Do Walmart Supercenters Improve Food Security?," *Applied Economic Perspectives and Policy* 41, no. 2 (June 2019): 177–98, https://doi.org/10.1093/aepp/ppy023; Art Carden, Charles Courtemanche, and Reginald Harris, "The Vital Two: Retail Innovation by Sol Price and Sam Walton," *Essays in Economic and Business History* 40 (2022): 188–209.

[5] For an economist's perspective on why shopping carts get bigger, see Steven E. Landsburg, "Attack of the Giant Shopping Carts!!!," Slate, April 27, 2000, https://slate.com/culture/2000/04/attack-of-the-giant-shopping-carts.html.

[6] Joseph Schumpeter, *Capitalism, Socialism, and Democracy*, 3rd ed. (New York: Harper, 1950), 110.

[7] Thomas Hobbes, *Leviathan, or the Matter, Forme, & Power of a Common-Wealth Ecclesiastical and Civill* (The Green Dragon in St. Paul's Churchyard: Andrew Crooke, 1651; Urbana, IL: Project Gutenberg), https://www.gutenberg.org/files/3207/3207–h/3207–h.htm.

[8] See Gen 1:28 for the language of "filling" and "subduing."

[9] This chapter's charts come from the fantastic website http://ourworldindata.org. We recommend exploring the site to get a sense of just how much life in this vale of tears has recently improved.

[10] See the chart on page 19 showing English GDP per capita.

[11] Max Roser et al., "Economic Growth," Our World in Data, accessed January 31, 2024, https://ourworldindata.org/economic-growth.

[12] Gen 5:27.

[13] Charlie Giattino, Esteban Ortiz-Ospina, Max Roser, "Working Hours," Our World in Data, https://ourworldindata.org/working-hours#are-we-working-more-than-ever.

[14] Timothy B. Lee, "24 Charts That Show We're (Mostly) Living Better Than Our Parents," Full Stack Economics, June 29, 2022, https://www.fullstackeconomics.com/p/24-charts-that-show-were-mostly-living-better-than-our-parents.

[15] Marian L. Tupy and Gale Lyle Pooley, *Superabundance: The Story of Population Growth, Innovation, and Human Flourishing on an Infinitely Bountiful Planet* (Washington, DC: Cato Institute, 2022), 17.

[16] Art Carden, "Too Much: Three First World Problems," American Institute for Economic Research, March 21, 2024, https://www.aier.org/article/too-much-three-first-world-problems/.

[17] Tupy and Pooley, *Superabundance*.

[18] Courtemanche et al., "Do Walmart Supercenters Improve Food Security?"

[19] See this link for the chart showing the percentage of the population with access to clean water: https://ourworldindata.org/grapher/share-using-safely-managed-sanitation.

[20] Donald J. Boudreaux, "Capitalism Is Cleaning the World Every Single Day," American Institute for Economic Research, April 22, 2019, https://www.aier.org/article/capitalism-is-cleaning-the-world-every-single-day/.

[21] Angus Deaton, *The Great Escape: Health, Wealth, and the Origins of Inequality* (Princeton: Princeton University Press, 2013), 24.

[22] Tupy and Pooley, *Superabundance*, 289.

[23] Hans Rosling, Ola Rosling, and Anna Rosling Rönnlund, *Factfulness: Ten Reasons We're Wrong about the World—and Why Things Are Better Than You Think* (New York: Flatiron Books, 2018), 17–20.

[24] See this link for the chart showing the increase in life expectancy: https://ourworldindata.org/life-expectancy.

[25] Rosling, Rosling, and Rönnlund, *Factfulness*; Tupy and Pooley, *Superabundance*.

[26] Here is the link: https://ourworldindata.org/.

[27] Government did invent the internet. But capitalism made it great. See Peter G. Klein, "Government Did Invent the Internet, but the Market Made It Glorious," Ludwig von Mises Institute, June 8, 2006, https://mises.org/library/government-did-invent-internet-market-made-it-glorious.

[28] Moller, "Justice."

[29] Art Carden, Sarah Estelle, and Anne Bradley, "We'll Never Be Royals, but That Doesn't Matter," *Independent Review* 22, no. 1 (2017): 83–92.

[30] Jena Warburton, "Walmart Might Stop Selling a Popular Product from This Beloved Brand," TheStreet, October 16, 2023, https://www.thestreet.com/retail/walmart-might-stop-selling-a-popular-product-from-this-beloved-brand.

[31] Schumpeter, *Capitalism, Socialism, and Democracy*, 67.

[32] The following discussion follows Deirdre N. McCloskey and Art Carden, *Leave Me Alone and I'll Make You Rich: How the Bourgeois Deal Enriched the World* (Chicago: The University of Chicago Press, 2020), particularly 95, 171. Also, see Nathan Rosenberg and L. E. Birdzell Jr., *How the West Grew Rich: The Economic Transformation of the Industrial World* (New York: Basic Books, 2008).

[33] Niall Ferguson, "The 6 Killer Apps of Prosperity," filmed September 19, 2011, TED video, https://www.youtube.com/watch?v=xpnFeyMGUs8.

[34] R. J. Rummel, *Death By Government* (New Brunswick, NJ: Transaction Publishers, 1997), 166–76; Niemietz, *Socialism*.

[35] Ralph Raico, "The Theory of Economic Development and the 'European Miracle,'" in *The Collapse of Development Planning*, ed. Peter J. Boettke (New York: NYU Press, 1994), 37–58.

[36] Carden, "Too Much."

[37] Ps 16:6.

[38] Art Carden, "The Past Is a Nice Place to Visit. You Wouldn't Want to Live There," American Institute for Economic Research, July 18, 2019, https://www.aier.org/article/the-past-is-a-nice-place-to-visit-you-wouldnt-want-to-live-there/.

[39] Prov 4:7.

[40] C. S. Lewis, *The Last Battle* (New York: HarperCollins, 2005), 208.

2

Thinking about the Ordinary Business of Life

Economic Essentials and Economic Errors

Here are a few of those fallacies, which do not cease to be fallacies simply because they become fashions. G.K. Chesterton[1]

Economics in Nine Lessons

How is chapter 1's abundance possible?[2] This chapter's economic essentials and economic errors help us understand, and they lead us to some surprising conclusions: if you want to help the "least of these," then you should oppose higher minimum wages because they take opportunities from low-skill workers and redistribute income from some poor people to other poor people.[3] If you want to "Make America Great Again," then you should oppose washing machine tariffs (taxes on imported goods) because they make Americans poorer: the 2018 tariffs cost American consumers $1.5 billion per year, or $815,000 per year for every new job created.[4] The economic essentials in this chapter can't tell us what to value, but they can help us think carefully—and the corresponding economic errors show us how fashionable fallacies are Instagram and TikTok gold but intellectual and moral lead that weighs down and poisons people.

Essential 1: Economics Is about Choosing

Jesus asked his disciples "whose image" is stamped on a Roman denarius.[5] "Caesar's," they replied. What is going on here? When Jesus queried his disciples, he certainly wasn't unaware of the answer (Caesar), nor was he teaching monetary theory or public economics. "Whose image is stamped on *you*?" Jesus rhetorically asks.

Bearing the divine image means we reflect (some of) God's attributes. Unlike beasts, we reason and resist our biological urges.[6] We are more than stomachs, and our desires are more than appetites. People *choose*. As C. S. Lewis notes, people have both an "intellect" (the mind) and a "chest" (disciplined emotions) that can overrule their instincts.[7] "Man not only lives," he writes, "but loves and reasons: biological life reaches its highest known level in him."[8]

Unlike the beasts, you have a choice to make. You might spend $100 on a wool coat or on 1,000 pencils. The operative word here is "or." You can't get both. Economics is involved even when money isn't: you can spend the next hour reading or napping but not both. Wherever you find choices, you will find economics and people using economics to understand those choices' intended and unintended consequences. The twentieth-century economics journalist Henry Hazlitt explained: "The art of economics consists in looking not merely at the immediate but at the longer effects of any act or policy; it consists in tracing the consequences of that policy not merely for one group but for all groups."[9]

You only buy a wool coat because you want to stay warm in the winter, but you help far-off shareholders enjoy secure retirements. Unintended consequences. You prosecute "price gougers" to help people after a natural disaster, but you create shortages and make things worse because people don't get the messages prices send. Unintended consequences.

Error 1: Economics Is Only about Money

Joe comes home from work and tells his wife he has been offered a promotion. It comes with a hefty raise, but he will need to travel more and be away from his young family. What does economics tell Joe to do?

Maria is trying to decide between attending Flyover State U and Prestigious U. Flyover State will cost $12,000 per year. Prestigious will cost $45,000 per year. What does economics tell Maria to do?

Rhonda is a state legislator trying to decide how to vote on a bill that would repeal the death penalty. Can the economic way of thinking help her?

DeJuan is a scholar trying to understand why fewer people are going to church. Can economics help him?

Many people might say "take the job," "go to Flyover State," "no," and "no," but they would be wrong. The real answers are "it doesn't tell Joe to do anything," "it doesn't tell Maria to do anything," "yes," and "yes." Economics does not tell you what to choose. It helps us think systematically and clearly about people's choices. You probably know a lot of people like Joe who turn down lucrative opportunities because they prefer more time with their families. As for Maria, there is more to choosing a college than the sticker price. Will Maria earn appreciably more after going to Prestigious than Flyover State? Will she get a better education? Have a more successful peer group? Have more fun? Economics, again, just highlights the tradeoffs.

While Rhonda and DeJuan are not making *financial* decisions (in that money is not directly involved), they have to think carefully about trade-offs. We'll say it again: economics applies to every choice. Want to understand why people commit crimes? Economics helps. Why people vote carelessly? Economics again (and see (chapter 12). Want to better grasp the inner workings of marriage and family life? Economics enriches our understanding of these holy institutions.

A father turning down a higher paycheck because he values more time with his family is making an "economic" decision. "Doesn't economics tell him to take the money and run?" No, it doesn't. When people reject economics because they think it spurns "human" or "transcendent" values in favor of monetary values or claim economics puts "profits before people," they're discarding useful tools and limiting their understanding. When Alfred Marshall calls economics "a study of man's actions in the ordinary business of life," he pithily captures the universality of economic reasoning.[10] The emphasis, of course, is on "life," not "business."

Essential 2: People Have Purposes

"Economists are a silly lot for thinking people act *rationally* or with *purpose*," your roommate says while heading toward the door. "In any event, it's raining, so I'd better take an umbrella."

Your roommate has just unwittingly illustrated what economists mean when we say "people have purposes" or "people are rational." It's simply that people choose means to achieve ends. End: stay dry. Means: grab an umbrella. That's all economists mean by "purposive" action and "rational" choice. People have goals and don't intentionally waste resources pursuing them. Swim trunks and beach towels are not on the list of recommended gear for Mount Everest expeditions, and we doubt many climbers waste scarce pack space on them.[11] "People have purposes" and "people are rational" don't mean people are "wise" or "smart." The fool in Proverbs is rational in the economic sense. He pursues women, riches, or pleasure the best way he knows how. Nobel laureate Ronald Coase puts it this way:

> "Whether men are rational or not in deciding to walk across a dangerous thoroughfare to reach a certain restaurant, we can be sure that fewer will do so the more dangerous it becomes. . . . Why a man will take a risk of being killed in order to obtain a sandwich is hidden from us even though we know that, if the risk is increased sufficiently, he will forego seeking that pleasure."[12]

People compare costs and benefits, defined in the broadest way possible, and choose whatever they think will net them the most, whether we're talking about money, warm fuzzy feelings, or time communing with God. People's purposes are their own. Furthermore, we infer what people value from their actions, not their words. Talk and tweets are cheap.

The things people value are called *goods*. People try to get *goods* that promote their goals and avoid *bads* that thwart them. A dead horse is a bad—unless you're laying siege to a castle and want to fling it over the parapet, in which case it's a good. Something is a good or a bad based on people's plans, not its composition per se.

We leave it to our friends in humanities departments to tell us which goods (and in what quantities!) facilitate human flourishing. We need no sophisticated analysis to condemn pornography, but maybe you should reread Aristotle's *Nicomachean Ethics* as you weigh your dietary choices. We're economists, so we'll try to stay focused on what economics does best: explaining how prices for goods like Bibles (you should probably read more) or romance novels (you should probably read fewer) arise and change and how changing prices change choices.

Error 2: People Are Irrational

Overcome with rage, Professor Plum grabs a candlestick from a nearby table and swings it as hard as he can. Mr. Boddy's lifeless form collapses on the library floor.

Surely such a crime of passion is "irrational," right? Not necessarily. Despite the connotations, economists don't use "rational" to describe cognition. As economists describe it, "rational choice" just says we do more of what we like and less of what we don't, all other things being equal. People from Cincinnati tend to be Cincinnati Reds fans for no better reason than because it's the hometown team, which seems "irrational." But that doesn't preclude us from saying people will want more Reds tickets at lower prices. By "rationality," economists just mean people try to achieve their goals as best they know how.[13] People's goals need not be praiseworthy, wise, or consistent with their proclaimed intentions. Even crimes of passion are rational in this sense: in a fit of rage, Professor Plum concocted a hastily chosen goal (*kill!*) and seized the "best" means at his immediate disposal (the candlestick). Economics just predicts that if we hold everything else constant, making murder more costly means fewer murders. The death penalty might not have stopped Professor Plum from killing Mr. Boddy, but it might have stopped his accomplice Colonel Mustard from killing the butler. And while economic logic and statistical evidence are informative, they are not decisive. They can identify trade-offs, but they cannot select among them. Economics, by itself, cannot determine whether a society should or shouldn't have the death penalty.

If all you mean by "irrational" is that we're all full of quirks that make us lovably human, then you're right. People are irrational. We often process information poorly, reason illogically, and use our truth-seeking organ to twist evidence to support what we *want* to believe rather than what is true.[14] People say they want to provide their children a safe, comfortable future and then blow their paychecks on lottery tickets and liquor.[15] Some people buy gin impulsively, irresponsibly, and sinfully, but that doesn't stop us from explaining that people will demand more gin and more orange juice if gin prices fall (chapter 5).

Essential 3: Every Choice Has a Cost

One evening, a group of economists were walking to dinner when they saw a line at Ben & Jerry's that stretched for what seemed like blocks. There was another ice cream parlor right next door, and it had a much shorter line. It didn't take long to figure out the difference. Ben & Jerry's was giving away free ice cream to promote a charity. The place with the shorter line wasn't. Hence, one line was very short whereas one line was very long.

Why were people *paying* for ice cream when Ben & Jerry's was giving it away? Simple: the free ice cream cost too much. They wouldn't have to pay money for it, but they would have to pay with time they could have spent working (to earn money now) or studying (to earn more later). Cost is the satisfaction you anticipate from your best alternative to whatever you choose. "My coat cost $100" means "I could have bought 1,000 pencils with what I spent on the coat, but I'm forgoing the satisfaction those pencils would have brought me." "Free" ice cream isn't: someone who values her time at $20 per hour "pays" $10 to wait in line for thirty minutes.[16]

Error 3: People Have Rights to Things That Should Be Free

"I can't believe what we're paying for college," your roommate observes between bites of pizza. "Wish the government would make it free." According to some "free education" advocates, education is a "human right." But one thing's for sure: free education is not free. In addition to the time someone spends getting an education, an institution's staff, buildings, and equipment must come from somewhere. The same is true of other things that people say should be "free," like health care, roads, childcare, and other things it would be nice to have in greater abundance. Calling something a "human right" or appealing to "justice" does not make its cost disappear. When a politician promises free stuff, they just mean "we will make someone else pay for it." Thomas Sowell puts it this way: "Things cost because other things could have been produced with the same time, effort, and material."[17] "No price" does not mean "no cost." It just means the cost is less explicit.

Essential 4: Incentives Affect People's Choices

Economist Steven Landsburg says economics can be summed up in four words: "People respond to incentives." "The rest," says Landsburg, "is commentary."[18] The "commentary"—applications and illustrations—could fill a well-stocked library. People line up for "free" ice cream. Overall, people drive less when gas prices rise. Some (maybe you!) don't switch to the bus or work from home when gas rises a few cents, but others do. Speaking of driving, economists know how to cut the pedestrian death toll: repeal seat belt laws. Research shows that requiring seat belts nudged some drivers toward a bit more recklessness. Pedestrians took the fall.[19] We also know how to cut traffic: charge people more for driving during peak hours.

Error 4: Changing People's Incentives Won't Change Their Choices

"That's ridiculous," your roommate huffs. "People aren't going to stop driving or going to church just because their incentives change a little bit. Anyway, I thought about going to get free ice cream at Ben & Jerry's, but I don't want to go back out in the rain."

Once again, your roommate illustrates the point we're making. Have you ever skipped church because of bad weather? People do more things that get cheaper and fewer things that get more expensive, holding everything else constant. People skimp on routine cleanings when the dentist is expensive. Tooth decay is more common in states where occupational licensing makes dentistry more expensive.[20]

"People will . . ." does not mean "people should . . ." and vice versa. An economist predicts that cheaper video games mean people will spend less time at church, all else constant. The economist isn't saying people *should* spend less time at church. He's pointing out that cheaper video games mean the cost of going to church in terms of gaming time sacrificed has risen. As something gets more expensive, people will do less of it (again, and crucially, holding everything else constant). If you still don't believe us, ask why women go to religious functions more often than men. Are they holier?[21] Maybe, but historically, men have given up more moneymaking opportunities whenever they participated in religious functions.[22] We think that's a better explanation.

Essential 5: People Make Incremental Choices

Steven and Amy are walking together on a moonlit night when Steven drops down on one knee. Amy's face flushes as Steven tells her he loves her and that their time together has been the best time of his life. He says he wants to spend the rest of his life with her and has bought her something precious to symbolize how much she means to him. "Amy," he whispers, "will you marry me?" He reaches into his pocket and pulls out a bottle of water.

This is . . . not likely to succeed. If you understand why, then you get what economists mean by "incremental" (aka "marginal") analysis. Choices are incremental and depend on incremental costs. Many things start to make sense once you grasp this—including the huge price gap between engagement rings and water. Insufficient water means death from dehydration, but water is so abundant in many places that we put it in balloons to throw at our friends. Another bottle of water just isn't that valuable to you most of the time. It's the law of marginal utility: Since you do the most important things first, the next unit goes to something a little less important. If you're thirsty, reach in the fridge for a can of sparkling water, and then drop it, you don't go thirsty because you're clumsy. You reach in again and grab one of the cans you were saving for later. If you want someone to marry you, then you should probably spring for something a little less common than a bottle of water, like a diamond ring.[23]

Error 5: Choices Are All or Nothing

A few hours later and still despondent after a crushing rejection, Steven sees a meme that shows a quote laid over a forest fire: "If you think the economy is more important than the *environment*, try holding your breath while counting your money." The person who said this makes the same mistake Steven did. Thinking about it as "the economy" *or* "the environment" misunderstands the problem. Incremental trade-offs matter; the relevant question is always, What are we willing to sacrifice for slightly cleaner air? Or, What do we have to give up to recycle this plastic jug? If you have to run your garbage through the dishwasher and set it out to be picked up by a loud, traffic-snarling, smoke-belching truck that will only dump it in a landfill anyway, recycling might not be worth it.[24] Mere economics helps us see folly masquerading as wisdom.

Essential 6: Trade Is Cooperation

When people trade, they work together even though they might not know (or care) about the other person's goals. Think about this the next time you're at a Walmart Supercenter. You get oranges. Where did you get the money? Maybe you work at a coffee shop where accountants hang out. Where did the accountants get the money they spent on the coffee? Maybe they audited Walmart's financial statements. Where did Walmart get the money to pay them? They got it by selling oranges to you. Everyone gets what they want: accountants get coffee, you get oranges, and Walmart gets audited financial statements.

And who or what is this thing we call "Walmart"? Walmart is everyone who owns Walmart stock, which might include institutional investors like Vanguard, employee pension funds like the California Public Employees Retirement System, the Harvard endowment, and Walmart employees who bought stock through employee stock purchase plans.[25] Expand the circle of cooperation just a little bit beyond Walmart to include farmers, ranchers, executives, janitors, construction workers, and many more and you see how you help an army of strangers get the food, clothing, and shelter they want. That's not bad when you just wanted oranges.

Error 6: Every Trade Has a Loser

"But what about people doing backbreaking work in far-flung orange groves for low wages? Surely you don't think *they* are better off, do you?" Your roommate is incredulous, but yes, we do. People say "no" to trades they don't think will improve their lot in life. Maybe they are starting in horrible circumstances and only trading their way to slightly less horrible circumstances, but "slightly less horrible" is still an improvement. Consider "sweatshops." So long as we're not thinking of outright slavery, people work in sweatshops because it beats the alternatives.[26] Christian economist Paul Heyne responded to trade critics this way: "What the critic is really saying is that sometimes people's opportunities are so poor that we should not—not what? That's the question: Not what? Not offer them somewhat better opportunities?"[27]

We might think people in this situation are being exploited like someone who trades his birthright for a bowl of stew because he is dying (is he, though?).[28] It is the circumstance and not the exchange that is objectionable, however, and stopping the exchange makes them worse off. You don't make someone better off by taking away their best option.[29]

Essential 7: Cooperating in Markets Is Costly; Governments Regularly Make It Costlier

Think about two things our parents tell us *never* to do: never get in a car with strangers, and don't take candy from strangers. Now think about two things people do millions of times a day. They *summon* strangers and get in their cars when they need to go places. At this very moment, someone somewhere is probably putting money in a vending machine placed by a stranger and filled with candy made by strangers.[30] Ride-sharing and candy companies have developed ways to overcome transaction costs, which are barriers to cooperation. Transaction costs come in three flavors. They are "triangulation" (finding trading partners), "transfer" (moving goods and processing payments), and "trust" (the cost of verifying the integrity of what's traded).[31]

Government regulations often make transaction costs higher by attaching conditions before people can cooperate. Joseph (a resident of the United States) might be willing to hire Jose (a resident of Mexico) to paint fences, but the US government requires that Joseph and Jose get permission first. Regardless of your position on whether the government ought to require Joseph and Jose to obtain permission, you should know that requiring permission destroys wealth. Joseph is poorer. So is Jose.

Error 7: Government Will Fix Society's Problems If We Get the Right People in Power

"I'm disappointed," your roommate muses. "My congressional representative promises so much but delivers so little. We should vote him out and replace him with someone who has *everyone's* interests in mind, not just his own." It's tempting to think that voting one group of bums out and another group of bums in will do the trick, but Adam Smith explained how people make bad policies because they face bad incentives, not because they are innately bad (though total depravity doesn't help). Government officials respond to incentives just like everyone else and must stay in office to get anything done. Many policies are political winners even though they create dysfunctional incentives. What's more, identifying a problem is not the same as identifying a solution.[32]

Essential 8: Profits Tell Businesses They Are Helping People; Losses Tell Businesses They Are Wasting Resources

A textbook describes the "art of business" as "identifying assets in lower-value uses and finding ways to profitably move them into higher-value uses."[33] Profits tell people they have produced more wealth. And more wealth means people achieve more goals. Similarly, losses show people they have reduced the amount of wealth available, so people can satisfy fewer goals. Profits aren't transfers from customers or workers to capitalists. They are new wealth that rewards entrepreneurs' good judgment.

There is an interesting implication here. Many claims like "we are going to run out of resources," "executives are focused on their company's short-run profits at the expense of its long-run viability," and "women are paid less than men for doing the same job" imply that there are practically unlimited amounts of money to be made acting on opportunities everyone else is missing. If you think we're running out of oil, go buy as much as you can and store it to sell at higher prices later, when other supplies are exhausted. The CEO doesn't maximize shareholder value? Borrow money, buy controlling interest in that CEO's company, and replace the CEO with someone who does. You can get exactly the same work for eighty-two cents on the dollar by hiring women? Fire all the men, replace them with women, and reap the enormous rewards. If your argument implies that people are overlooking hugely profitable opportunities, you're probably missing something.

Error 8: Businesses Profit by Exploiting People

"Never speak to me of profit," said Indian Prime Minister Jawaharlal Nehru to the industrialist J. R. D. Tata. "It is a dirty word."[34] We've met people who agree, but they overlook what profits do. Many think it is just an overcharge tacked on to production costs, but they're wrong. Profit rewards entrepreneurs who make sound judgments about the goods and services people want. Profits are informative but not decisive; they merely tell you what people value relative to all the alternatives. They don't tell you what they *should* value or that you're genuinely acting in someone's best spiritual interests when you serve them profitably. Nor do profits force you to do anything. "No" is always an option.

Essential 9: Choices Have Unintended Consequences

When the British ruled India (1858–1947), they tried to deal with the problem of cobras by offering bounties for snake tails. Enterprising natives started breeding cobras to sever their tails. The unintended consequence? More cobras. When the unintended consequence is the opposite of intentions, it's called the

"Cobra Effect"—an apt name given that Genesis 3 describes the serpent as the craftiest of creatures.[35]

When French colonizers of Vietnam had a rat problem, they put a bounty on rat tails, and the rat breeding began.[36] When well-meaning humanitarians started buying slaves' freedom, slave-catchers started enslaving more people so they could sell their freedom to the humanitarians.[37] In the early twentieth century, the Ottoman leader Jemal the Slaughterman—who earned the nickname by savagely executing political rivals—tried to get rid of a locust plague by requiring people over twelve to collect and turn in three kilograms of locust eggs. The result? "An absurd trade in locust eggs."[38] By requiring everyone to bring locust eggs for destruction, Jemal the Butcher encouraged people to create a market for them.

Pope Paul VI did not intend to change the price of fish, but that is what his 1966 document *Paenitemini* did anyway. *Paenitemini* granted Roman Catholics permission to eat meat year-round except on the six Lenten Fridays. Previously, meat consumption was forbidden for Roman Catholics on every Friday. As Roman Catholics began increasing their meat consumption en masse, their demand for fish (which had always been permitted) decreased substantially. World fish prices fell and the world fishing industry contracted.[39]

Error 9: If It's Bad for Someone, It's Bad for All

Every change makes at least someone worse off relative to a hypothetical alternative. Dunkin' loses customers and money if a Starbucks opens next door, but customers get more coffee and lower prices. Cheaper coffee means customers might be able to buy slightly nicer shoes or lend to someone who wants to build an apartment complex.

You can replace "bad" with "good" and make the same argument. People regularly justify a public policy by describing how it helps a highly visible group. However, just because something is good for one group doesn't mean it's good for everyone. Prohibiting new coffee shops in the neighborhood will be very good for people who own existing coffee shops, but less coffee and higher prices means coffee drinkers lose.[40]

How Should We Then Live?

Embrace this chapter's insights because they will increase your understanding of our Father's world.

First, only individual humans choose and act (essential 1). *Mere* economics begins from this point and develops its implications. Social phenomena emerge as unintended consequences of individual people pursuing their interests with references to their values and in response to their incentives (essential 9). As the 1986 winner of the Nobel Prize in Economics, James M. Buchanan, emphasized, economists are "methodological individualists" because the individual is the fundamental and irreducible unit of consciousness.[41] C. S. Lewis puts it this way: "You have never talked to a mere mortal. Nations, cultures, arts, and civilizations—these are mortal, and their life is to ours, as the life of a gnat. But it is immortals whom we joke with, work with, marry, snub, and exploit."[42]

Second, economic law is real. The natural sciences have Newton's universal law of gravitation, e, π, and others. The social sciences have scarcity (see essential 3, plus the rest of the book) and the law of demand (see chapter 5).

We must make our peace with these.

If you take nothing else from *Mere Economics,* we hope you recall that scarcity is unavoidable and that people do more of the things that get cheaper (essential 4 and error 4). They do less when the cost rises. This disarmingly simple idea has profound implications. Make it more costly for teenage workers to exchange with employers by passing a minimum wage? Fewer teens will work (chapter 9). The teens lose wages, their would-be employers lose profits, and we all lose some of the riches we went on about in chapter 1. Make cooperation more costly and you'll get less of it and less of everything else you want.

Speaking of what you want, a four-year-old daughter of Fuller's friend defines economics as "the study of how you can't always get what you want." It turns out that little Lia has cooked up a profound definition for our so-called dismal science. In chapter 3, we'll unpack her insight.

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[1] G. K. Chesterton, "Our Notebook," *Illustrated London News*, April 19, 1930, British Newspaper Archive.

[2] This chapter is adapted from Art Carden, "Economic Essentials and Economic Errors," American Institute for Economic Research, October 13, 2022, https://www.aier.org/article/economic-essentials-and-economic-errors/; with apologies to the great Henry Hazlitt: Henry Hazlitt, *Economics in One Lesson* (San Francisco: Laissez-Faire Books, 1996).

[3] Matt 25:40. Thomas MaCurdy, "How Effective Is the Minimum Wage at Supporting the Poor?," *Journal of Political Economy* 123, no. 2 (April 2015): 497–545, https://doi.org/10.1086/679626; David Neumark and Peter Shirley, "Myth or Measurement: What Does the New Minimum Wage Research Say about Minimum Wages and Job Loss in the United States?," *Industrial Relations: A Journal of Economy and Society* 61, no. 4 (October 2022): 384–417, https://doi.org/10.1111/irel.12306; David Neumark, "The Effects of Minimum Wages on (Almost) Everything? A Review of Recent Evidence on Health and Related Behaviors," *Labour* 38, no. 1 (March 2024): 1–65, https://doi.org/10.1111/labr.12263; Lee Ohanian, "California Loses Nearly 10,000 Fast-Food Jobs After $20 Minimum Wage Signed Last Fall," *Hoover Institution* (blog), April 24, 2024, https://www.hoover.org/research/california-loses-nearly-10000-fast-food-jobs-after-20-minimum-wage-signed-last-fall.

[4] Aaron Flaaen, Ali Hortaçsu, and Felix Tintelnot, "The Production Relocation and Price Effects of US Trade Policy: The Case of Washing Machines," *American Economic Review* 110, no. 7 (July 1, 2020): 2103–27, https://doi.org/10.1257/aer.20190611.

[5] Matt 22:15–22.

[6] Isa 1:18.

[7] C. S. Lewis, *The Abolition of Man* (Oxford: Oxford University Press, 1943), 169.

[8] C. S. Lewis, *Mere Christianity* (New York: Macmillan, 1943), 139.

[9] Hazlitt, *Economics in One Lesson*, 5.

[10] Alfred Marshall, *Principles of Economics*, vol. 1 (London: Macmillan, 1890), 1. The Liberty Fund version says "a study of mankind in the ordinary business of life" (https://oll.libertyfund.org/titles/marshall-principles-of-economics-8th-ed).

[11] Alpine Ascents International, "Everest Gear List," Alpine Ascents International, https://www.alpineascents.com/climbs/mount-everest/gear-list/.

[12] R. H. Coase, *The Firm, the Market, and the Law* (Chicago: University of Chicago Press, 1992).

[13] Israel M. Kirzner, *The Economic Point of View: An Essay in the History of Economic Thought*, ed. Laurence S. Moss, 2nd ed., Studies in Economic Theory (Kansas City, KS: Sheed and Ward, 1976); Vernon L. Smith, "Constructivist and Ecological Rationality in Economics," *American Economic Review* 93, no. 3 (2003): 465–508; Vernon L. Smith, *Rationality in Economics: Constructivist and Rational Forms* (Cambridge: Cambridge University Press, 2007); Peter J. Boettke

and Rosolino A. Candela, “Rational Choice as If the Choosers Were Human,” in *Handbook of Behavioral Economics and Smart Decision-Making: Rational Decision-Making within the Bounds of Reason*, ed. Morris Altman (Cheltenham, UK: Edward Elgar, 2017), 68–85.

[14] For a colorful tour through common errors and biases, see Rolf Dobelli, *The Art of Thinking Clearly* (New York: Harper, 2013).

[15] Prov 23:20–21.

[16] Yoram Barzel, “A Theory of Rationing by Waiting,” *Journal of Law and Economics* 17, no. 1 (1974): 73–95.

[17] Thomas Sowell, *Knowledge and Decisions* (New York: Basic Books, 1980), 80.

[18] Steven E. Landsburg, *The Armchair Economist* (New York: Free Press, 2012), 3.

[19] Sam Peltzman, “The Effects of Automobile Safety Regulation,” *Journal of Political Economy* 83, no. 4 (1975): 677–725.

[20] Sidney L. Carroll and Robert J. Gaston, “Occupational Restrictions and the Quality of Service Received: Some Evidence,” *Southern Economic Journal* 47, no. 4 (1981): 959–76.

[21] Please, don’t answer. It’s a rhetorical question.

[22] Robert J. Barro and Rachel McCleary, *The Wealth of Religions: The Political Economy of Believing and Belonging* (Princeton: Princeton University Press, 2019), 20. Even today, women generally outpace men in measurable expressions of religious fervor the world over. From the Pew Research Center, see https://www.pewresearch.org/religion/2016/03/22/the-gender-gap-in-religion-around-the-world/.

[23] Marriage customs weren’t always this way. See Margaret F. Brinig, “Rings and Promises,” *Journal of Law, Economics, and Organization* 6, no. 1 (1990): 203–15.

[24] Michael C. Munger, “Think Globally, Act Irrationally: Recycling,” Econlib, 2007, https://www.econlib.org/library/Columns/y2007/Mungerrecycling.html.

[25] We don’t actually know if any of these organizations own Walmart stock.

[26] Benjamin Powell, *Out of Poverty: Sweatshops in the Global Economy*, Cambridge Studies in Economics, Choice, and Society (New York: Cambridge University Press, 2014).

[27] Paul T. Heyne, *“Are Economists Basically Immoral?”: And Other Essays on Economics, Ethics, and Religion*, ed. Geoffrey Brennan and Anthony Michael C. Waterman (Indianapolis: Liberty Fund, 2008), 4.

[28] Gen 25:29–34.

[29] The economist David Henderson says this regularly. See also Michael C. Munger, “Euvoluntary or Not, Exchange Is Just,” *Social Philosophy and Policy* 28, no. 2 (2011): 192–211.

[30] Art Carden, *Strangers with Candy: Observations from the Ordinary Business of Life* (St. Louis: Libertarian Christian Institute, 2023).

[31] Michael C. Munger, *Tomorrow 3.0: Transaction Costs and the Sharing Economy* (New York: Cambridge University Press, 2018), Kindle loc. 314.

[32] Art Carden, “What Ought to Be If ‘There Ought to Be a Law’: Remembering Horwitz with Variations on Brennan and Freiman,” *Journal of Private Enterprise*, forthcoming.

[33] Luke M. Froeb et al., *Managerial Economics*, 5th ed. (Mason, OH: Cengage, 2017), 18.

[34] Amit Varma, “Profit’s No Longer a Dirty Word: The Transformation of India,” Econlib, February 4, 2008, https://www.econlib.org/library/Columns/y2008/Varmaprofit.html.

[35] David S. Lucas and Caleb S. Fuller, “Bounties, Grants, and Market-Making Entrepreneurship,” *Independent Review* 22, no. 4 (2018): 507–28.

[36] Michael G. Vann, “Of Rats, Rice, and Race: The Great Hanoi Rat Massacre, an Episode in French Colonial History,” *French Colonial History* 4, no. 1 (2003): 191–203, https://doi.org/10.1353/fch.2003.0027.

[37] Tyler Cowen and Alex Tabarrok, *Modern Principles of Economics* (New York: Worth, 2009), 65.

[38] Simon Sebag Montefiore, *Jerusalem: The Biography*, 1st American ed. (New York: Alfred A. Knopf, 2011), 617.

[39] Frederick W. Bell, "The Pope and the Price of Fish," *American Economic Review* 58, no. 5 (1968): 1346–50.

[40] If you do not want to see Carden summarize many of these essentials and errors while standing on one foot, then, whatever you do, most certainly do not visit this link: https://www.youtube.com/watch?v=tvJVhlNl1FA.

[41] See, for example, the discussion of methodological individualism in Buchanan's Nobel Prize acceptance speech: https://www.nobelprize.org/prizes/economic-sciences/1986/buchanan/lecture/. As he puts it, "Individuals themselves are the sources of evaluation, and the economist's task is to offer an explanation-understanding of the process through which these . . . preferences are ultimately translated into a complex outcome pattern."

[42] C. S. Lewis, *The Weight of Glory and Other Addresses*, 1st HarperCollins ed. [rev.] (San Francisco: HarperSanFrancisco, 2001), 46.

3

You Can't Always Get What You Want

Our Great Economic Problem

Cursed is the ground because of you. Gen 3:17

Houston, We Have a (Cherubim) Problem

The Rolling Stones, who sang "You Can't Always Get What You Want," agree with Lia. Essentially, getting the stuff we want will come only by the sweat of our brow. Worse still, many things we want are altogether unobtainable. Lia is clearly wise beyond her years. And—fun fact—Mick Jagger studied at the London School of Economics.

Four-year-olds and rock stars may be more interesting, but textbooks are more precise. A textbook describes the "Great Economic Problem" as the challenge of using our limited means to satisfy our unlimited wants as efficiently as possible (paraphrased).[1]

Here in chapter 3, we use chapter 2's essentials to dig deeper into chapter 1's facts of flourishing. After learning about scarcity, it seems remarkable that anyone anywhere is anything other than poor, sick, or dead. Think of this chapter, then, as the necessary "bad news" making the "good news" (of prosperity) taste so sweet. This chapter should also arouse your sense of wonder:

How did people ever leave the desert and find this land flowing with milk and honey?

The bad news first: scarcity is an unavoidable fact that sets the backdrop for virtually everything else in the human story. It shatters hopes and dreams. It's "why we can't have nice things." It creates conflict among brothers, whether genetic (Cain and Abel) or spiritual (Paul and Barnabas).[2]

What kind of good God would create a world like this? First, scarcity doesn't mean God doesn't provide. It simply means we are limited and finite. He is not. Even in the garden of Eden, Adam could not be in two places at once, and Eve could not eat fruit that Adam had just finished.[3] Scarcity was there. Joseph's brother cannot wear the coat Joseph just donned. A pane of glass can't be a window in Birmingham and a windshield in Pittsburgh at the same time. Scarcity means there is never enough to satisfy all our desires, but it doesn't preclude generosity and joy. If offered an apple, we might say yes for no other reason than to give it to someone we love. Scarcity requires choosing. Stewardship requires choosing well.

Sin aggravated scarcity. God says to Adam, "Cursed is the ground because of you; in pain you shall eat of it all the days of your life . . . by the sweat of your face, you shall eat bread."[4] Work got hard, and the earth no longer yielded its bounty willingly. A few verses later: "[God] drove out the man, and at the east of the garden of Eden he placed the cherubim and a flaming sword that turned every way to guard the way to the tree of life."[5]

As one of Fuller's colleagues puts it, "Mankind now has a cherubim problem." No one knows exactly what life in Paradise was like, but God sending angels with flaming swords to block the entrance suggests that humanity's lot changed dramatically for the worse.

While it forms the backdrop to the human drama, scarcity is too easy to misconstrue. The theologian William Cavanaugh says, "Life in Christ refuses to take scarcity as a given" and claims that scarcity is "based on the assumption that human desire is limitless."[6] His view is too limited. "Desire" just means people could figure out *something* to do with more, even if they would just give it away. A supposedly "tragic," scarcity-embracing worldview allegedly means there is "never enough to go around."[7] But since Cavanaugh exists in space and time, he faces scarcity even though we believe he is in Christ. Because Cavanaugh spent time writing his 2008 book, *Being Consumed: Economics and Christian Desire*, his excellent book *The Myth of Religious Violence: Secular Ideology and the Roots of Modern Conflict* did not appear until 2009. We wish it had been released sooner, but Cavanaugh, like all of us, has yet to slip the surly bonds of scarcity to touch the face of Edenic superabundance (essential 3).

Christian historian Eugene McCarraher likewise inveighs against scarcity: "The grotesque ontology of scarcity and money, the tawdry humanism of acquisitiveness and conflict, the reduction of rationality to the mercenary principles of pecuniary reason—this ensemble of falsehoods that comprise the foundation of economics must be resisted and supplanted."[8]

Yet, in writing this sentence, McCarraher did one thing instead of another. He could have revised another sentence but didn't. Scarcity.

The Great Economic Problem creates a Great Social Problem: How do we control violence?[9] Violence wouldn't be a problem in a world without scarcity. Take my car? Another appears. Kill my body? No problem. I respawn and continue. Life would be like *Super Mario Brothers*. But scarcity tempts us to take without making. Why trade for what you can take? Why get what someone else has by serving his wants when you can kill or enslave him? Roman historian Tacitus said of the ancient Germans that it seemed "lazy" and "inert" to get by "sweat" that which could be gotten by "blood."[10] Having "feet quick to shed blood" enriched royals and rulers, but it left our ancestors (and many people worldwide) in dire poverty.[11]

It doesn't have to be this way. Life needn't be a war of all against all. Mere economics teaches that some social arrangements allow people to navigate this vale of tears while pursuing the Creation Mandate of Gen 1:28: "Be fruitful and multiply and fill the earth and subdue it, and have dominion." Mere economics also teaches that other social arrangements result in domination and lives which are solitary, poor, nasty, brutish, and short. "Therefore choose life, that you and your offspring may live."[12]

Voluntary cooperation is the surest way to navigate scarcity and exercise dominion while avoiding domination. The Creation Mandate is a tall order; however, dominion is hardly impossible, or the command would have been repealed after the Fall. Don't panic about scarcity any more than you would panic about gravity. Mere economics explains how scarcity-shackled humans can cooperate to achieve more together than they ever could apart. When they do, prosperity, progress, and more people spring forth.

Of Human Action, but Not of Human Design

Scarcity makes us choose. We can't not choose. Repeat after the Canadian rock band Rush: "If you choose not to decide, you still have made a choice."[13]

"What do *I* choose?" is the individual's question. As the world's leading expert on yourself, you probably have a pretty good idea of what you want, but most importantly, when you get easy-to-interpret feedback (pleasure or pain) you have strong incentives to interpret wisely.[14] Going to the gym means pain now and gain later. Pounding a sleeve of Oreos means pleasure now but a bellyache (and love handles) later.

Groups face a harder question that requires people to reconcile preferences and resolve disagreements: "What do *we* choose?" It is harder for groups to interpret feedback as well. Someone might enjoy net benefits at everyone else's expense. A group might not sacrifice current pleasure if they won't be around to collect tomorrow's rewards. It's easy to say, "Let us eat and drink, for tomorrow we die" knowing someone else (like their great-grandchildren) will foot the bill.[15]

It's even easy to convince yourself that you're doing future generations a *favor* by, say, preventing someone from paving paradise and putting up a parking lot or by consuming more on the misguided belief that high consumption leads to economic growth (chapter 14).

That's the problem of politics in a paragraph. We don't consume our descendants' inheritance simply because politicians are especially bad, even though we think power attracts those who crave it.[16] Rather, it's that complex social phenomena are the unintended consequences of human choices—choices that scarcity foists on each of us. The outcomes resulting from our choices are "the result of human action, but not the execution of any human design."[17] No human mind willed our abundance, and yet, here we are. You may not intend to feed African children when you choose to buy a cup of coffee, but you're bidding their coffee-farming parents into your service and providing them with income nonetheless.[18]

Notably, you're not commanding them to do anything. You're making an offer they *can* refuse.

Meanwhile, many things we think help people don't. Minimum wages reduce employment. Rent control leads to housing shortages. Tariffs make us poorer. Governments waste money on stadiums and convention centers.[19] The road to hell is paved with good intentions and economic impact studies.[20]

Of course, no one likes hearing they're wrong, and people cling to their visions of how the world works. When you ask someone to relinquish something they've believed their whole life, it's like asking them to cut off a limb—but something isn't right just because it feels right. Scarcity doesn't disappear because we don't like it. Prudence demands we work within reality's nonnegotiable constraints instead of trying to wish them away.[21]

Gerard's Great Escape

You have heard it said that free markets are objectionable because they reward *monetary* value rather than "human" or "intrinsic" value. But we say unto you that objects don't have intrinsic value; what's more, monetary value is "human" value. Money prices arise from people's choices, and people's choices reflect their values.

Value is subjective—it's personal. You might think an old trinket is junk. Your neighbor might sell the same trinket for a million dollars. One man's trash is another man's treasure. The humanities make a compelling case that people often should value things differently than they do.[22] Economics simply acknowledges diverse preferences.

Most likely, parents understand subjective value well, even if they can't articulate it. In 2011, Carden and his family stopped at a McDonald's in Harrisonburg, Virginia, en route to Massachusetts.[23] After their meal—and after he wrote a short blog post on his phone, thinking himself clever for getting valuable work done while traveling—the family hit the road again. They were at a hotel in Hagerstown, Maryland, about ninety minutes later.

At bedtime, their two-year-old couldn't find his stuffed panda, Gerard. Gerard wasn't in the room. He wasn't in the car. There was only one other possibility.

They called the Harrisonburg McDonald's. Someone had found Gerard in the parking lot. Instead of going to sleep, Carden went to fetch Gerard. They could have ordered an identical stuffed panda—and probably had it shipped overnight—but it wouldn't have been *Gerard*. It would have just been another stuffed panda. Driving to Harrisonburg and back for a stuffed panda cost way more than replacing him, but it was worth it. Carden would do it again without hesitation. So would most parents.

That is what we mean when we say value is personal.

The law of marginal utility says that the more of something you have, the less valuable any given unit is. Imagine walking into your house with a box of identical Christmas cards. You open the box, stumble, and drop the top card in a fresh mess your dog left on the floor. Unless you're a psychopath, this means someone isn't getting a Christmas card. Who gets left out? Your mother or a friend from high school you don't really remember? The *marginal* utility of a Christmas card is what you give up when you ruin one. Even if the one you dropped had a sticky note that says "Mom," you just move it to the friend-from-high-school card. Which would you tend to treat with more care? A cup of water or a cup of diamonds? With a moment's thought, you'll see that you, too, are obeying the law of marginal utility, even if you aren't thinking about it explicitly.[24]

Getting What You Want

How do people *get* goods like the Christmas cards you just dropped?

There are only four ways.[25]

First, you can make something yourself, but a moment's reflection suggests this is the road to poverty. Even when you "make" your morning coffee, you're still not doing it yourself. (Did you make the coffee pot and grow the beans?)

Second, you can get a gift. Receiving gifts can be lovely. At the same time, we all have stories about bad gifts we've gotten. Your devout Muslim neighbor won't have much use for a wine club membership. A vegan, gluten-free teetotaler will be disappointed if she expects her dinner from the benevolence of the butcher, the baker, and the brewer.[26]

Third, you can take it. You might DIY as a porch pirate. Or perhaps you elect representatives to steal for you. A professor of Fuller's liked to say, "Something doesn't cease being theft because you got a majority vote in Congress to do it."[27] However, a society of universalized thievery will not long endure because theft reduces incentives to produce in the first place. Widespread theft means more spending on police and locks. Fuller likes to ask his students how long the football players would benefit from sanctioned theft. Presumably, they're bigger and stronger than the average student. At first, we'd see goods "traveling" from non-football players to football players. Once everyone else stopped producing, though, even the football players' wealth would fall.

Finally, you can trade for what you want. You can swing by Walmart, where 142,000 items you didn't produce await you. All you need to get whatever you want is the money you earn by serving someone else. Everybody wins. In a funny parody of the song "Havana," the comedian Remy explains that "free trade's like a magic wand / it turns what you make best into what you want."[28] Chapter 4 will explain why he's right.

How Should We Then Live?

First, remember that scarcity just means we must choose and be creative. It doesn't mean we must succumb to the law of the jungle. The person behind you in the communion line cannot eat the piece of bread you just ate, but that doesn't prevent us from living in fellowship with God and one another in God's good and abundant world.

Second, realize that the key word under the law of the jungle is "Me." But then recognize that the key word for mitigating the influence of scarcity in the world is "We." Scarcity seems like it would doom humanity to starvation and misery, but chapter 1 has already shown us that need not be the case. By cooperating with others, we expand everyone's options.

When it comes to your own personal policy, you're faced with a choice: you could spend the next hour making or taking. Making means you're using your time, talent, and treasure to make someone else better off. Maybe it means a better mousetrap, a diaper change, or a report on your boss's desk by nine in the morning so he can make more effective decisions next week. Each of these actions puts a tiny dent in the scarcity constraint we all face.

Taking could have two meanings. Consuming is one. It's mutually beneficial, and it makes you and the seller better off. Still. It doesn't create as much new wealth as if you'd refrained from "taking" at all and had instead saved. When we save, there are more resources in the bank, which means more resources to fund new enterprise, which means more production, which means more abundance (chapter 14).

The other and more familiar sense of taking means that you forcibly seize what's not yours to have. Call it the law of the jungle or the tendency of the kindergarten playground—either way, it makes us all poorer. One man's gain is another's loss. But it's worse than that: resources are consumed in the scramble to seize and protect one's goods from being seized. Mercifully, the world has tilted more toward making and less toward taking over the last two hundred years or so. We're all richer for it.

As we will begin showing in the next chapter, markets are all about expanding our options by cooperating with others and making more. Our final chapter will conclude with an exhortation to make more and take less.

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[1] Tyler Cowen and Alex Tabarrok, *Modern Principles of Economics* (New York: Worth, 2009), 81.

[2] Genesis 4 and Acts 15, respectively.

[3] Gen 2:15–22.

[4] Gen 3:17–19.

[5] Gen 3:24.

[6] William T. Cavanaugh, *Being Consumed: Economics and Christian Desire* (Grand Rapids: Eerdmans, 2008), viii.

[7] Cavanaugh, xii.

[8] Eugene McCarraher, *The Enchantments of Mammon: How Capitalism Became the Religion of Modernity* (Cambridge: The Belknap Press of Harvard University Press, 2019), 16.

[9] Douglass C. North, John Joseph Wallis, and Barry R. Weingast, *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History* (Cambridge: Cambridge University Press, 2009); Gary W. Cox, Douglass C. North, and Barry R. Weingast, "The Violence Trap: A Political-Economic Approach to the Problems of Development," *Journal of Public Finance and Public Choice* 34, no. 1 (2019): 3–19.

[10] Ludwig von Mises, *Socialism: An Economic and Sociological Analysis* (Indianapolis: Liberty Fund, 1981), 37.

[11] Isa 59:7.

[12] Deut 30:19.

[13] Rush, "Freewill," track 2 of *Permanent Waves*, released 1980, https://www.rush.com/songs/freewill/.

[14] This doesn't deny indecision or existential crises. An indecisive person is choosing to weigh his options further.

[15] 1 Cor 15:32.

[16] Twentieth-century economist Frank Knight put it this way: "They would have to enforce orders ruthlessly and suppress all disputation and argument about policies; and, as a condition for minimum efficiency, they would also have to do everything possible to remove ground of difference of opinion, by giving the people the appropriate 'information' and conditioning of attitudes, i.e., 'propaganda.' They would have to do these things whether they wanted to or not; and the probability of the people in power being individuals who would dislike the possession and exercise of power is on a level with the probability that an extremely tender-hearted person would get the job of whipping-master on a slave plantation." Frank H. Knight, "Lippmann's The Good Society," *Journal of Political Economy* 46, no. 6 (1938): 864–72, 869.

[17] Adam Ferguson, *An Essay on the History of Civil Society*, 5th ed. (London: T. Cadell, 1782), 205–6, https://oll.libertyfund.org/titles/ferguson-an-essay-on-the-history-of-civil-society/.

[18] Victor V. Claar, "Will Fair Trade Coffee Stunt Your (Economic) Growth? A Response to Paul Myers," *Journal of Markets & Morality* 16, no. 1 (2013): 259–66.

[19] Heywood T. Sanders, *Convention Center Follies: Politics, Power, and Public Investment in American Cities*, American Business, Politics, and Society (Philadelphia: University of Pennsylvania Press, 2014); John Charles Bradbury, Dennis Coates, and Brad R. Humphreys, "The Impact of Professional Sports Franchises and Venues on Local Economies: A Comprehensive Survey," *Journal of Economic Surveys* 37, no. 4 (September 2023): 1389–1431, https://doi.org/10.1111/joes.12533; John Charles Bradbury, Dennis Coates, and Brad R. Humphreys, "Public Policy toward Professional Sports Stadiums: A Review," *Journal of Policy Analysis and Management* (September 2023): 1–39, https://doi.org/10.1002/pam.22534; John Charles Bradbury, "Robert Baade: Stadium Economics Pioneer," in *The Economic Impact of Sports Facilities, Franchises, and Events*, ed. Victor A. Matheson and Robert Baumann, Sports Economics, Management and Policy 23 (Cham, Switzerland: Springer International, 2023), 5–22.

[20] See any introductory economics textbook for analysis of price controls and tariffs, e.g., Cowen and Tabarrok, *Modern Principles of Economics*. See all the sources cited above for devastating criticisms of "economic impact" studies.

[21] Prov 8:12; Luke 14:25–35.

[22] See Roger Scruton, *Beauty: A Very Short Introduction* (Oxford: Oxford University Press, 2011), 262.

[23] This section is adapted from Art Carden, "Value Is Subjective: A Study in Pandas," *Christian Science Monitor*, December 7, 2011, https://www.csmonitor.com/Business/The-Circle-Bastiat/2011/1207/Value-is-subjective-A-study-in-pandas.

[24] The law of marginal utility applies *within* individual people, not *between* them, so it doesn't have implications for redistribution. See also Art Carden, "Diminishing Marginal Utility: It's a Law," Ludwig von Mises Institute, September 9, 2008, https://mises.org/library/diminishing-marginal-utility-its-law.

[25] This section is adapted from Art Carden, "Four Ways to Get What You Want," American Institute for Economic Research, January 28, 2023, https://www.aier.org/article/four-ways-to-get-what-you-want/, which is based on Clarence Carson's categories.

[26] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. Edwin Cannan, vol. 1 (1776; repr., London: Methuen, 1904), 16, https://oll.libertyfund.org/title/smith-an-inquiry-into-the-nature-and-causes-of-the-wealth-of-nations-cannan-ed-vol-1.

[27] See 1 Samuel 8 and 1 Kings 21.

[28] Remy, “Banana,” October 3, 2018, YouTube video, https://youtu.be/rw7PUrgU3N0?si=d85uOxpgRGiVKCaZ.

4

Multiplication through Division

The Miraculous Division of Labor

Adah bore Jabal; he was the father of those who dwell in tents and have livestock. His brother's name was Jubal; he was the father of all those who play the lyre and pipe. Zillah also bore Tubal-cain; he was the forger of all instruments of bronze and iron. Gen 4:20–22

Two are better than one, because they have a good reward for their toil. Eccl 4:9

The unintended consequence of specialization and trade is a special miracle analogous to the divine miracle of loaves and fishes. Deirdre McCloskey[1]

Want to Feed the Multitudes? Specialize

Scarcity constrains us, but there is a path toward greater abundance. Let's illustrate a powerful idea with just a little arithmetic.

Suppose that in a day's time, Peter could bake ten loaves *or* catch four fish. Not "and." If he bakes ten loaves, he can't catch four fish. If he catches four fish, he can't bake ten loaves.

For simplicity, assume he spends half his day baking loaves and half his day catching fish, which means he eats five loaves and two fish daily.

Now let's imagine you meet Peter. Perhaps you didn't get a great education and don't have many skills. As a result, you can only bake two loaves or catch two fish in a day. If you spend half your day baking and half fishing, you eat one loaf and one fish daily.

A few things are clear here. First, Peter is better at both baking and fishing than you are. Peter would win a baking contest. He would win a fishing competition. Therefore, many assume Peter has nothing to gain from your existence, but hold on: who would win a baking or fishing contest doesn't matter. Who gives up the fewest fish to bake a loaf matters. The surprising conclusion: you can each get more fish and more bread by specializing and trading.

Suppose you each specialize a little bit and then trade. Peter bakes more and fishes less, now catching one fish and baking seven and one-half loaves. Meanwhile, you abandon baking altogether for fishing, catching two fish and baking no loaves. Then you trade. Suppose Peter trades you two loaves for a fish. After the two of you have specialized and traded, Peter can consume five and one half loaves and two fish. Since Peter can consume more, does this mean you are worse off? Ronald Sider might say yes, but the answer is no. If anything, you are the big winner because you can eat two loaves and a fish rather than just one of each.

To see what each fish costs Peter, divide the ten loaves he doesn't bake by the four fish he catches. Each fish costs Peter two and one half loaves (ten divided by four). Doing the same math for you shows each fish costs you one loaf.

It's easy to see the gains from trade (essential 6). If Peter can buy a fish from you for fewer than the two and a half loaves it would cost to catch the fish himself, he's better off. Meanwhile, you're better off catching fish at one loaf per fish and then selling them for more than one loaf per fish.

Have the two of you cleverly invented sophisticated new mixers and ovens? No. Did you get better fishing tackle? No. Did you, like Jesus,miraculously turn five loaves and two fishes into enough to feed the multitudes?[2] Again, no. You've just specialized a little bit, and as a result, you and Peter can eat the same number of fish as before you specialized, but you can eat *more* bread.

The implications are profound. First, while we can't miraculously turn five loaves and two fish into enough to feed thousands of people, we can help feed the multitudes by specializing in what we can do at the lowest opportunity cost and trading the fruit of our labor for the fruit of others'. It's beautiful in part because you get more by giving others more; at the end of the day, you have more to help those who cannot help themselves.

Second, trades don't have "winners" and "losers." You and Peter get more. Because you can specialize and trade, you can enjoy more than you could without the other's help. Importantly, neither party is the object of the other's charity. You don't have Peter's skills, but you earn more daily bread by making it possible for Peter to earn more as well.

Third, economists agree that foreigners are our friends. Failure to understand international trade and immigration causes unnecessary fear and makes us poorer. While we don't have the space to address every immigration concern, we can address one.[3] Imagine in our example that Peter is a New Yorker while you're a born-and-raised Canadian. People worry that immigrants will "take our jobs," but our example shows that your increased standard of living does not come at Peter's expense. The basic idea holds whether you stay in Canada your whole life or cross the New York border and begin a new life as an American citizen. As economists have explained, immigrants don't "take American jobs." They do jobs that would not exist if the immigrants weren't there to do them.[4]

For example, suppose Haitian migrants move to the United States, where they can earn far more money shining Americans' shoes than farming in Haiti. Importantly, Haitians wouldn't be displacing a thriving shoe-shining industry, which has largely disappeared as Americans have gotten more productive. They would be doing work that no one else was doing in the first place. To worry that immigrants will "take our jobs" commits the lump-of-labor fallacy, the idea that we only have so many jobs and that one worker permanently displaces another. If Americans don't want their shoes shined, the Haitians will work as nannies or custodial staff or . . . fill in the blank. Ultimately, foreigners help us produce more, which creates new opportunities for any Americans they might temporarily displace. But what will happen once Haitian workers reach American levels of productivity? Simple: they will earn American wages (see chapter 7 for more on how markets determine wages).[5]

Economists disagree a lot, but we agree on international trade. It's mere economics par excellence. And we economists generally agree that countries like the United States could help their citizens and immigrants by loosening immigration restrictions.[6] Some economists have estimated that looser restrictions could double global GDP.[7] Even the low-end estimates are enormous. Will immigrants wreck American institutions? Conceivable, but a fear that lacks historical precedent.[8] Commit terrorist attacks? Not impossible, but unlikely.[9] Christians (and all people of goodwill) want to put poverty where it belongs: in the history books.[10] We should look to ease immigration restrictions because immigration is "the world's greatest anti-poverty program."[11] The same has been said about economic development, and immigration is a quick and easy way to get more. It fights poverty by creating abundance. We enrich the stranger when we welcome him—but we also enrich ourselves.

As You Did It to One of the Least of These

Instead of moving in next door as immigrants do, suppose our "neighbor" remains 4,000 miles away, speaks a foreign tongue, and shares few of our cultural values.[12] What then? Is there domestic benefit to exchange? After all, international trade can be frustratingly uninspiring, particularly given its vivid disruptions and almost-invisible-to-the-naked-eye benefits. Is closing a factory in the United States and opening a “sweatshop” in Asia worth it so Americans can save a few cents on socks?

Trade skeptics overlook the dispersed benefits. Some find virtue in paying more for “fair trade” coffee, goods “made in America,” and local produce, but as twentieth-century economic journalist Henry Hazlitt reminds us, “the art of economics” means looking at the costs and benefits for everyone, not just the highly visible beneficiaries.[13] It’s a variation on “love your neighbor as yourself.”[14]

Suppose free trade means Amalgamated Textiles moves operations from Ohio to the Philippines, paying Filipino workers a paltry $11 daily. Ohioans lose jobs and livelihoods while each American saves one cent per year on socks. Is it worth putting them through such pain just to save a measly *penny* on socks made by people (supposedly) exploited in jobs paying less in a day than the average American worker earns in about twenty minutes?[15]

Once we account for all the effects, the move is a clear win for Filipinos and Americans. First, Filipino workers earn an extra daily dollar, which is no mean thing given that the minimum wage for nonagricultural workers in Manila is about $10 dollars.[16] Even an extra dollar a day for someone earning so little substantially improves their standard of living, and this doesn’t account for the fact that the working conditions in textile factories are usually better than in agriculture.

Recall the description of the sheep and the goats in Matthew 25. At the Last Day, Jesus will commend the righteous for feeding him when he was hungry, for clothing him when he was naked, and for visiting him when he was sick. The righteous will be surprised. When did they do any of these things for Jesus? Matthew 25:40 says, “And the King will answer them, ‘Truly, I say to you, as you did it to one of the least of these my brothers, you did it to me.’” International trade helps you love “neighbors” whom you may never meet.

“Wait,” we hear some objecting. “Does loving our metaphorical Filipino neighbor then come at the expense of loving our literal, domestic, flesh-and-blood neighbor, whose name we know and whose struggles we can see?” Good question. What happens with that extra penny each American saves on Filipino socks? For simplicity, assume American consumers bank their impossible-to-notice savings. Three hundred-thirty million pennies mean an extra 3.3 million loanable dollars every year.

What can people do with that additional $3.3 million? Freddy’s Custard and Steakburgers’ corporate website tells prospective franchise owners to expect an initial investment of “$641k–$2.1M.” To open a store, you’ll also need $1 million net worth and $400,000 in liquid assets. When we put them together, the piles of pennies Americans save on socks can finance about one and a half new Freddy’s franchises every year. Those restaurants will recruit cooks, managers, and other personnel. They may not hire the specific people who lost their jobs at the sock factory, but they can hire someone and create an opportunity that wouldn’t exist but for the savings. American consumers are better off: instead of just getting socks (no trade), we now get socks plus the capacity to make new burgers and custard (free trade). It’s the fish and loaves example again, only this time with socks and burgers.

But what about those American workers who lost their jobs? Benefits to other Americans are probably cold comfort for textile workers struggling to pay the rent. We still think the move to free trade is justified for four reasons. First, others’ gains become opportunities elsewhere, including opportunities for their descendants, and we’re not sure it’s fair to deny them these opportunities just so Bob can keep making socks. Second, civil society institutions like churches and the Lion’s Club are very good at helping people through difficult transitions. Third, *any* change is going to make someone worse off. If this book fails miserably because someone else writes a better book, are we owed anything? Do you owe anything to the person whose book you’re not reading because you’re reading this one? Fourth, if we couple free trade and easier immigration with deregulation elsewhere—like in the housing sector, for example—then we are pretty confident that Bob the sockmaker will be able to find a good job building houses and skyscrapers.[17] And since he's fluent in the English language and American culture, there's a good chance it will be something more challenging and productive than manual labor.

Loosening restrictions on labor and housing markets would be a first step in the right direction. Flexible labor markets make it easier for workers to pivot to other careers. Removing restrictions on housing would lower the average American's biggest expense: shelter from the elements. Civil society institutions, like churches and fraternal societies, are also crucial for supporting workers between jobs, but they need room from the government to breathe. See chapter 11 for more.[18]

What a Wonderful World

Early Church Father Augustine of Hippo taught us that all truth is God's truth, wherever it is found. We wholeheartedly concur, and so have no problem recognizing the insights of the twentieth-century Jewish scholar Rabbi Jonathan Sacks who observes:

> A primordial instinct going back to humanity's tribal past makes us see difference as a threat. That instinct is massively dysfunctional in an age in which our several destinies are interlinked. Oddly enough, it is the market—the least overtly spiritual of concepts—that delivers a profoundly spiritual message: that it is through exchange that difference becomes a blessing, not a curse. When difference leads to war, both sides lose. When it leads to mutual enrichment, both sides gain.[19]

Whether people acknowledge the blessings of difference or not, it's no exaggeration to say that our differences make the world go 'round. Consider Genesis 4, which tells both of "difference lead[ing] to war" (Sacks's words) in the fratricide of Abel by Cain, but also tells of difference that will lead to enriched lives in the description of itinerant shepherds, toolmakers, and artisans of musical instruments. These differences and the bounty they produce through peaceful exchange led the great twentieth-century economist Ludwig von Mises to hail the division of labor as the "the fundamental social phenomenon."[20] Specialization and exchange, says the twentieth-century economist and classicist Philip Wicksteed, let us harness people's regard for their interests, encouraging them to use their talents for strangers' benefit:

> Thus, by teaching Greek to men who can neither make shoes nor drive an engine, I can get myself shod and carried by men who have no wish to be taught Greek. It might be a valuable exercise for anyone who is "earning his living" to attempt to go through a few hours or even a few minutes of his daily life and consider all the exchangeable things which he requires as they pass, and the network of cooperation, extending all over the globe, by which the clothes he puts on, the food he eats, the book containing the poems or expounding the science that he is studying, or the pen, ink, and paper with which he writes a letter, a poem, or an appeal, have been placed at his service, by persons for the direct furtherance of whose purposes in life he has not exercised any one of his faculties or powers.[21]

And as Adam Smith observed, "Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog."[22] Dogs devour and destroy; their sense of reciprocity is, to put it mildly, underdeveloped. People specialize based on their differences and then exchange. We're all better off for it.

This is no trick, no sleight of hand, no mysterious new machine, no Jack and the beanstalk magic beans. We're just bringing together two people, allowing them to accomplish more together—via trade—than they could apart. "The heavens declare the glory of God"; trade does, too.[23]

Will Tariffs #MAGA?

In his 1879 bestseller (yes, a true bestseller) *Progress and Poverty*, economist Henry George made an eloquent point about trade restrictions.[24] If protectionist logic is sound, George reasoned that humans have been prosecuting wars most stupidly for millennia. After all, protectionists believe that by restricting the flow of imports into their country, they can jumpstart their country's prosperity. Yet, naval blockades are common in war. If protectionists are right that cutting off trade with foreigners makes a nation great, why should blockades ever be used as weapons? Why not mail the adversary free supplies and weaponry while we're at it? As George put it, "What protection teaches us, is to do to ourselves in time of peace what enemies seek to do to us in time of war."[25]

Clearly, protectionism is alluring. Make foreign steel more expensive, and more Americans make steel. Simple. But that's what economist Thomas Sowell calls "Stage One Thinking."[26] When we ask, Then what happens? (stage *two*), we see how tariffs affect everyone in the market—not just American steel workers—and see how tariffs Make America Poorer Again. Protectionism is a bipartisan indulgence: In 2009 after Barack Obama had just been elected president, tariffs were "change we shouldn't believe in."[27]

Tariffs have four effects, none of which are "a richer society" (error 6). First, they raise government revenue (chapter 12). Second, they transfer income from domestic steel consumers to domestic steel producers. Dollars going into the pockets of Sally Steelworker are coming directly out of the pockets of Sarah

Steelbuyer. How? Well, imagine Sarah Steelbuyer is an auto producer. Now that steel is more expensive, she can't make as many cars. The supply of cars shrinks and the price of cars rises (chapter 5). Sally Steelworker and Christina Carbuyer spend more on their next cars, leaving them with less money to spend on shirts and food. They have less to save (chapter 14). Meanwhile, at the higher prices, Henrietta Hapless doesn't buy a car at all.

The economic reasoning doesn't stop there. The shirt and food industries contract. Shirt and food workers lose their jobs. Savings fall. With fewer savings, fewer new entrepreneurs get their big break because they can't find financing.

Without tariffs, people buy cheaper cars. That leaves them more resources to buy shirts and food, all while saving more for the future. Adam Smith spent hundreds of pages drilling this point home in *The Wealth of Nations*: "In every country it always is and must be the interest of the great body of the people to buy whatever they want of those who sell it cheapest. This proposition is so very manifest that it seems ridiculous to take any pains to prove it; nor could it ever have been called in question, had not the interested sophistry of merchants and manufacturers confounded the common sense of mankind."[28] It's true. Tariffs do help domestic steel producers, but at the expense of every domestic consumer of steel.

Third, tariffs mean we get fewer goods. We buy fewer things containing now more expensive steel, like cars, and the auto industry shrinks. Those new workers in steel? We hate to belabor the obvious, but they didn't just drop from heaven like so much manna. Some of them came from the auto industry.

Fourth, tariffs induce Americans to waste resources making steel. Suppose a ton of steel costs $300 on the world market, costs $350 to produce domestically, and sells for $400 due to tariffs. In this case, we'd be wasting $50 of valuable resources to produce the ton of steel we could have gotten for $300 with free trade. If we want to help Sally Steelworker, let's find a way to do it without hurting other people like Sarah Steelbuyer and the workers in industries that now don't exist because we're overpaying for steel. Repeat after Adam Smith: tariffs make us poorer. A poll conducted by the University of Chicago of top economists asked them to assess whether free trade makes consumers wealthier. Over 95 percent agreed (and no respondents registered disagreement).[29] It doesn't get more *mere* economics than that.

How Should We Then Live?

First, realize that in a free market, we create prosperity by helping others prosper. Mutually beneficial exchange means we can abandon selfish ambition and conceit. We don't need them to get what we want. In Charles Wesley's hymn "And Can It Be?," Jesus Christ emptied himself of "all but love" to ransom sinners like us. Our proper response, says the apostle Paul, is to "do nothing from selfish ambition or conceit, but in humility count others more significant than [our]selves. Let each of you look not only to his own interests, but also to the interests of others."[30]

Exchange embraces—or at least side hugs—Paul's exhortation. You can get what you want by offering people something better than what they have, and they can always say "no, thank you." No one is forced to do anything against their own interests, however they define those interests. Paul does not mean "ignore your own interests." He means we should look "*also* to the interests of others," who bear God's image. We do this in markets because exchange requires persuasion while relinquishing power. You are looking to the interests of others whenever you bid or ask rather than command, even if you're not conscious of taking others' wants into account. The best way to enlist others on our behalf is to make them an offer they will gladly accept.

Peaceful exchange brings us out of the desert and into a land flowing with milk and honey. Chapters 4–6 explain how. Like the children of Israel, we find temptations in the promised land, like the temptation to mistake cooperation for exploitation that the state's visible iron fist can "fix" (chapters 7, 8, and 9). When we make that mistake, we aggravate scarcity and inch closer to the desert.

Second, you shouldn't feel the slightest bit guilty when you pay someone else to do work for you—your lawn, your laundry, your grocery shopping—so you can concentrate on your job and do it just a little bit better. If you can make $35 an hour playing violin at weddings and other events, then it makes sense to pay someone else (say) $20 an hour cleaning your house, cooking your food, or doing your laundry. The world comes out ahead because we get more violin performances without sacrificing a clean house.

Third, we should go on a search-and-destroy mission for antitrade, anti-specialization policies like tariffs and immigration restrictions (essentials 6 and 7, error 6). Tariffs line lobbyists' pockets and promote the interests of politicians, but they are a tax on the American consumer. And there is no way to tax ourselves to prosperity.

Prosperity is also hampered by a destroyer of worlds we don't have space to address adequately: war.[31] The nineteenth-century French economist Frederic Bastiat likely never said, "When goods don't cross borders, soldiers will," but whoever said it captured something profound.[32] Countries at war don't trade, and countries with a lot of trade don't tend to fight one another.It hurts to cut off your trading partner, which is one reason we aren't moved by claims that an industry (steel, rice, whatever) must be protected from foreign competition because of its strategic military importance (commodities like steel and rice can also be stockpiled). That trading countries war less frequently is great news because the large-scale violence of war destroys the division of labor, forcing people to inch closer to economic self-sufficiency and thus back to the standard of living "enjoyed" by our first parents.

Adam Smith, once more with feeling: "The interested sophistry of merchants and manufacturers confounded the common sense of mankind."[33] He means "merchants and manufacturers" convinced people that a benefit to them is a benefit to everyone (error 9). However, we impoverish ourselves and others when we prevent "capitalist acts between consenting adults," to use a phrase from the twentieth-century Harvard philosopher Robert Nozick.[34] There are a lot of ways to do justice, love mercy, and walk humbly with one's God.[35] Getting out of the way of people who want to trade is a good place to start.

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[1] Deirdre N. McCloskey, "The Liberty of the Will in Theology Permits the Liberated Markets of Liberalism," *Journal of Economics, Theology, and Religion* 1, no. 1 (2021): 101.

[2] John 6:1–14.

[3] Economists argue about immigration, but even the economists most pessimistic about immigration tend to be more optimistic about its effects than the average person. For economists who are very optimistic about immigration, see an analysis of immigration economics and ethics in the style of a graphic novel: Bryan Caplan, *Open Borders: The Science and Ethics of Immigration* (New York: First Second, 2019). For a treatment that is presented in a more traditional, scholarly style, see Alex Nowrasteh and Benjamin Powell, *Wretched Refuse? The Political Economy of Immigration and Institutions* (Cambridge: Cambridge University Press, 2020). For more pessimistic takes by economists, see George Borjas, *Heaven's Door: Immigration Policy and the American Economy* (Princeton: Princeton University Press, 2011); Garett Jones, *The Culture Transplant: How Migrants Make the Economies They Move to a Lot Like the Ones They Left* (Stanford: Stanford University Press, 2022).

[4] Art Carden, "Illegal Immigrants Don't Lower Our Wages or Take Our Jobs," *Forbes*, August 28, 2015, https://www.forbes.com/sites/artcarden/2015/08/28/how-do-illegal-immigrants-affect-american-workers-the-answer-might-surprise-you/?sh=7e919fa1771a.

[5] Paul Krugman makes this argument in the context of international trade. See, e.g., Paul Krugman, "In Praise of Cheap Labor," *Slate*, March 21, 1997, https://slate.com/business/1997/03/in-praise-of-cheap-labor.html; Paul R. Krugman, *The Accidental Theorist: And Other Dispatches from the Dismal Science* (New York: Norton, 1998).

[6] "Loose" is not a synonym for "none."

[7] This estimate is admittedly speculative, but our point is that the gains to loosening restrictions are potentially large. See Michael A. Clemens, "Economics and Emigration: Trillion-Dollar Bills on the Sidewalk?," *Journal of Economic Perspectives* 25, no. 3 (August 1, 2011): 83–106, https://doi.org/10.1257/jep.25.3.83.

[8] Nowrasteh and Powell, *Wretched Refuse?*

[9] Alex Nowrasteh, "Terrorism and Immigration: A Risk Analysis," Cato Policy Analysis No. 798 (Washington, DC: Cato Institute, September 13, 2016); Alex Nowrasteh, "Terrorism and Immigration: A Risk Analysis, 1975–2022," Cato Policy Analysis No. 972 (Washington, DC: Cato Institute, August 22, 2023).

[10] For various reasons, this does not contradict Jesus's point that "you always have the poor with you" (Matt 26:11). For one, there will always be those who are relatively poor, even in a wealthy society, such as in the United States.

[11] For example, Institute for Policy Research, "Global Migration: 'The World's Greatest Anti-Poverty Program,'" Northwestern University, March 19, 2020, https://www.ipr.northwestern.edu/news/2020/deparle-greatest-anti-poverty-story.html.

[12] This section is adapted from Art Carden, "Where Do the Savings Go?," American Institute for Economic Research, December 28, 2022, https://www.aier.org/article/where-do-the-savings-go/.

[13] Mathew 25:40; Henry Hazlitt, *Economics in One Lesson* (San Francisco: Laissez-Faire Books, 1996), 5.

[14] Luke 10:29–37.

[15] Statistics on what the average American worker earns are from U.S. Bureau of Labor Statistics, "Table B-3. Average Hourly and Weekly Earnings of All Employees on Private Nonfarm Payrolls by Industry Sector, Seasonally Adjusted," accessed January 26, 2024, https://www.bls.gov/news.release/empsit.t19.htm.

[16] "Philippines Raises Minimum Daily Wage in Manila Capital Region," Bloomberg.com, May 14, 2022, https://www.bloomberg.com/news/articles/2022-05-14/philippines-raises-minimum-daily-wage-in-manila-capital-region.

[17] See, e.g., Bryan Douglas Caplan and Ady-Sebastian Branzei, *Build, Baby, Build* (Washington, DC: Cato Institute, 2024).

[18] For more on civil society, see David T. Beito, *From Mutual Aid to the Welfare State: Fraternal Societies and Social Services, 1890–1967* (Chapel Hill: University of North Carolina Press, 2000); John E. Murray, *Origins of American Health Insurance: A History of Industrial Sickness Funds*, Yale Series in Economic History (New Haven: Yale University Press, 2007).

[19] Jonathan Sacks, *The Dignity of Difference: How to Avoid the Clash of Civilizations* (London: Bloomsbury, 2003), 22.

[20] Ludwig von Mises, *Human Action* (Auburn, AL: Ludwig von Mises Institute, 1998), 157.

[21] Philip H. Wicksteed, *The Commonsense of Political Economy* (London: Macmillan, 1910), 170–71.

[22] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. Edwin Cannan, vol. 1 (1776; repr., London: Methuen, 1904), 15, https://oll.libertyfund.org/title/smith-an-inquiry-into-the-nature-and-causes-of-the-wealth-of-nations-cannan-ed-vol-1.

[23] Ps 19:1.

[24] This section is adapted from Art Carden, "How Does Economics Help Us Make Better Policy? Here Are Four Examples," *Forbes*, October 17, 2018, https://www.forbes.com/sites/artcarden/2018/10/17/how-does-economics-help-us-make-better-policy-here-are-four-examples/. *Progress and Poverty* sold several million copies in the late 1800s. Henry George, *Progress and Poverty* (Garden City, NY: Doubleday, Page, and Company, 1879), https://oll.libertyfund.org/title/george-progress-and-poverty.

[25] Henry George, *Protection or Free Trade* (New York: Doubleday, Page, and Company, 1905), https://www.econlib.org/library/YPDBooks/George/grgPFT.html?chapter_num=7#book-reader.

[26] Thomas Sowell, *Applied Economics: Thinking beyond Stage One*, rev. ed (New York: Basic Books, 2009).

[27] Art Carden, "Tire Trade Tirade," Ludwig von Mises Institute, October 12, 2009, https://mises.org/mises-daily/tire-trade-tirade.

[28] Smith, *Wealth of Nations*, 1:458–59.

[29] "Free Trade," Clark Center Forum, accessed April 29, 2024, https://www.kentclarkcenter.org/surveys/free-trade/.

[30] Phil 2:3–4.

[31] For more on the costs and political economy of war, see Christopher J. Coyne, *After War: The Political Economy of Exporting Democracy* (Stanford: Stanford University Press, 2008); Christopher J. Coyne, *Doing Bad By Doing Good: Why Humanitarian Action Fails* (Stanford: Stanford University Press, 2013); Robert Higgs, *Depression, War, and Cold War: Studies in Political Economy*

(Oakland: Independent Institute, 2006); Robert Higgs, *Resurgence of the Warfare State: The Crisis Since 9/11* (Oakland: Independent Institute, 2012).

[32] Nicholas Snow, “If Goods Don’t Cross Borders . . . ,” Foundation for Economic Education, October 26, 2010, https://fee.org/resources/if-goods-dont-cross-borders/.

[33] Smith, *Wealth of Nations*, 1:16.

[34] Robert Nozick, *Anarchy, State, and Utopia* (London: Blackwell, 1974), 163.

[35] Mic 6:8.

5

You Can Always Depend on the Knowledge of Strangers

The Miraculous Division of Knowledge

The curious task of economics is to demonstrate to men how little they really know about what they imagine they can design. F. A. Hayek[1]

Using What You Don't Know: Woolen Coats and Pencils

Chapter 4 highlighted the division of labor. This chapter explores the division of *knowledge*.[2] Adam Smith began *The Wealth of Nations* with an example of a woolen coat that the average workman of eighteenth-century Scotland might find familiar.[3] Said coat is a wonder of cooperation and an example of the division of knowledge; it's a product of countless hands and minds. A coat like the ones we've both worn for almost twenty years can be bought for about $130, less than four hours' work at average American wages of $34.69 in March 2024.[4] The commercial society that gives us coats, as the Scottish philosopher Adam Ferguson always reminds us, is "of human action, but not of human design" (chapter 3). Adam Smith would say, "In civilized society, [man] stands at all times in need of the cooperation and assistance of great multitudes, while his whole life is scarce sufficient to gain the friendship of a few persons."[5]

Echoing Smith, the philosopher Alfred North Whitehead observes that "civilization advances by extending the number of important operations which we can perform without thinking about them."[6] Buying a coat to stay warm while looking nice means we take advantage of innumerable important operations of which we know next to nothing. What are they? We doubt you have more than a superficial knowledge of the care and feeding of sheep, the sorting, grading, and labeling of different kinds of wool, or how the price of wool has changed or might change.[7] How much do you know about carding and spinning wool? Supply chains that get wool from farms to factories? Transoceanic shipping? Software that processes your payments swiftly, securely, and reliably? Coats are complicated.

In the last chapter, we saw that self-sufficiency means "solitary, poor, nasty, brutish, and short" lives. How does the infinitely complex network of cooperation we so desperately need come together? How do we get the right stuff to the right people in the right places at the right times without wasting resources? We take a first stab at an answer in this chapter, with chapter 6 bringing the analysis to a climax in the glorious profit and loss system.

To begin, consider something seemingly simpler than a coat: the simple, unremarkable no. 2 pencil of the kind you'd toss into your Walmart shopping cart with nary a thought. It's the same device the 20th century essayist Leonard Read discusses in his classic 1958 essay *I, Pencil*.[8]

As Read illustrates, the seemingly simple pencil demands cooperation and coordination on a global scale to become a reality. A lot has to happen to turn wild earth into a tool we use to record and transmit coded knowledge. First, we must mine raw materials.[9] We extract graphite from the earth and fell trees. We extract oil for fuel and plastic. We mine the metal that attaches the eraser to the pencil. Wild earth becomes a little more useful: Unrefined ore, logs, crude oil, and so on.

Refining is next. Here, people turn iron ore, logs, and crude oil into industrial materials like lumber, steel, bronze, brass, kerosene, diesel fuel, asphalt, and other commodities. Refining gets raw materials ready for manufacturing. Manufacturing applies effort and intelligence that turns refined commodities like steel, lumber, oil, plastic, graded cotton, and wool into goods like pencils and coats. After manufacturing, goods enter distribution and retailing. Distribution moves goods from factories to warehouses to store shelves, while retailing (think Walmart) gets goods from store shelves into consumers' hands.

At each stage, people use their brains and brawn to create value for downstream buyers. Refiners turn raw materials into more useful commodities. Manufacturers turn commodities into goods that are a little more useful still. Distributors and retailers don't manufacture anything but create value by getting goods like pencils and coats to users. Transforming one material into another creates value, but so does changing where and when it is. A pencil in a warehouse differs from a pencil on your desk. It's prohibitively costly to use the pencil in the warehouse. It's trivially easy to use the pencil on your desk.

This complex production structure shows us where land and labor get their value. Pencils and coats don't have value because of the resources that go into them. That perspective gets things precisely backward. Production moves materials forward through successive stages of transformation, from raw materials to finished goods, but valuation moves back through successive stages of production—from pencils and coats to raw materials. Land and labor are valuable because people can use them to produce finished goods and services others want.

In *I, Pencil*, Read quotes G. K. Chesterton, who observed that "we perish for want of wonder, not for want of wonders."[10] Commercial society is a wonder that produces other wonders, and we should wonder at it. It's not a miracle in the strictest sense, though it should seem like it, because it yields so much bread for so little sweat from our brows.[11]

Here's a vital lesson from the division of knowledge: we need each other. God created the world such that his creatures are highly dependent on one another. It should drive us to humility. It should remind us how utterly separate we are from our omniscient, self-sustaining Creator. When we humans divide labor and knowledge, we get products we could not design or create alone. As the economist Don Lavoie puts it: "Just as the human being as a biological individual is distinguished from other species by a powerful intellect, so is human society set apart from other animal societies by its greater ability to make effective use of individual minds."[12]

How do we make effective use of individual minds? Enter prices—our assistants as we decide what to use, where to use it, and when to use it. Here's Vernon Smith, the 2002 winner of the Economics Nobel Prize: "At the heart of economics, is a scientific mystery: How is it that the pricing system accomplishes the world's work without anyone being in charge?"[13] The early twentieth-century American economist Benjamin Anderson put it more succinctly: "Prices have work to do."[14]

Specifically, prices encourage people to adjust their behavior to changing conditions they may not understand, know about, or even condone. For example, a bumper crop of juniper berries means cheaper gin. Where a bottle of gin used to cost $20, it now costs, say, just $15, and people buy more gin. They also demand more of the goods often consumed with gin (like orange juice), called complements. Holding everything else constant, demand for orange juice will increase. Orange growers hire more people to serve this new orange juice demand. Critically, some of these new orange pickers might be teetotalers. Prices tell them to give gin drinkers what they want—more orange juice to drink with their gin—and they oblige.

Supply and Demand

"Rats and roaches live by competition under the laws of supply and demand; it is the privilege of human beings to live under the laws of justice and mercy."[15]

That's a clever expression from the brilliant Christian essayist, novelist, and social commentator Wendell Berry, but for once, there's no tradeoff:we needn't choose between "supply and demand" and "justice and mercy." You can be extraordinarily merciful by feeding the hungry and clothing the naked—which you can do by supplying more food and clothing, which would mean lower prices. To our ears, Berry's statement makes about as much sense as saying the law of gravity doesn't apply because humans live "under the laws of justice and mercy." Gravity plus "justice and mercy" means you shouldn't push someone off a cliff, but physical and moral law aren't at war here.

We can go further. "Rats and roaches" manifestly do *not* live under the "laws of supply and demand." They don't exchange at all. Image-bearing human beings, by contrast, live by "truck, barter, and exchange."[16] Take away "supply and demand"—that is, market exchanges—and we revert to "the Hobbesian propensity to rape, pillage, and plunder."[17] In fact, we become more like rats and roaches. Competition according to the law of the jungle is vicious and destructive, while competition in markets is peaceful, even cooperative. While it's true that sellers (peacefully) compete with other sellers through price cuts, improved quality, and ad campaigns, markets are also arenas of vast cooperation. After all, buyers and sellers cooperate in their search for mutually agreeable terms of trade.

Those terms of trade—just fancy economist language for "prices" and "quantities"—arise from "bids" (prices buyers offer, or "demand") and "asks" (prices sellers request, or "supply"). A "market" exists wherever bids and asks are found.

Crucially, bids and asks are consensual. Think about the difference between placing an order and giving an order. Placing an order means extending an offer:

“I will give you some money for the thing on your menu.” Giving an order means issuing a command: “Do as I say or be punished.” In a commercial economy, either party is free to walk away, and “no, thank you” gets an amicable separation. In a command economy where the government makes all the production and pricing decisions, “no, thank you” gets a bullet in the back of the head or possibly a permanent “vacation” to Siberia.

Supply and demand analysis is an essential analytical tool. Without the supply and demand framework, the terms of trade make little sense. By “demand,” economists refer to combinations of prices and corresponding quantities. People demand a particular quantity of a good, be it coffee or crack cocaine, at every possible price.

Suppose the price of coffee falls due to an increase in supply. Not everyone responds to lower prices identically. Buyers tend to be less responsive to price changes when a good consumes a small fraction of their budget. We doubt you even notice when the price of salt rises or falls by a few cents, but companies that buy salt by the trainload do. The law of demand—which follows from the law of marginal utility (chapter 3)—describes this inverse relationship between prices and quantity demanded. We can state it as haiku:

All else held constant
Quantity demanded falls
When the price rises.[18]

Once you really internalize the law of demand, you’ll see it everywhere and make connections you might not see coming. Consider a regulation that would require children under age two to be strapped into their own seat on a plane in contrast to the current rule that allows parents to hold small children in their laps. It seems like a great way to keep kids from dying in plane crashes until you realize the rule would make family trips by plane more expensive and encourage driving instead. Driving is much more dangerous than flying, and the switch could cost more lives in traffic accidents than it saves in air accidents.[19]

"Supply" is the other side of the market. Suppose new research shows salt cures acne. Demand rises, prices rise, and salt makers sell more. If the price gets high enough, we'll abandon academic scribbling and go into the salt business. We can state the law of supply as a haiku, too:

All else held constant
Quantity supplied rises
When the price rises.

Supply is trickier than demand because it's usually easier for demanders to buy less when prices rise than for suppliers to sell more. Over time, however, $10,000 an ounce for salt would mean new salt mines, new salt companies, and people reverse engineering the pretzels in their pantries.

Equilibrium happens where the price equates quantity supplied with quantity demanded. If people discover that salt is healthier than they once thought, people will want more salt at any price. Demand increases. The price rises, and people trade more salt—a new equilibrium.

Demand also shifts when income changes. People buy more "normal goods" with higher incomes (and vice versa) and fewer "inferior goods" with lower incomes (and vice versa). For instance, Juan's demand for steak might rise and his demand for ground chuck might fall if his salary doubled, which would nudge steak prices higher and ground chuck prices downward.

Importantly, none of us have to know much to cooperate with Juan when he gets his big raise. The steak market is linked to markets for the pulp used to make butcher paper and the steel used to make the chainsaws used to cut down the trees, which becomes wood pulp, which becomes butcher paper. It's all too much for a single mind to comprehend, but people don't have to know where iron comes from to be able to incorporate all the relevant, socially useful knowledge about its place among other goods to adjust to Juan's new demand. They just have to watch the prices.

Please don't mishear us—prices aren't "one weird trick" for sneaking past the cherubim guarding the gates of Eden. No Christian who takes sin seriously believes there is a social system capable of ushering us from "the kingdom of necessity to the kingdom of freedom," as Karl Marx's benefactor and collaborator Frederick Engels put it.[20] Market prices don't eliminate scarcity. But they do allow us to negotiate the tradeoffs found in this vale of tears peacefully and productively.

C. S. Lewis defines a miracle as "an interference with Nature by supernatural power."[21] Stuff going where it can do the most good isn't a miracle in the strict theological sense because it's ordinary, much like the movements of the celestial bodies. Then again, the sun coming up each morning isn't a miracle either. But, with apologies to G. K. Chesterton, we think God never tires of beholding the exchange system work its everyday wonders.[22] Like an astronomer marveling at the heavens, the economist marvels at markets' order, regularity, and intelligibility. And while the regularity of the heavens is apparent, it takes some economic training, says the American economist Israel Kirzner, to perceive the order market prices enable:

> To the casual observer, market activity seems to be a bewildering and uncoordinated mass of transactions. Economic analysis reveals that this seeming chaos in the activity of market participants is only apparent. In fact, analysis shows that the exchanges that take place are subject to definite forces at work in the market.[23]

The heavens declare the glory of God, and so does the price system. As Vernon Smith reminds us, the price system facilitates the world's work, and it does so without a boss or a czar ordering people or products around. By telegraphing changes in supplies and demands (read: "human wants") it coordinates the efforts and desires of people who will never know or often even know of each other. If humans had invented the price system, it would be our greatest achievement.[24] But we didn't. It's God's gift for our good and his glory.

With Enemies Like These, Who Needs Friends?

Speaking of our good, we get paid every time someone buys *Mere Economics*, but so does our agent. Does he exploit us by taking a cut for a book he didn't write? Karl Marx and many he influenced would say yes. Value, for Marx, only comes from labor. Bosses, bankers, savers, and middlemen (like our agent) don't contribute anything. For Marx, they're takers, not makers. Parasites.

Or not.

Enter division of knowledge. Our agent knows the publishing industry. He understands marketing, selling, and writing books that people will want to read better than we do. Working with him lets us concentrate on writing. We don't have to determine the ins and outs of the industry. We read a contract. We sign a contract. We write a book. We submit it. We have delegated those tasks we do (relatively) poorly so we can focus on those tasks we do (relatively) well. Ad campaign? Someone else's job. Printing? Someone else's job. Finding a publisher interested in the book? Someone else's job. Our agent enriches the world to the tune of the extra books we can write.

What's In a Name?

"Not so fast!" says the critic of markets.[25] Where we see social cooperation, the market skeptic spies an endless list of social pathologies. They accuse producers of manipulating us into overpaying for stuff we don't need with flashy logos and brand names.

Brands and logos, however, aren't modern inventions. Archaeologists have recently found evidence of five-thousand-year-old branding in Mesopotamia.[26] If it's manipulative social waste, why has advertising lasted so long? Is marketing a function of evil people trying to part consumers with their last dollar? Or can we tell a deeper, more profound story?

Carden used to believe the market manipulation story. He used to think himself wise for quoting Henry David Thoreau: "Every generation laughs at the old fashions, but follows religiously the new."[27] What's more, he overestimated the power of advertising to generate sustained consumer interest. He hadn't yet read the famous twentieth-century economist Joseph Schumpeter's sly observation that "the picture of the prettiest girl who has ever lived will, in the long run, prove powerless to maintain the sales of a bad cigarette."[28]

Then, after studying economics, he started understanding what brand names do. Market phenomena persist when they solve problems. Brand names and advertising solve at least three. First, advertising exists to bring buyers and sellers together so they can exchange. The greater output specialization affords (chapter 4) is useless if buyers are unaware of sellers.

Second, brand names and advertising tell us what to expect. Carden remembers seeing a stand-up comic talking about a bottom-shelf shoe store with the motto "Why pay more?" The comedian asked, "Quality?"

Knowing what to expect is valuable. Consider a cross-country road trip. When you're on the highway and see a sign for Restaurant A, you know you'll pay more but that it will be clean enough to eat off the floor. On the other hand, when you see a sign for Restaurant B, you know you'll pay less, but you're taking a risk by eating off one of the plates. Consistency is valuable, even when you're consistently mediocre. Maybe you're willing to take the risk to save the cash. Either way, brands help you decide.

What about brands for practically indistinguishable products, like bleach?[29] Two brands might be the same on average, but the premium brand might *be* the premium brand due to superior quality control. The quality variance may be smaller in the premium brand, and low variance is valuable. There's less guesswork. The point is that customers know what to expect.

They know what to expect even when they're far from the familiar sellers they tend to patronize. A family trip at a time when out-of-state license plates were like flashing neon signs reading "Charge me more!" inspired Holiday Inn founder Kemmons Wilson. Holiday Inn's careful branding and quality control helped solve this problem. When you saw a Holiday Inn, you knew more or less what you would get. It wouldn't be the Waldorf-Astoria, but you would at least have a clean, comfortable room. Similarly, when you see the glistening golden arches, you know more or less what you'll get. A Big Mac is a Big Mac whether it's in Birmingham or Boston.

And here's something else—consumers are unforgiving. There are myriad competitors for consumers' dollars, which means buyers often switch sellers at the drop of a hat. Companies rise and fall based on consumers' experiences. One bad interaction can be more potent than a thousand good ones. There's one fast-food place Carden's never patronized because every time he thinks about it, he remembers reading about an *E. coli* outbreak there when he was in sixth grade.

None of this is to say market mischief is impossible. Though several decades removed, one need only invoke the name "Enron" to send shivers up the spine. On a less grand scale, Fuller's friend relayed a tale about a New York City hamburger joint that was augmenting its supposedly 100 percent ground beef patties with wood chippings. Wood shavings are cheaper than beef, so it was good for the shady proprietor while it lasted. Another case occurred when someone thought they'd bought an iPhone on eBay only to receive a wooden block painted to look like a real smartphone. It's fraud, and it's mildly funny (until it happens to you).

But part of the humor derives from the fact that 99.9999 percent of exchanges, whether business-to-business or business-to-consumer, go off without a hitch. The real puzzle is why more sellers don't indulge in similar shenanigans. Wouldn't they, if fraud is so lucrative?

The third problem that brand names and advertising help to mitigate is the temptation to defraud. An example from a different time and context helps us understand how companies show they're serious about quality and promise-keeping. In 1519, Hernan Cortes landed on the Mexican shore, intent on conquest. His first act upon disembarking was to burn his ships. The actions of a power-drunk lunatic or a brilliant, calculating general? Without endorsing Cortes's intentions, we think it's the latter.

Cortes changed his soldiers' incentives. His pyrotechnics altered the relationship between costs and benefits for the natives and for Cortes's soldiers. Laughably outnumbered, Cortes's men only had one realistic option: forward. If retreat was not an option, how hard would *you* fight? Meanwhile, the natives also realized that Cortes meant business. Talk is cheap. Actions aren't. As Sun Tzu puts it in his ancient classic *The Art of War*, "Soldiers. . . . If there is no place of refuge, they will stand firm. If there is no help for it,they will fight hard."[30] So much for the glorious Aztec city, Tenochtitlan. Cortes razed it to the ground.

What does any of this have to do with advertising and brand names? Like Odysseus facing the man-eating Sirens, Cortes had tied himself to the mast. It was now in the best interest of Cortes (and his men) to conquer the New World, or at least to die trying. The same logic explains why facial tattoos are common among prison gang members. Tattoos brand you for life and raise the cost of switching allegiance to a rival gang.[31]

For something more tasteful, consider the beloved engagement ring. It arose in the United States during the mid-1930s to overcome the temptation to renege on a promise to wed. Until the '30s, a woman had legal recourse when a man made a marriage proposal that he failed to consummate. After such "breach of promise" laws were stricken from the books, the practice of giving engagement rings arose to fulfill a woman's demand to sort the masculine wheat from the boyish chaff. Only serious suitors would invest in a costly diamond ring. Diamond engagement rings served the same function that advertising fulfills today: a credible commitment to deliver on a promise.[32]

Or, ponder why celebrity endorsements exist. Are consumers so weak-willed, so incurably impulsive that the mere image of Michael Jordan is enough to cause Air Jordans to fly off the shelf? And why do profit-maximizing corporations spend tens of millions on these deals? Outrageous advertising deals must be serving some function. Shareholders don't look kindly on corporations that frivolously blow millions. If corporations do, and you are lucky enough to notice, you can make practically unlimited money. Just do what they do without paying for celebrity endorsements.

Mere economics sheds light on palatial banks, Cortes's blazing ships, and Taylor Swift's Diet Coke commercials. Customers want a solvent bank that won't disappear overnight. Consequently, honest bankers invested in ostentatious pillars and marble floors to convince their clientele they were trustworthy. After all, a banker with designs on his clients' funds won't ever recoup these massive investments if he takes the easy way out by defrauding his clients. Only bankers who are in it for the long run will (eventually) earn a profit from their architectural flourishes. Those who want to "take the money and run" won't. For a signal to be credible ("we won't take your money"), it must also be costly ("look at these ornate pillars").

Sure, the average consumer may not know the details of celebrity endorsement contracts. But still, they know that Michael Jordan, Taylor Swift, and David Beckham are expensive endorsements, whereas Art Carden and Caleb Fuller are not. Coke and Adidas would be unlikely to break even on their Swift and Beckham investments if they reduced the quality of their products. If Coke diluted its product and Adidas began skimping on durability, consumers would quickly flee these companies for rivals (Pepsi, Nike).

Reliance on these sorts of signals to guide our cooperation is nothing new. Just as we often depend on the signals sent by brand names and advertising, medieval merchants depended on the information contained in other costly investments to facilitate their trades.[33] Meeting in far-flung European fairs, medieval traders couldn't always count on local courts to enforce their contracts. So, they sought assurance that business associates were trustworthy. Merchants seeking long-term relationships with others would learn their language, adopt their dress, intermarry, and even convert to a new faith. These actions only pay off if a merchant is good for his word over the long run. Someone looking to defraud a customer won't go to the trouble of learning Arabic.

When a seller breaks a promise, either implicitly or explicitly, consumers flee to substitutes. Brand names help them distinguish between "good" and "bad" sellers. Economists examining fifty-six commercial airplane crashes between 1964 and 1987 found that pilot error caused some of these accidents but not others.[34] Amazingly, consumers "punish" negligent airlines by switching to other providers, but they don't punish nonnegligent airlines after a catastrophic accident. Reckless airlines' stock prices fall. Responsible airlines' stock prices don't. After the 1986 *Challenger* disaster, the stock market figured out which company had manufactured the faulty components almost immediately, while it took a panel of experts months.[35]

Markets are at work for all of us even when we're oblivious to the underlying dynamics. None of this is to say there aren't markets with shoddy products or dishonest sellers, with wooden iPhones or "wooden" burgers, but such stories are so unusual because markets *usually* keep sellers in line.

Still, not everyone is satisfied. Those with refined aesthetic sensibilities sometimes decry advertising as emblematic of capitalism's excesses. Advertising, they say, is vulgar, tacky, and ugly. Fuller has heard at least three friends admire state governments (like Vermont) that have banned billboard advertising alongside the interstate highway system.

We're sensitive to these types of concerns. Yet, what consumers find tasteful (or not) is beyond the economists' purview. We leave those concerns to our philosopher friends who are in the business of shaping peoples' tastes. Our concern is more mundane: the aesthetic objection focuses on the "seen" while ignoring the "unseen." Banning roadside advertisements might beautify the Vermont landscape, but economics trains us to sniff out the unseen with the relentless tenacity of a bloodhound. Such bans make it harder for companies to offer quality assurance. Trade-offs. Understand them, and you've grasped the greater part of economics.

How Should We Then Live?

First, let's appreciate prices and be slower to suppress them because we silence our neighbors when we suppress prices. Every penny is a ballot, and every time you spend or save you vote for who should produce what, where, when, how, and for whom (see the next chapter).

Don't markets cater to rich voters, though? Actually, no. All the dollar votes of the rich are typically swamped by all the dollar votes of the not-so-rich and the poor. That's why most producers don't focus exclusively (or at all) on catering to rich buyers. Ever heard of Walmart?

Prices emerge from competing bids and asks (essential 9), and they are necessary if we are going to cooperate with strangers (essential 6). The economist Thomas Sowell writes that "civilization is an enormous device for economizing on knowledge," and the prices that emerge from competing bids and offers embody a lot of consequential knowledge that might be difficult or impossible to articulate.[36] When you embrace policies that suppress prices, you suppress your neighbors' votes and exclude them from the commercial conversation.[37] In the marketplace, we can genuinely say "every vote counts."

Second, we should take a second look at things we call "irrational" or even "evil" because they make more sense in light of essential 7. Nike wouldn't pay millions for athlete endorsements if they were a shoestring operation or were looking to defraud you. Nike means business—literally. Advertising and branding provide information and assurance.[38]

The poet Walt Whitman wrote, "I am large, I contain multitudes."[39] Even if we don't contain multitudes, we *rely* on multitudes every day. Even more remarkable, these multitudes needn't know we rely on them. They needn't even approve of our goals, but they cooperate with us and we with them. They profit when they succeed. If we are to profit and flourish, profits and losses are not optional social phenomena. We'll see why in the next chapter.

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[2] Adapted from Art Carden, "Coats, Pencils, and Division of Knowledge," American Institute for Economic Research, February 19, 2024, https://www.aier.org/article/coats-pencils-and-division-of-knowledge/.

[3] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. Edwin Cannan, vol. 1 (1776; repr., London: Methuen, 1904), 16, https://oll.libertyfund.org/title/smith-an-inquiry-into-the-nature-and-causes-of-the-wealth-of-nations-cannan-ed-vol-1.

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[5] Smith, *Wealth of Nations*, 1:16.

[6] Quoted in F. A. Hayek, "The Use of Knowledge in Society," *American Economic Review* (1945): 528.

[7] To get a sense of the complex economic problems involved with "sorting, grading, and labeling," see Yoram Barzel, "Measurement Cost and the Organization of Markets," *Journal of Law and Economics* 25, no. 1 (1982): 27–48.

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[10] Read, *I, Pencil*, 4.

[11] Gen 3:19.

[12] Don Lavoie, *National Economic Planning: What Is Left?* (Washington, DC: Cato Institute, 1985), 26.

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[15] Wendell Berry, *The Art of the Commonplace: The Agrarian Essays of Wendell Berry*, ed. Norman Wirzba (Washington, DC: Shoemaker & Hoard, 2002), 212.

[16] Smith, *Wealth of Nations*, 1:15–16.

[17] Peter J. Boettke, "Pessimistically Optimistic about the Future," *Independent Review* 20, no. 3 (2016): 343–46, 343.

[18] To see Carden recite the haiku, visit https://www.youtube.com/watch?v=tXt_3H3e2bg. The link includes bloopers!

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[24] Hayek, "Use of Knowledge"; F. A. Hayek, *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948).

[25] This section is adapted from Art Carden, "What's in a Name? Quite a Lot, Actually," American Institute for Economic Research, July 31, 2021, https://www.aier.org/article/whats-in-a-name-quite-a-lot-actually/.

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6

What Does It Profit a Man? Profits, Losses, and Production

It is profit and loss that force the capitalists to employ their capital for the best possible service to the consumers. Ludwig von Mises[1]

Markets Are for Conversations

Why don't people make electrical wires out of gold rather than copper? Gold conducts electricity better and does not corrode. Why use technologically inferior copper when gold does everything we want copper to do so much better?

The answer: people think copper is good enough, and they want to use gold for other things. Markets allow us to have a multitude of implicit conversations about the merits of using gold or copper (or anything else) for various projects.

"Let's make wires out of gold!"

"Nope. Too expensive."

"What do you mean by that?"

"People would rather use the next ounce of gold for something else."

"Like what?"

"I don't know. Maybe crowning teeth or making jewelry."

"How do you know?"

"Look at the price. Are you willing to pay that for enough gold to wire your house?"

"OK. I can make do with copper."

As we saw in the last chapter, prices aren't arbitrary obstacles mean people put between you and what you want. They're social conventions emerging from social conversations. Gold's price reflects bids, which depend on what entrepreneurs think they can get for goods like wedding rings and gold teeth. It also reflects asks, which depend on what people think entrepreneurs can do with it. Gold would mean better wires but not better enough to compensate for the wedding bands and gold teeth we would have to give up.

Our ancestors lived in lice-infested, scat-smeared poverty because they didn't produce much. Keeping chapter 1's poverty, hunger, and premature death at bay requires production. Chapters 4 and 5 showed how people work together to make goods and services like suits, smartphones, soap, smoothies, oil changes, and haircuts. In this chapter, we will see how profits and losses bring our efforts into harmony with others' wants.

The Soul of Economic Theory

Let's start with the obvious. Only God creates in the sense of bringing something out of nothing (*creatio ex nihilo*).[2] People rearrange what God has created into more valuable configurations. Economists calls the people who guess what and how to transform "entrepreneurs." Critically, market transformations are consensual at every step. Entrepreneurs can bid for inputs, offer outputs, and contract with laborers, lenders, and landlords, but they cannot backstop their "offers" with threats of violence (but see chapter 11 on taxes).

Entrepreneurs who navigate these bid-ask waters "successfully" earn a special type of income: profit. It's special because it isn't contracted for in advance like wages, interest, and rent. It is *residual* income, left over after *contractual* income has been paid to laborers (wages), lenders (interest), and landlords (rent). An entrepreneur profits when revenues exceed costs and loses when they don't.

To Marxists and most people, profit is just a transfer from consumers to corporations (which, we remind you, is a shorthand for other consumers). That's a major error, and you can look at any newspaper to see that the "transfer" theory of profit dominates popular thinking. Newspapers routinely describe greedy corporations as gluttonous boogeymen seizing profits from hapless consumers. The world has a single, fixed pie. More for corporations means less for us.

Or not. To see why, consider what economists Armen Alchian and William Allen say:

> Profits are the economy-wide increases in wealth as a result of more valuable uses of resources. Profits are the unpredictable, but now discovered, increases in values of the responsible resources. The former lower values underestimated the future use values. No one knew earlier what the value of the resources would prove to be, else their market value would already have been that high. The earlier value, or cost of use, was the highest value that anyone formerly was willing to bet it would yield. The fortunate buyer of the resource at that earlier price was able to get the resource's more valuable services before others (or possibly even that buyer) knew what it would ultimately be worth.[3]

Don't be tempted to conclude, say Alchian and Allen, that "the rich" have discovered "one weird trick" for picking pockets. If we're talking about a rich person in a free market, he only got rich by serving the wants of his fellow man. Avarice—which destroys the social fabric when coupled with the state's visible fist—still ruins your soul but loses its social sting when creating value for others is the only way to indulge it.[4] Ask not whether someone has money, but how they got it. There's a world of difference between the Walton family of Walmart fame and royal dynasties that built their fortunes through conquest and coercion. The Waltons were makers; the Habsburgs were takers.

Maybe people would abandon their disgust with "profit" if they understood that every action seeks "profit" broadly understood. Jesus refers to profit in the broad sense when he asks rhetorically, "For what does it profit a man to gain the whole world and forfeit his soul?" (nothing).[5]

When producers seek profits, they are doing what consumers want (essential 8).[6] As economist Don Lavoie puts it in describing a world without profits and losses: "The problem is not that people will not be insufficiently motivated to do the right things but, more fundamentally, they will not know what the right things to do are, even if they passionately wanted to do them."[7]

By the "right things," Lavoie means producing the right stuff in the right quantities with the right inputs in the right places at the right times for the right people. By "right," he means "producing more with less" and avoiding the impoverished state of producing "less with more."

An example helps. Imagine a champagne fountain watering your garden. It's a neat idea until you count the cost.[8] The bill from spraying hundreds of gallons of champagne on the ground would be screaming: "Are you *sure* this is the best way to use champagne that people could enjoy at weddings?" In fact, this is why we only tend to see champagne fountains at weddings and other celebrations. "Just make more champagne" might be an easy fix if you're Jesus, but the rest of us have to ask where the labor, grapes, and other ingredients will come from and what their alternative uses are. What would we give up making another champagne fountain? Again, Don Lavoie summarizes nicely: "Economic rivalry is the clash of human purposes."[9] One person wants champagne for irrigation. Another wants it for a wedding. You can't supply both, all else held constant. Profits reward entrepreneurs who, consumers believe, best resolve those clashes, and entrepreneurs aren't just guessing. Prices guide them. They compare their input prices (costs) with anticipated output prices (revenues), and they hit the accelerator when they think revenues will exceed costs.

Profits do not last long in free markets because profits tell other entrepreneurs to enter the market. Profits disappear as firms enter because the rising supply means falling prices. The process continues until it is no longer to anyone's advantage to switch from one industry to another. The Nobel Prize–winning economist George Stigler observed, "There is no more important proposition in economic theory than that, under competition, the rate of return on investment tends toward equality in all industries."[10] In other words, profits are ephemeral unless something prevents people from entering the market. "Something" is usually "someone with a gun."

Marxists obsess about workers owning the means of production, but we are here to help them sleep easier. Owning the means of production is no walk in the park. It subjects your income to the vagaries of the marketplace, which is to say to the vagaries of others' wants.[11] Your income might be negative (a loss!). There's a reason workers usually opt for "wage slavery," a morally despicable term for the way it diminishes the experiences of honest-to-goodness slaves and undermines the dignity of voluntary contracts.

Profits get the press, but losses are the other side of the coin and just as important. They tell entrepreneurs they are wasting resources, and an entrepreneur who loses money on project after project won't stay an entrepreneur for long. A homebuilder wiring houses with gold will run out of money, go out of business, and do something else. Profits say "do more of this," and losses say "do less of that."

The Nobel Prize–winning economist Vernon Smith puts it this way: "[Many think] the function of price is to provide revenue, and the function of revenue is to cover cost."[12] Smith continues, "But this is the antithesis of the market function of price."[13] Prices guide us toward ventures that create value as judged by people voting with their dollars. "Technologically feasible" does not mean "economically viable," and just because we *could* do it does not mean we should. Profits and losses help us find what people want us to do among all the things we can do. They tell us to align our efforts with our neighbors' wants.

Socialism Isn't Social

Profits and losses are notably MIA from socialism, which is why seemingly well-meaning visions turn into tragedies. Socialism, as the economist Robert Heilbroner defines it, is "a centrally planned economy in which the government controls all means of production."[14] If the government controls all means of production (i.e., land, labor, and capital goods), they're not exchanged. If they aren't exchanged, they don't have prices. If they don't have prices, there's no such thing as profit and loss. And without profit and loss, there's no way to tell whether wealth has been created or destroyed.[15]

Imagine the nicest person you know—your prayer-warrior grandma—as a socialist planner deciding how to use society's resources for the maximum benefit. She loses sleep at night because she cares so much, but without profits and losses to inform her decisions, she won't be able to tell if she made their lives better or worse by using gold for electric wires rather than dentistry and jewelry.

Is "*Christian* socialism" different? People holding up Acts 2 as a model of "Christian socialism" for broader society mean well but are mistaken.[16] The early Christians, at least those in Jerusalem, "had everything in common," and what are families but tiny communist enterprises governed by the principle "from each according to his ability, to each according to his needs?"[17] Every healthy society contains pockets of "socialism" among family and close friends. No one we know—or want to know, frankly—attaches an invoice to a dinner party invitation.

But mutual aid among like-minded people who share goals and values is not the same thing as full-blown socialism, where the government owns and controls the means of production. Context also matters. Some of the early converts had lost everything. Others, who were more fortunate, sold what they had (in markets, no less) and shared generously. The Acts 2 model has a lot more in common with insurance, we would argue, than socialism. It's a good survival strategy for a beleaguered and nascent religious movement. We celebrate civil society and think the church continues to play a crucial role in assisting the downcast (chapter 11), but we reject socialism—not because we don't care about poor people, but because it has been a disaster everywhere it has been tried. Profits and losses are necessary if enormous groups of strangers with different tastes, talents, and ideas are going to work together.

"Okay," we hear fans of Christian socialism objecting again, "why can't we just pool everyone's income that they earned in markets, and then divide it up equally? What's wrong with equal shares?" That's a much better—and less blood-soaked—idea than outright socialism. Still, it's only attractive until we ask how people will act under "equal shares." Will they act differently or just do as they've always done? It turns out that the size of society's pie varies based on how you slice it. Taxing the wealthy means less wealth invested in producing new factories, creating new goods, and training workers. Eventually, if not right away, the pie will shrink, which is bad news for the poor. After all, people buy food, clothing, and shelter with *quantities* of pie rather than with *shares* of pie. If you want Sam Walton working nights and weekends to bring everyday low prices to the masses, you'd best let him keep the residual.

Even more to the point: no one is stopping anyone else from sharing incomes equally among friends and family. There is all the difference in the world between you openhandedly sharing *your* income and your grasping insistence on "sharing" *our* income. The former is kind and generous. The latter is arrogant and presumptuous, even wicked.

In free markets, we can experiment with different ways of producing and living to see what suits us best. Communes and workers' or consumers' cooperatives are always allowed. We certainly wouldn't discourage you from starting one. You and your friends could experiment with owning the factors of production.[18] But the problem with forcing everyone to participate is that it requires *force*. People can't opt out of the socialist workers' paradise, which is a polite way of saying "if you try to leave, people with guns will stop you. If you resist, they will shoot you"—and we needn't speculate on this point. The bullet-riddled corpses of those trying to escape East Germany and North Korea testify silently but powerfully to our point.

Free enterprise doesn't just deliver us from grinding poverty and devastating disease.[19] It doesn't merely allow humanity to take its first feeble steps toward fulfilling the Creation Mandate. It's also morally superior to every other system for organizing production. Under free enterprise, interactions are consensual and peaceful. The wealth you earn reflects the degree to which you have served others. It shouldn't surprise the Christian that the moral way of interacting is also the one that allows us to best fulfill humanity's marching orders.

Thumbs on the Scale

Profits and losses can be misleading, however. Whether they are depends on society's rules. To see why, consider that the four ways of getting what you want we discussed earlier really reduce to two: you can make, or you can take.[20] You can make stuff and trade with people who want to buy it, or you can take stuff other people have made without offering anything in return.

Some rules reward making, others taking. Every society has a mix of both, and the mix determines whether the society blossoms or wilts.[21] Tariffs on foreign steel producers raise domestic steel producers' profits, but this is a case where the profit *is* an extraneous surcharge that transfers wealth from consumers to producers without creating new value. It's taking, subtly, and the money spent lobbying for tariffs is pure social waste—just like the time and energy someone spends breaking into your car.[22] The pie shrinks because producers could have spent that time and energy producing more instead of using it to secure a transfer.

The pie also shrinks when the government privatizes profits and socializes losses by putting its thumb on the scales, as it did with bailouts for car companies and banks during the Great Recession. When things were going well, auto company shareholders enjoyed the benefits. When things went south, taxpayers were left holding the bag. That's cronyism, a system of government favoritism, as opposed to free enterprise.[23] People take more risks when they know the taxpayers will get stuck with the bill. How would a gambler's strategy change if we said "keep the winnings; we'll pick up any losses"? The same principle applies to companies expecting a bailout. If these weren't reasons enough to favor free and open competition, Prov 11:1 says, "The LORD detests dishonest scales, but accurate weights find favor with him."

People before Profits

But isn't this all depressingly cold and calculating? Shouldn't we expect more from people? Shouldn't corporations put people before profits?

"People before profits" is catchy, alliterative, and emotionally compelling. It fits on a bumper sticker and contrasts something good that you can put a face on (people!) with something abstract, faceless, and possibly sinister (profits!). Imagine an out-of-control trolley barreling down a track toward a pile of money. You can throw a switch that will divert the trolley to another track, saving the money but killing five people. What do you do? Some activists wrongly think economics says, "throw the switch" and wrongly think business is the art of throwing the switch and getting away with it. The only way to stop the madness is to get the "people before profits" people into the halls of power. The moral answer seems obvious, and throwing the switch to save the money seems obviously wicked.

Maybe we should look a little more closely. When people say, “people before profits,” they really mean “some people before other people,” usually “people we can point to, before people harder to identify,” or more bluntly, “me before you.”

Consider car safety. A faulty piece of equipment presents a genuine moral dilemma. Should a company issue a recall if it learns that its airbags can malfunction and injure drivers? Our emotions scream, “Of course!” but the answer isn’t that obvious. What problems do we create or ignore to fix the airbag problem? Just like there is no free lunch, there is no free safety (essential 5). With respect to driving, the most dangerous thing you can do is drive in the first place, faulty airbag or no faulty airbag. If you really couldn’t put a price on safety, no one would drive.

The economist Dwight Lee even explains that he is glad corporations put “profits before people” or “are willing to sacrifice human life to increase their profits.”[24] It sounds monstrous, but we know Dwight Lee and can confidently say he’s no monster. He’s explicit: “Corporations routinely sacrifice the lives of some of their customers to increase profits, and we are all better off because they do.” Why? More safety means less of something else, and at some point, people decide that slightly safer cars aren’t worth it.

We could make cars virtually indestructible, and we could force car companies to earn losses doing so. The “people before profits” people probably wouldn’t lose sleep over it, but they should. Safer cars require more wires and engineers that are now unavailable for other things, like smoke detectors, medical devices, and anything else our neighbors value. The Smith family has a safer car, but they skimp on the costlier smoke detectors. It’s not clear they’re safer, on net. No one’s first impulse connects safer cars with house fires, but economics helps us see connections that aren’t apparent.

When corporations produce products only to the point of maximum profitability—and no further—they are doing exactly what we, the consumers, want, as expressed in the conversation happening in the marketplace. Go back to our hypothetical conversation about gold and copper. The market has one about car safety too.

"Why not make that car safer?"

"It would cost too much. We'd earn losses if we did that."

"What does that mean?"

"It means that consumers don't value the additional increment in safety to this car as much as it would cost."

"What's the cost?"

"Whatever consumers would have to give up if we bid additional materials and man-hours into producing this car."

There is no bright line between "safe" and "unsafe." It comes in degrees, it is costly, and when we are deciding which cars to buy and which safety features to add, we are comparing how much we value additional safety to what it would cost. Volvo has a reputation for safety, and a 2024 Volvo V60 Cross Country B5 Plus is probably safer than a 2024 Toyota Corolla. It also costs more than twice as much, $54,000 to $22,000, according to Cars.com.[25] Of course, if we were *really* serious about eliminating traffic fatalities, we could just ban cars.

It turns out you can put a price on safety, and you do it all the time. No one acts as if "any risk is too great," because you put your life at risk every time you enter your car—indeed, any time you do *anything*. If we're going to give people the safety they want without sacrificing anything more valuable, we have to have profits and losses.

The Mystery of Money

It can't work in a barter economy. In attempting to prepare a balance sheet, entrepreneurs would quite literally be comparing apples with oranges. That won't do. To calculate profits, entrepreneurs need money, and they can't do without double-entry bookkeeping itself, a seemingly mundane invention that the German poet Johann von Goethe called "one of the finest inventions of the human mind."[26]

But what of money? Consider a scene that, at first glance, has nothing to do with this question. "When we saw a comrade smoking his own cigarettes, we knew he had given up faith in his strength to carry on, and, once lost, the will to live seldom returned." That's Viktor E. Frankl describing the horrors of Auschwitz.[27]

That seems like a strange inference. What are cigarettes for, if not smoking? But just a paragraph earlier, Frankl hints at the answer: "The cigarettes could be exchanged for twelve soups, and twelve soups were often a very real respite from starvation."[28]

In POW camps, cigarettes were money—tradable claims on the future—and holding them rather than smoking them represented at least a sliver of hope for tomorrow. The economist R. A. Radford, a World War II POW, documented the cigarettes-as-money phenomenon in detail. "Cigarettes rose," wrote Radford, "from the status of a normal commodity to that of currency." And again: "By the end of a month, when we reached our permanent camp, there was a lively trade in all commodities and their relative values were well known, and expressed not in terms of one another—one didn't quote bully in terms of sugar —but in terms of cigarettes."[29]

Radford's account illustrates something remarkable: money finds a way. From the most splendid empires to the most wretched POW camps, all societies have used some kind of money, whether it be salt, seashells, gold, silver, tobacco leaves, cigarettes, or something else. The word "salary" comes from the Latin *salarium*—the salt paid to Roman soldiers. The actress Audrey Hepburn said, “To plant a garden is to believe in tomorrow.” So is opening a bank account—or in a prison camp, holding on to your cigarettes.

It looks like we’re moving into dangerous and controversial waters, and prudent, thrifty frugality can descend into miserly faithlessness. Almost everyone knows this biblical warning: “For the love of money is a root of all kinds of evil. Some people, eager for money, have wandered from the faith and pierced themselves with many griefs.”[30] It’s a sober warning, but it’s also paramount that we “rightly handle the word of truth.”[31] We’ve explained that God gives his creatures good gifts, and we know that he sometimes blesses them with material abundance (chapter 1).[32] Problems arise when we forsake the Creator for his created gifts, the very thing these verses warn against.[33] The same Jesus who created the family told his disciples that they must “hate” their mother and father to be worthy of him, but we hope no one thinks he means we should treat our parents with contempt.[34] It’s the same with money. Life in Christ is about priorities—music to our economist ears.

While we think Paul is hardly commenting on money as a social institution in his instructions to Timothy, others don’t see it that way. Christian thinkers like Jacques Ellul penned jeremiads against money.[35] In this view, money is an immoral invention that introduces gratuitous evils to the world. It positively *makes* people greedy. Perhaps you resonate with a question we’ve been asked: What would be so bad about barter? Apart from the fact that it would mean billions of people starving to death and grinding poverty for those who remain, nothing at all—but we hope you would like to avoid that.

Allow us to explain. Like brand names, money reduces transaction costs (essential 7). Suppose you breed Golden Retrievers and want to buy fresh fish. After finding a fishmonger, you run into a problem: divisibility, sometimes called “the small change problem.” You can’t trade part of a dog for a little mackerel: the dog is indivisible. If you traded an entire dog for a lot of fish, you would leave with more than you can eat before it goes bad.Working out an installment plan would create headaches and paperwork for everyone involved. If you produce indivisible goods like dogs, cars, clothes, pianos, or economics books, you would have a hard time trading and therefore might not even do it in the first place. And with fewer exchanges, the world is poorer (chapters 4 and 5).

Money solves the small change problem because it's divisible. You can chop it up without destroying its value. You can sell dogs to loving homes in exchange for money and then use that money to buy mackerel. Problem solved.

Indivisibility is one instance of the "double coincidence of wants" problem. We will not exchange if I don't want what you have and have what you want. Carden would have been in a tight spot if economics lectures were all he had to offer the vet when his dog was injured. It's better that he can trade economics lectures to people who want them for something the vet will also want: money. Even this example is unrealistic: in a pure barter economy, it's unlikely that specialization would get to the point where we have economists and veterinarians. Who would choose professions that don't allow them to trade easily and often?

Money makes it possible to tell when we are creating value because it lets us convert revenues and costs into common, comparable units. Without money, we would literally be comparing apples and oranges, and no producer could calculate whether he'd earned a profit or a loss. Without money, there's no well-developed division of labor. And life? What's left of it is solitary, poor, nasty, brutish, and short.

So, where did money come from? Not from wise rulers blessing their subjects. Money emerged as the product of human action but not of human design (chapter 3). People have always wanted gold, silver, and salt because they are useful, but eventually, people started wanting these things because they were so easy to trade. Voila! Money was born.[36]

How Should We Then Live?

First, profits shouldn't make you feel guilty. They are a reward from the rest of us for enriching us. Profits are a sign you've stewarded society's scarce resources well. You haven't stolen from your community. You have made others richer, not poorer by enlarging the pie, and profits are how they say "thank you." Unless, of course, you're earning profits by getting the government to shut out competition, in which case you should feel bad and read chapter 12 carefully.

Profits and losses are informative, but they are not decisive. Earning a profit does not literally command you to keep doing something. Profits and losses guide production, but on this side of eternity, we can't guarantee that they guide it toward moral and spiritual improvement. Scripture- and Spirit-informed judgment are still necessary. Pornographers earn massive profits serving people's sin-twisted preferences, but at least profits and losses ensure they are satisfied at the lowest cost. Our publishers might lose money nobly printing *The Economists' Study Bible* if no one buys it. Their rewards may be an "unfading crown of glory" and inner satisfaction, but they have to stop the presses when the money runs out.[37]

Second, we should not expect markets to deliver what they cannot. Markets cannot reconcile you to God. Only Jesus Christ can. We love Everyday Low Prices as much as the next guy, but even Walmart.com's 400 million items won't bridge the gap between God and man or offer rest for your restless soul. Nor will we draw closer to God by rejecting markets and embracing socialism. Spiritual problems require spiritual solutions.

Here is the bottom line: profits aren't evil, and "nonprofit" doesn't mean "virtuous." That someone has earned a profit is not *prima facie* evidence that he has done wrong, contrary to what our ancestors and too many of our contemporaries think. Profits and losses are indispensable to a flourishing society. When you choose wisely, the market's invisible hand pats you on the back.[38] This is a profit. When you choose poorly, the market's invisible hand slaps you in the face. This is a loss. When the government puts its visible hand on the scales or shakes its visible fist, the system doesn't serve our wants as effectively.

Third, if you know what Google should do with their mountain of extra cash, compete with them or organize a leveraged buyout.[39] Beat the "evil capitalists" at their own game. If you can't, realize that the market (just shorthand for "other people") has a message you may not want to hear.

Producers make consumers better off, but that fact alone doesn't head off every suspicion. After all, bosses, managers, and CEOs are involved in production—and these people aren't usually rhapsodized in verse and song. Aren't they villains who have found a way to line their pockets at the expense of those lower in the firm's hierarchy? No. Read on to find out why.

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[1] Ludwig von Mises, *Planning for Freedom* (South Holland, IL: Libertarian Press, 1952), 134.

[2] Ps 33:6.

[3] Armen A. Alchian and William Allen, *University Economics*, 2nd ed. (New York: Wadsworth, 1967), 245.

[4] Beware! 1 Tim 6:6–10.

[5] Mark 8:36.

[6] For more on profit, see Art Carden, "Profit and Production," *Quarterly Journal of Austrian Economics* 12, no. 2 (2009): 13–26; Art Carden, "A Note on Profit, Loss, and Social Responsibility," *New Perspectives on Political Economy* 5, no. 1 (2009): 1–8.

[7] Don Lavoie, *National Economic Planning: What Is Left?* (Washington, DC: Cato Institute, 1985), 21.

[8] Luke 14:28–29.

[9] Don Lavoie, *Rivalry and Central Planning* (Cambridge: Cambridge University Press, 1985), 22.

[10] George Stigler, *Capital and Rates of Return in Manufacturing Industries* (Princeton: Princeton University Press, 1963), 54.

[11] Nicolai J. Foss, Peter G. Klein, Lasse B. Lien, Thomas Zellweger, and Todd Zenger, "Ownership Competence," *Strategic Management Journal* 42, no. 2 (2021): 302–28.

[12] Vernon L. Smith, "Constructivist and Ecological Rationality in Economics," *American Economic Review* 93, no. 3 (2003): 473.

[13] Smith, 473.

[14] Robert Heilbroner, "Socialism," Econlib, Concise Encyclopedia of Economics, 2008, https://www.econlib.org/library/Enc/Socialism.html.

[15] Ludwig von Mises, *Economic Calculation in the Socialist Commonwealth* (Auburn, AL: Ludwig von Mises Institute, 1920); Mises, *Socialism: An Economic and Sociological Analysis*; F. A. Hayek, "The Use of Knowledge in Society," *American Economic Review* (1945): 519–30; Friedrich August Hayek, *The Fatal Conceit: The Errors of Socialism* (London: Routledge, 1988).

[16] Art Lindsley, "Does Acts 2-5 Teach Socialism?" Institute for Faith, Work, and Economics, September 12, 2012, https://tifwe.org/resource/does-acts-2-5-teach-socialism.

[17] Acts 2:44; Karl Marx, "Critique of the Gotha Programme," Marxists Internet Archive, ch. 1, https://www.marxists.org/archive/marx/works/1875/gotha/ch01.htm. Notice that Acts 2:46 says that the Christians broke bread in each other's homes, implying that private home ownership was still common in the early church.

[18] To understand why communes and cooperatives are so rare, we recommend Henry Hansmann's 1996 classic, *The Ownership of Enterprise.* Spoiler alert: workers and consumers rarely opt for these forms of production because they usually confer fewer net benefits and create more uncertainty than traditional, capitalist for-profit firms.

[19] Peter T. Leeson, "Two Cheers for Capitalism?," *Society* 47 (2010): 227–33.

[20] For a discussion of such "getting by," see Milton M. Shapiro, *Foundations of the Market-Price System*, Ludwig von Mises Institute (Lanham, MD: University Press of America, 1974), 2–8.

[21] William Baumol, "Entrepreneurship: Productive, Unproductive, and Destructive," *Journal of Political Economy* 98, no. 5 (1990): 893–921.

[22] Gordon Tullock, "The Welfare Costs of Tariffs, Monopolies, and Theft," *Western Economic Journal* 5, no. 3 (1967): 224–32.

[23] Peter G. Klein et al., "Capitalism, Cronyism, and Management Scholarship: A Call for Clarity," *Academy of Management Perspectives* 36, no. 1 (February 2022): 6–29; Randall G. Holcombe, "Political Capitalism," *Cato Journal* 35 (2015): 41; Randall G. Holcombe, *Political Capitalism: How Political Influence Is Made and Maintained* (New York: Cambridge University Press, 2018).

[24] Dwight R. Lee, "Sacrificing Lives for Profits," November 1, 2000, https://fee.org/articles/sacrificing-lives-for-profits/.

[25] Search conducted April 24, 2024.

[26] Johann Wolfgang von Goethe, *Goethe*, vol. 9, *Wilhelm Meister's Apprenticeship*, ed. Eric A. Blackall and Victor Lange (Princeton: Princeton University Press, 1995), 18.

[27] Viktor E. Frankl, *Man's Search for Meaning* (New York: Simon & Schuster, 1985), 26.

[28] Frankl, *Man's Search for Meaning*, 26.

[29] Richard A. Radford, "The Economic Organisation of a POW Camp," *Economica* 12, no. 48 (1945): 189–201.

[30] 1 Tim 6:10.

[31] 2 Tim 2:15.

[32] Jas 1:17; Job 42:7–16.

[33] Rom 1:25.

[34] Luke 14:26.

[35] Jacques Ellul, *Money & Power* (Downers Grove: InterVarsity, 1984).

[36] Carl Menger, "On the Origin of Money," *Economic Journal* 2 (1892): 239–55.

[37] 1 Pet 5:4.

[38] The "invisible hand" is a metaphor from Adam Smith's *The Wealth of Nations.* It is Smith's way of conveying how prices, profits, and losses guide market participants' decisions.

[39] Paul E. Knowlton and Aaron E. Hedges, *Better Capitalism: Jesus, Adam Smith, Ayn Rand, and MLK Jr. on Moving from Plantation to Partnership Economics* (Eugene, OR: Cascade Books, 2021), 142; Henry G. Manne, "Mergers and the Market for Corporate Control," *Journal of Political Economy* 73, no. 2 (1965): 110–20.

7

The Laborer Is Worthy of His Wages

How Markets Determine Wages and Working Conditions

For the Scripture says, "You shall not muzzle an ox when it treads out the grain," and, "The laborer deserves his wages." 1 Tim 5:18

The two methods by which we are allowed to produce events may be called work and prayer. C. S. Lewis[1]

Who Sets Wages?

Chapters 1 and 6 showed that Adam and Eve were poor as dirt on day 1 of life outside Paradise because they had yet to produce anything. We must produce to avoid their lowly fate, and to produce effectively, we must cooperate with multitudes. We must work in teams, and in a commercial society, we call these teams "firms" or "businesses" or "corporations," words that don't usually generate warm, fuzzy feelings. In fact, when most folks think about the relationship between employers and employees, they call to mind words like "antagonism" or (worse) "exploitation." In this chapter, we turn to what mere economics says about work, wages, and related issues like discrimination.

Here's the man on the street's working theory: stingy employers choose how much they pay workers, and they pay almost nothing unless the government does something about it. Giants like Walmart swoop into poor communities where they take advantage of and underpay low-skilled workers with few options. But people who think this way are wrong. Supply and demand, not mean bosses or big-box fat cats, set wages.

To stack the deck in favor of the "stingy employers theory," assume every firm in the world is run by an Ebenezer Scrooge clone who cares about nothing but profit. Now suppose one of them decides to stop paying people so he can keep the money for himself.

Will he succeed?

No.

Why not?

Competition.

It's true that employers only demand employees as a "means" to making money, but the fact that buyers (of labor) compete with other buyers (of labor) causes wages to rise. Imagine you work for CroesusCorp, earning $50,000 a year but contributing $100,000 annually to CroesusCorp's bottom line. Every year, CroesusCorp pockets $50,000 in profit by employing you. Greedy Avarice Inc. engages the services of a headhunter who notices you. Avarice Inc. offers you $60,000 annually. It's a win-win. You get a $10k raise; Avarice Inc. pockets $40k in profits. CroesusCorp loses, but they lose because they made a mistake by underpaying you. That is until profit-obsessed Amalgamated Mammon gets in on the action. Your salary rises to $70k as you pack your bags for Amalgamated Mammon's greener pastures. Wages rise as employers look out for their bottom lines. Competition forces wages higher until it would pay more to get you than you're worth. The process isn't instantaneous or perfect, but it's relentless and persistent. It's why wages are astronomically higher than subsistence levels.

The theory also explains real-world wage patterns. Consider this: sometimes, the most unpleasant jobs are the cornerstones of a well-functioning society. Would you rather awaken to a world where all the economists or all the garbage collectors had disappeared? We'd prefer all the (other) economists to disappear—and not simply because we'd face less competition. Sanitation is not a small problem. Remember the Black Death?

If all garbage collectors disappeared one day, their jobs wouldn't stay vacant forever. Incentives would change to attract people into the field. Garbage collectors' wages would rise, drawing cooks, librarians, carpenters, economics professors, and others into the field. People would keep moving into sanitation and out of other fields until it was no longer advantageous.

Holding everything else constant—and remember this important qualifier—noxious jobs like garbage collection pay more than jobs requiring comparable skills. This premium compensates workers for the fact that garbage collection stinks. All else constant, fun jobs pay less than boring jobs. Safe jobs pay less than dangerous jobs; easy jobs pay less than hard jobs. If you took any job and made it a little more fun, more people would compete for it and wages would fall. The same would hold if we made jobs less dangerous or less boring. People work for a lot of things, not just wages—having a career that is stimulating, spiritually fulfilling, and comfortable is, in the eyes of many, worth sacrificing some income. We didn't become professors for the pay.

"Holding everything else constant" is doing a lot of heavy lifting here. Riding on the back of a garbage truck is more dangerous than working in a comfortable office, but the office job pays better. How so? Everything else isn't constant. Many other attributes of the jobs help explain why garbage collectors earn less than executives. Importantly, there is a much larger supply of people with the skills to collect garbage. There are relatively few people with the skills to be successful executives.[2]

Supply and demand shed light on another bugaboo of those worrying that labor markets are places where "capitalists" come together to exploit laborers. Capital goods (i.e., "machinery," "tools") are goods humans produce and use to produce other goods. When workers use capital goods, their productivity rises.

Edmund Cartwright's (1743–1823) power looms of the Industrial Revolution are a case in point. Someone operating a loom produces much more than someone working only with their hands. Maybe you can produce one shirt a day with your bare hands but one hundred with a loom. When someone produces more, they become more valuable to employers. The competition we just described kicks in again. Employees operating looms earn higher wages than their predecessors working with primitive technology, such as one's hands.

The Luddites famously smashed the Industrial Revolution's looms when they realized the machines had put some weavers out of a job. But the looms did not reduce employment overall, or else one legacy of the Industrial Revolution would be mass unemployment—unemployment that would have only intensified in the years since the nineteenth century. Instead, new jobs sprung up to produce and maintain the looms. At the same time, the looms dramatically increased the clothing supply, allowing the average person to own a complete wardrobe for the first time, all while spending less money on clothes. Entrepreneurs reinvested the savings, which meant more output and, you guessed it, new jobs.

A Synonym for "Choice"

It's hard to shake the meanness theory of wages. After all, the world is full of jerks. Some of them are managers and CEOs. Some of them are shareholders. The ranks of producers, consumers, politicians, retirees, professors, students, clergy, parents, children, the young, the old, Christians, and skeptics burst with people failing to love their neighbors as themselves.[3] As Christians, this is exactly what we'd expect; "all have sinned and fall short of the glory of God."[4] One way to sin and fall short of God's glory is by indulging in the "isms"—racism and sexism, for instance—which violate the biblical mandate to show no "partiality."[5]

Again, spiritual problems require spiritual solutions; however, economists know that people respond to incentives, including incentives to indulge or resist the flesh. So, what conditions encourage discrimination? And what discourages it?

First, note something rather shocking. "Discrimination" is just a choice (essential 1). When you choose Walmart, you discriminate against Target. Someone getting married vows to discriminate against other possible partners by "forsaking all others."[6] Usually, people have no problem with this sort of discrimination. They celebrate it. And at least in the case of marriage, they *should* celebrate it.

All this to say, discrimination is complicated. There are many kinds, but consider just two.

First, discrimination might be a response to hidden information. Measuring someone's productivity or character is costly, and people routinely discriminate based on observable characteristics highly correlated with productivity and character, like tattoos. Norms may be changing, but "ink" still carries a stigma. Tattoos tell the world you buck convention.[7] Being a rebel is a feature in some jobs but a bug in others. For better or for worse, people associate visible tattoos with irresponsibility and poor impulse control. The more prominent your tattoos, the less likely you are to succeed in the job market. Economists call this "statistical discrimination" because it's based on a group's average tendencies.

Think about statistical discrimination this way. Imagine you were asked to put together a basketball team and could draw players from one of two groups: college professors and college students. The professorate has a lot of great athletes, but we average forty-six years old and have many health problems. It's a good pool if you want to pick five people to write books, but not if you want to go to the NCAA basketball tournament. Clearly, this sort of discrimination need not be sinful.

Second, some people have "a taste for discrimination." It's what James condemns in his epistle and what Nobel Prize-winning economist Gary Becker analyzes in his classic *The Economics of Discrimination*.[8] Racists don't like people of other ethnicities. Misogynists don't like women. Misandrists don't like men.

Reams have been written about both kinds of discrimination, but we will focus on this seedier side of choosing—"taste-based discrimination"—because it's obviously sinful and gets the most press. A key question is, Are people willing to put their money where their mouths (or minds) are and give up income to indulge their taste for discrimination? Someone who doesn't like purple people might pass over the best applicants if they're purple. Employees might also be willing to avoid companies surrounding them with purple coworkers. An executive indulging his taste for discrimination at his shareholders' expense violates his fiduciary duty to maximize shareholder profits.

But how long can these discriminators get away with their discrimination? Even if someone is willing to give up income in return for bigotry, this may not last long. In markets, discriminatory firms tend to lose because consumers rarely care who made the food they eat and the clothes they wear so long as they get a good deal.[9] Indeed, "buy American," "buy local," and anti-sweatshop campaigns are predicated on the notion that people don't have a *sufficient* taste for discrimination.

Take a gap that's often chalked up to discrimination. Men earn more than women in the United States. Yet, if women were underpaid relative to men, it'd only take a few profit-obsessed employers to fire their male staff, hire all women, and increase their profits. Shareholders would be overjoyed. Executives' stock options would appreciate. And let's not forget that many employers are women themselves. Do they, too, dislike paying women their worth? From the discrimination view, it's not just men holding women down. It's women also.

So, why do men earn more? Wage premiums for unpleasantness explain a large chunk of the disparity. Disproportionately, men work jobs with long and variable hours, risky working conditions, hectic commutes, lots of travel, and stressful situations. Disproportionately, these jobs pay more. In other words, men and women frequently do *not* do the same work. A pediatrician (a job women occupy disproportionately) is not doing the same job as a neurosurgeon (a job men occupy disproportionately). Women may place more value on a job with regular hours that allows more family time, but a man is likelier to choose a job that takes him away from family for long stretches while compensating him handsomely. A cynic might conclude that men are simply greedier creatures than women are.

Harvard's Claudia Goldin, the 2023 winner of the Economics Nobel Prize, is probably the world's leading expert on gender pay differences. Through decades of careful empirical examination, Goldin has shown that men disproportionately choose jobs with inflexible, odd, and variable hours.[10] Women opt for more flexible jobs that can accommodate motherhood. That's all well and good—but such jobs also pay less! The gender pay gap, therefore, tends to differ by occupation. The gap is small in industries where most jobs look alike and is larger where jobs differ. In "business," the pay gap tends to be large. In pharmacy, part-time work is common but not penalized, and the gender pay gap is small. When comparing like with like, the gap almost disappears. "As far back as 1971, single women in their thirties who had worked continuously since leaving school were earning slightly *more* than men of the same description."[11] Gaps haven't necessarily closed because we are more enlightened. Wages tracked productivity in nineteenth-century French manufacturing when attitudes were anything but modern and discrimination was completely legal.[12]

In other words, men and women make different choices (on average), leading to a gender pay gap. For a host of reasons, they sort into different jobs and industries.[13] These different choices have roots in culture, history, and policy

—for a long time, women could not own property or apply for credit on their own—but also in biology. Men and women differ physiologically, the most important difference being that women can bear and feed children. "Equal human *potentialities*" do not translate into "equally developed *capabilities*" for a host of reasons that have nothing to do with discriminatory bias.[14]

Economics makes another prediction. A gender pay gap implies a gender death gap as the other side of the coin. After all, one reason for higher pay is dangerous working conditions. For the United States in 2021, men comprised 91–92 percent of workplace fatalities.[15] Oddly, mentioning the "pay gap" tends to elicit outrage, while mentioning the "death gap" or "life expectancy gap" tends to elicit smirks and laughs. Women who want to earn more are free to enter these dangerous professions.

In sports and many other fields, men and women often do similar-looking work, but that work does not always provide similar value. In early 2022, women's soccer stars Megan Rapinoe and Alex Morgan reached a $24 million settlement with the U.S. Soccer Federation in the wake of a lawsuit over "equal compensation." They were joined in spirit by other sports superstars, like Serena Williams, who commented, "I like that people are starting to recognize that women do deserve equal pay and they deserve the same a male gets."[16] In fact, the "equal pay for equal work" idea has been enshrined in American law since the Equal Pay Act of 1963. Yet, many in our society still insist that women earn (something like) eighty-two cents on the dollar for doing the "same work" as men.

But consider this: Fuller was a college tennis player with a winning record. Both Williams and Fuller hit forehands, backhands, and serves and occasionally approached the net. Did they do the "same work?" If so, Fuller was exploited because while Serena was busy racking up close to $100 million in prize money (and much more when we count her endorsements), Fuller has yet to see a penny from playing tennis (he made a few bucks teaching it). Williams packed stadiums and attracted millions of TV viewers. Fuller was lucky when his mom showed up.

People are far more willing to pay for the opportunity to see Serena do her stuff than for Fuller to do something cartoonishly similar. And as eager as screaming fans are to see Serena, their intensity and numbers swell more for stars of the men's game. As of this writing, Novak Djokovic (still active) has earned over $180 million in prize money (and much more when we count his endorsements). The 2022 Wimbledon tournament viewership tells the story. Whereas 3.1 million people watched the women's final on BBC One and another 712,000 streamed it, 7.5 million watched the men's final, and 2.6 million streamed it.[17]

If the San Diego Wave star Alex Morgan earns less for "the same job," then Major League Soccer owners (the US men's professional soccer league) are stupidly leaving money on the table. Employers pay Morgan more than zero because some other employer would bid the productive employee away to his firm or team if they didn't. One of the Major League Soccer clubs just up the road in Los Angeles could offer Morgan more than she makes playing for the Wave. Both sides would win. Morgan would get a pay raise. One of the LA teams would get a star player on the cheap and put a better product on the field. Right?

Last we checked, LeBron James earns more than the entire WNBA put together. It's not because there's a conspiracy to underpay women for "the same work." It's because people vote with their money. Money talks; it screams "YES!" to the NBA and whispers "if you insist" to the NBA-subsidized WNBA, though it is saying "yes" a little louder thanks to Caitlin Clark's meteoric rise. Should Clark ever draw LeBron-level money, she'll find herself making LeBron-level money.[18]

None of this suggests that discrimination against women (or men) can't happen in free markets, only that it's costly and that the higher the cost, the less it happens. Anyone caring about snuffing out taste-based discrimination should think long and hard about how it flourishes—and whether their preferred solutions will actually solve anything.

How Not to Fight Discrimination

The 1990 Americans with Disabilities Act (ADA) is a US law prohibiting discrimination based on disability. According to the ADA, illegal discrimination could occur during application, hiring, firing, training, or other steps in the employment relationship. The ADA states that employers with fifteen or more employees shall not discriminate against a "qualified individual with a disability." The disabilities that the ADA covers are legion. Amputation. ADHD. Autism. And those are just disabilities starting with *a*. A few others covered by the ADA include diabetes, OCD, PTSD, deafness, and schizophrenia.

So, what happened after the ADA was passed? The ADA, it turns out, *decreased* the employment of disabled men of all working ages and also reduced the employment of disabled women under age forty.[19] Mere economics explains why. Begin with the fact that most discrimination lawsuits originate from employees who claim mistreatment. Most suits aren't from applicants alleging they weren't hired for reasons of disability.

Now, put yourself in an employer's shoes. It starts looking risky to hire someone with a disability. What if, after giving them a chance, something goes wrong? What if you and they disagree about their performance last year? What if they sue you for discrimination? Can your firm afford a lawsuit? It's starting to look like hiring someone else is your best bet. After all, in a pile of applications, it's easy to fabricate another reason to explain your choice to offer someone else the job. Four words sum up the policy lesson: intentions don't guarantee outcomes (essential 9). Fighting discrimination must start by changing hearts.

Suffer the Children

You might find someone who shares our perspective on how antidiscrimination law backfires, but good luck finding an opponent of child labor laws. Who could possibly oppose laws preventing children from working, other than Ron Swanson from the hit TV show *Parks & Rec*? Who favors eight-year-olds working long hours doing menial tasks in unsafe working conditions? What sort of moral monster could possibly be on the other side of this debate? Why is there even a debate at all?

Child labor is a case where mere economics is a necessary check on our moral intuitions, lest we do more harm than good. When we question child labor laws, it's not because we're sociopaths who delight in children spending their formative years in a factory. No. Economists oppose child labor bans *because* economists value human flourishing, including the well-being of children, whom our Lord dignified throughout his earthly ministry.[20]

We might begin by asking why child labor is not uniformly distributed around the world. Be careful. We've heard explanations that flirt with racism. Child labor is prevalent in Africa, South America, and Southeast Asia. You won't find children working in Columbus, Ohio, factories. Yet the parents in Dhaka, Bangladesh, don't love their children any less than the white, middle-class Ohio couple who would never dream of sending their children to work.

Why wouldn't the Ohio family countenance the thought of their children working? We slipped in a clue: "middle-class." Two adult incomes are sufficient to secure a material existence which surpasses that of almost every person who has ever lived (chapter 1). The Ohio couple doesn't need to send their kids to work. Without denying the existence of bad parents, we submit that the average parent is doing his or her best to provide a safe, loving environment for their children.

Parents who send their children to work think it's the only way to feed their family. Many families in the underdeveloped world teeter on the brink of starvation, their wages only sufficient to keep body and soul together from one day to the next. In such circumstances, children working can mean the difference between life and death. Unsurprisingly, when a country's average income rises, even by a little, child labor rates fall.[21] Most parents are willing to make tremendous sacrifices if their children can become educated and have what those of us in the developed world would call a "normal childhood," but what we call "normal" is anything but for the desperately poor.

But didn't this happen because enlightened countries banned child labor? Not mainly. Almost every country in the world bans child labor, but poor countries also mean poor governments unable or unwilling to enforce such regulations.[22] That isn't to say that such ill-enforced laws have no effect. They often do, and those effects can be dire for the children involved. Consider India's Child Labor (Prohibition and Regulation) Act of 1986. Though this regulation banned work by children under fourteen, it increased the share of children younger than fourteen working, increased the percentage of young girls working, and reduced poor households' caloric intake.[23]

How? The Indian government enforced the ban unevenly since they lacked resources to monitor India's large population. Some producers employed children under the table and paid occasional fines. This risk of being fined reduced the value each child contributed to employers' bottom lines and in turn reduced the black-market wages they were willing to pay. Household income fell across India, and parents tried making up the difference by sending more of their children to toil in a factory. In many cases, the next child they sent was a girl because they had already sent their son(s) to work. Well-intentioned policy made the poorest households poorer and more likely to send their children to work. Prosperity, the topic of chapter 13, not regulation, eliminates child labor.

How Should We Then Live?

First, reflect on where wages come from. They come from the market, which is just another word for "everyone else," and your boss is just the messenger. Contrary to popular belief, large retailers pay better than smaller ones.[24] Second, think about how there is more to work than wages. Third, understand that wage gaps happen because people have different developed capabilities to do things for which others will pay. Invidious discrimination doesn't matter as much as you might think. LeBron James earns more than the entire WNBA because he quite literally *makes* more, as measured by people's willingness to pay to watch him play. Messi Mania swept the United States in 2023, and shortly after he signed with Inter Miami, all of the games expected to feature him—home and away—sold out. Caitlin Clark had a similar effect in the WNBA, but even with Clark, the WNBA's broadcasting rights are measured in tens of millions of dollars while the NBA's broadcasting rights are measured in billions.[25]

As a matter of personal policy, you can raise your earnings by learning how to do things other people value. The process isn't instantaneous, but you can expect that increases to your productivity will eventually be rewarded with increases to your compensation. One more thing here: keep your productivity at least a little ahead of your wage. If you're worth paying, you will always find work—unless someone with a gun gets in your way. If you want WNBA stars like Caitlin Clark and Angel Reese to earn more, watch their games and buy their merchandise.

Hence, as a matter of public policy, we can raise others' earnings by getting out of their way. Well-meaning attempts to help them frequently backfire. Child labor laws (can) result in more children working. Antidiscrimination laws generate, of all things, *more* discrimination. You help others by offering them a hand up (say, by editing their resume or teaching them a new skill), not by forcing employers to pay more. Economic progress, to which we will return in chapter 13, cures child labor, sweatshops, and poor working conditions.

But someone in the back of the classroom raises his hand. "This might be true in competitive markets with many producers," she says. "But what about when a single firm corners the market? What about monopoly?" That is our question in the next chapter.

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[1] C. S. Lewis, *God in the Dock: Essays on Theology and Ethics*, ed. Walter Hooper (1970; repr., Grand Rapids: Eerdmans, 2002), 106.

[2] Tyler Cowen, *Big Business: A Love Letter to an American Anti-Hero* (New York: St. Martin's, 2019).

[3] Mark 12:31.

[4] Rom 3:23.

[5] See Jas 2:1–9.

[6] At least in his capacity as husband, which means among other things, sexual exclusivity.

[7] Or, that you're an economist. We have a mutual economist friend with a supply and demand tattoo.

[8] Jas 2:1–13; Gary S. Becker, *The Economics of Discrimination* (Chicago: University of Chicago Press, 1971).

[9] W. H. Hutt, *The Economics of the Colour Bar*, Institute of Economic Affairs (1964; repr., Auburn, AL: Ludwig von Mises Institute, 2007).

[10] Claudia Goldin, "A Grand Gender Convergence: Its Last Chapter," *American Economic Review* 104, no. 4 (April 1, 2014): 1091–1119, https://doi.org/10.1257/aer.104.4.1091.

[11] Thomas Sowell, *Social Justice Fallacies* (New York: Basic Books, 2023), 7.

[12] Donald Cox and John Nye, "Male-Female Wage Discrimination in Nineteenth-Century France," *Journal of Economic History* 49, no. 4 (1989): 903–20.

[13] Francine D. Blau and Lawrence M. Kahn, "The Gender Wage Gap: Extent, Trends, and Explanations," *Journal of Economic Literature* 55, no. 3 (2017): 789–865.

[14] Sowell, *Social Justice Fallacies*, 3.

[15] This statistic tends to hover somewhere in the low 90 percent region for the United States. See, for instance, this December 2023 summary by the Bureau of Labor Statistics: https://www.bls.gov/news.release/pdf/cfoi.pdf.

[16] Christopher Brito, "Serena Williams Says 'It Takes Time' to Address Gender Pay Equality in the Sports World," February 11, 2022, https://www.cbsnews.com/news/serena-williams-sports-gender-inequality/.

[17] Pritha Ghosh, "BBC's Coverage of Wimbledon 2022 Breaks TV Viewership Records with 53.8 Million Viewers," Sportskeeda, last modified July 12, 2022, https://www.sportskeeda.com/tennis/news-bbc-s-coverage-wimbledon-2022-breaks-tv-viewership-records-53-8-million-viewers.

[18] Art Carden, "Will Caitlin Clark Be Grossly Underpaid?," American Institute for Economic Research, April 23, 2024, https://www.aier.org/article/will-caitlin-clark-be-grossly-underpaid/.

[19] Daron Acemoglu and Joshua D. Angrist, "Consequences of Employment Protection? The Case of the Americans with Disabilities Act," *Journal of Political Economy* 109, no. 5 (2001): 915–57.

[20] Matt 19:14.

[21] Benjamin Powell, *Out of Poverty: Sweatshops in the Global Economy*, Cambridge Studies in Economics, Choice, and Society (New York: Cambridge University Press, 2014).

[22] Joshua C. Hall and Peter T. Leeson, "Good for the Goose, Bad for the Gander: International Labor Standards and Comparative Development," *Journal of Labor Research* 28, no. 4 (October 1, 2007): 658–76, https://doi.org/10.1007/s12122-007-9017-y.

[23] Prashant Bharadwaj, Leah K. Lakdawala, and Nicholas Li, "Perverse Consequences of Well Intentioned Regulation: Evidence from India's Child Labor Ban," *Journal of the European Economic Association* 18, no. 3 (June 1, 2020): 1158–95, https://doi.org/10.1093/jeea/jvz059.

[24] Brianna Cardiff-Hicks, Francine Lafontaine, and Kathryn Shaw, "Do Large Modern Retailers Pay Premium Wages?," *ILR Review* 68, no. 3 (May 2015): 633–65, https://doi.org/10.1177/0019793915570877.

[25] Michael McCarthy, "Tuned In: WNBA Could Seek Its Own Media Deal," *Front Office Sports* (blog), March 19, 2024, https://frontofficesports.com/wnba-could-seek-its-own-media-deal/; Joe Flint, Amol Sharma, and Isabella Simonetti, "NBC Prepares $2.5–Billion-a-Year Bid to Pluck NBA Rights From TNT," *Wall Street Journal*, April 29, 2024, https://www.wsj.com/business/media/nbc-prepares-roughly-2-5-billion-a-year-offer-to-steal-nba-rights-away-from-tnt-e6e14eeb.

8

"Tough Weed" or "Delicate Flower"? Monopolies and Competition

If it were a country, MySpace would be the seventh biggest, ahead of Bangladesh and Russia. Victor Keegan[1]

Will Google Ever Lose its Monopoly?

Jane College Student decides that it's finally time to start writing her term paper.[2] She knows markets harness people's vast knowledge, skills, and perspectives (chapter 4) to produce the goods and services (chapters 5 and 6) which deliver us from hunger and hardship (chapters 1 and 3). Profit-seekers push compensation toward productivity and discourage racial or sexual discrimination (chapter 7). She has some misgivings, though, and thinks firms can get so big they exploit consumers.

Jane walks to the campus library where she finds herself staring at the blank screen and blinking cursor before tabbing over to X (formerly Twitter). Just before tabbing over to Google, she sees this claim: "Google is the biggest monopoly in the history of humanity." A reply says, "If not Google, then Amazon." Her phone buzzes with a Gmail notification saying an Amazon package has arrived. She also sees a link to an article about how X (formerly

Twitter) is the most powerful site on the internet in her Apple News notifications.

Her breath quickens. Four monopolists—Google, Amazon, Apple, and X (formerly Twitter)—have her surrounded, and people on the internet say they are fattening their bottom lines at her expense. The market, critics say, has failed to deliver sufficient competition for hulking technology firms. They think markets tend toward fewer firms and higher prices with corporate power crushing competition. Competition is a "delicate flower" rather than a "tough weed," to use economist George Stigler's helpful metaphor.[3]

If Jane keeps reading, she'll see history and economics refuting the "delicate flower" view and highlighting "creative destruction," a term economist Joseph Schumpeter popularized that describes firms' constant search for ways to outdo one another.[4] Competition is hard to suppress. Sellers constantly outdo one another in search of the consumer's scarce pennies. Consumers get new and better products, lower prices, and funnier ads.

So, back to Google. Will it ever lose its monopoly? The question fails out of the gate. Google doesn't have a monopoly by any sensible definition of the word. Is Google's search engine the only way to "search" for information? No, there are libraries full of books, and there are other people—many of whom know things.

Is Google's Gmail the only way to communicate with a person at a distance? Again, no, there are other email providers (Outlook, Proton, etc.), cell phones, landlines, handwritten snail mail, shouting, and smoke signals.

Is Google Maps the only way to navigate? Nope. Garmin still exists (just checked), as do the stars (just checked), which guided navigation for millennia.

Does Google make the only browser? No, Chrome is just everyone's favorite browser.

What about advertising—is there any other way? Of course, as evidenced by the billions of dollars spent on nondigital advertising each year (nor is Google the only platform for digital advertising).

Try this logic on the services (e.g., YouTube) Google offers. The results are the same. Substitutes (e.g., Vimeo) abound.

So, let's modify this question: Will Google ever stop being a big, dominant firm?

We think so. In the time we spent writing this book, Google faced formidable challenges by upstarts like OpenAI and began falling behind competitors like Microsoft in AI.

It's hard to shake the feeling, though, that some firms are just *too* big.[5] (Compared to what?) Walmart employs over 2.3 million people. Might these companies exploit the poor and be the oppressors the Old Testament frequently decries?[6] The answer is complicated. For instance, Big Tech companies aren't an unalloyed group of unaided capitalists serving consumers. They've gotten special privileges from the government, too (chapter 6). Jane might need to rethink her paper, and instead of hating the players, she might need to look at the game itself.

Will MySpace Ever Lose Its Monopoly?

Google seems impervious to new competition. When the giants are in their heyday, it's hard to imagine a reversal of fortunes. In 2007, journalist Victor Keegan pondered aloud (and for the whole wide internet to see) whether MySpace was unstoppable. "If it were a country," Keegan noted, "MySpace would be the seventh biggest, ahead of Russia and Bangladesh."[7] About a year later, Facebook overtook MySpace as the most popular social media platform. In the spring of 2022, Fuller asked his Econ 101 students how many had heard of MySpace. Not everyone's hand went up.

Meanwhile, a 1999 *Barron's* cover story titled "Amazon.bomb" warned that the online bookseller's days were numbered.[8] A quarter century later, consternation about Amazon the "monopolist" is as intense as the consternation about Google. Snippets from business history show that a firm's fortunes rise and fall with how well it satisfies consumer preferences day after day. Past performance does not guarantee future success.

Understanding why some thought MySpace was invincible matters because there are parallels to Google and other large, dominant firms. It wasn't just that MySpace was "big"—the US economy is a graveyard of industrial and commercial giants once thought invincible. A&P Grocery, Sears, Blockbuster, and let's toss in Google's failed social media platform, Google+, for good measure. Future editions of *Mere Economics* might include Walmart, Google, and Amazon.

Social media platforms are "network goods"—a good that gains in value with the number of people using it. Once, a childhood friend of Fuller's bragged that his house was particularly special. "You see," he explained, "it was the first house in town to have a telephone." Even at the time, Fuller recalls a creeping sense of bemusement. "They must have been calling someone out of town," he remembers thinking. He only wishes he'd said it, but ten-year-olds aren't good at comebacks.

If the world had only one telephone, it'd be worthless, except maybe as a lousy anchor in a tiny boat. Phones become more attractive as more people have them. It's the same with social media platforms. When it's just you and Tom (evidently, some of Fuller's students won't understand that reference), MySpace is a lonely place.[2]

You can run this logic in reverse too. There's a self-perpetuating cycle associated with MySpace gaining more users—with every additional member, MySpace becomes more attractive. Producers of network goods, therefore, possess a "first-mover advantage." MySpace was the first of its kind; it practically started what we now call "social media." Therein lay its supposedly invulnerable position. Any upstart, would-be rival would necessarily begin with zero users.

Any new platform would therefore be less alluring than MySpace. Start-ups would never catch up. Yet, such an argument proves too much. How did the first social media platform start if these network dynamics were so powerful? Who was Tom's first friend?

In spite of a seemingly insurmountable lead, we know how the story ended for MySpace: Facebook buried its rival quickly. Yet, as of our writing, Facebook itself is hemorrhaging active users. Past success is no guarantee of future performance, and no amount of "corporate power" could make Google+, Google Glass, the Microsoft Zune, or Amazon Halo Bands profitable. At the beginning of the COVID-19 pandemic, Microsoft-owned Skype had a huge lead on other video conferencing platforms, but that couldn't stop Zoom.

That's how markets work. All producers must serve consumers' fickle whims. It might appear that firm managers, or perhaps a firm's owners, determine what a firm produces. To an extent, that's true. But if the owners wish to remain a going concern over the long run, they will satisfy consumer preferences at a lower cost than their rivals.[10] Consumer sentiment is a harsh mistress.

Network effects can be overcome. Some people get twisted in logical knots by entry barriers, but there is nothing mystical about them—they're just obstacles to action. All successful actions yield benefits in excess of costs. In other words, "entry barriers" accompany every action because every action incurs costs. To buy a cup of coffee, you must pay a price, wait in line, and so on. To enter the kingdom of heaven, you must be willing to sell your possessions and give to the poor.[11] These costs are barriers to your action.

Isn't "brand loyalty" an entry barrier? Anyone who's ever given it a go in business will tell you that brand loyalty doesn't fall from the heavens like manna. No. Brand loyalty reflects consumers' perceptions of a good's value, and it's gained through long perseverance and the liberal application of blood, sweat, and tears. The MySpace first-mover advantage *was* an advantage, undoubtedly.

Yet, that advantage only meant Facebook had to be that much better to catch and then surpass its rival. Likewise, a company looking to supplant Coca-Cola must be ready to produce a mighty popular product.

Governments are responsible for most monopoly-creating entry barriers. Profits in protected industries need not be evidence that a firm serves consumers better than its potential rivals. They can come from superior political maneuvering.

For example, some regulations disproportionately burden small firms. Economists call this "raising rivals' costs."[12] Europe's General Data Privacy Regulation (GDPR) legislation is a case in point.[13] This regulation requires European digital firms to hire qualified employees to handle customer data and install special software to protect users' privacy. It sounds well-intentioned, but this regulation harms small firms relative to large firms because it entails fixed costs (which don't vary with a firm's size). Large firms can often swallow these costs almost without noticing and hire an army of lawyers and lobbyists to ensure they stay on good terms in the halls of power. Cash-strapped smaller firms can't. These barriers are Google's best protection against any start-ups nipping at their heels.

Since entry barriers are clearly not all of a kind, ask not whether a firm is large or small. Ask how it got that way. Was it superior service to consumers or special privileges from the government? Why does Jane College Student—and practically everyone else—use Google? The answer is simple: they think it is the best search tool. After all, Google can only *ask* you to use it. That's it. Yes, they can advertise to you and sweet talk you. And compared with how people like Genghis Khan, the Vandals, and others sought to "persuade" historically, that's a pretty good deal. There's no Google Gun to your head! Switching to DuckDuckGo is easy, but Google offers what *most* internet users deem the best search tool.

This Time Isn't Different

Public commentary on firms like Google tends toward what C. S. Lewis called "chronological snobbery," which grants "uncritical acceptance of the intellectual climate of our age and the assumption that whatever has gone out of date is on that count discredited."[14] For some reason, while giants like A&P Grocery (over 15,000 stores in 1930) or MySpace (over 300 million users in 2007) have failed, Google and other large, contemporary companies are just . . . different.[15]

Why?

We've seen that the first-mover advantage is not magic, and it's unclear that network effects would be as strong for Google as for other digital firms. Keegan correctly observes that "it is easy to change search engines, even if it is Google. But if you switch social networks, you not only have to move all your videos, audios, messages, and photos elsewhere but you also lose your network of friends unless they migrate with you. MySpace won't make that easy." Displacing Google? Simple, says the 2007 Keegan, compared with dislodging a social media juggernaut like MySpace.[16]

Is Google different merely because it's "big"? Ask John Rockefeller, whose Standard Oil had shrunk dramatically *before* its famous 1911 antitrust case.[17] Ask K-Mart, Sears, or A&P Grocery. The November 12, 2007, issue of *Forbes* said "Nokia: One Billion Customers—Can Anyone Catch the Cell Phone King?" Blackberry and Nokia used to be giants with insurmountable market shares. Or so they said. Yet, in January 2022, the Blackberry brand was discontinued. Ask MySpace.

Is Google exceptional because it buys up potential rivals and shelves their technology? Revisit the basics of exchange: both parties win from this interaction (chapter 4). Think, too, about the "unseen." How many of these technologies would have gone altogether undiscovered but for the possibility of selling to Google? And how many *new* businesses were created because of Google's platform, search engine, advertising capabilities, or other services?

Is Google invincible because it is a platform on which digital rivals must first live, move, and have their being? No, this is dressed-up "first-mover" logic again. Yes, it's an entry barrier; no, it's not insurmountable. Again, the barrier exists due to the value of Google's platform.

To acknowledge these points, one need not approve of everything Google does. No, recognizing these ideas is a way of saying that Google, like every firm, must continue satisfying the preference of the consumer to remain a going concern. When someone else begins satisfying consumer preferences relatively better, Google is toast. Markets will see to that. And history attests to it.

When Google fades into the history books, it won't likely be due to DC trustbusters. And that's a good thing if consumer welfare is your standard. After all, economists have found "little empirical evidence that past [antitrust] interventions have provided much direct benefit to consumers."[18] Google's exit will probably be due to the foresighted behavior of an intrepid tinkerer—the way Google did it.

If You Aren't Dead, You Must Be Competing

But what if producers cease competing, start colluding, beat their swords into plowshares, and benefit themselves at consumers' expense? Adam Smith noted, "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."[19] Even when businessmen bump into each other at the local Edinburgh pub, it's not long before they start conniving, says Smith.

Cartels—a group of sellers agreeing to act in concert to maximize their collective profits—are exactly the sort of thing Smith has in mind. Still, in free markets, cartels rarely survive long. They're more like towers of Jenga blocks and less like the Empire State Building. The legendary golfer Arnold Palmer once quipped, "If you aren't competing, you're dead." Economists Armen Alchian and William Allen add, "If you aren't dead, you must be competing."[20] Mitigating competition—every cartel's aim—is a very tall order.

Imagine (and forgive us) a "barbershop cartel."[21] Three barbers in a small town have met the enemy, and the enemy is them. If any of our barber trio were to raise his prices from (say) $15 to $20, consumers would ditch him in a hurry for the other barbers whose prices haven't budged. One of our barbers approaches the other two with a proposition. "Why can't we," he asks, "all get along? Tomorrow, at noon, let's all raise our prices to twenty bucks." After hammering out their agreement in a presumably smoke-filled room, our barbers fall asleep dreaming of the vast riches to be theirs in the new cartel regime.

It works—for a minute. Consumers aren't happy, but they bite the bullet because there aren't close substitutes. Then, one of our barbers figures that lowering his price to $19 would steal customers from his competitors (currently charging $20), and he'd still be better off than he was before (when he was charging $15).

Once again, it works—for a minute. Consumers flock to the cheaper barber. The other two barbers, in despair, resort to cutting (no pun intended) their prices. Our barbers have a price war on their hands. Before long, they're all back to charging $15, and their momentary friendship has descended into lasting enmity. Consumers rejoice that happy days are here again.

Notice that the gains to the price-cutting rebel are short-lived. And that's precisely why he may opt for a sneakier means of cheating on the cartel agreement. Instead of cutting his price outright, the rogue barber keeps his price in line with the cartel agreement but offers more services. Instead of just a haircut, he provides a haircut plus a shave, all for twenty bucks. Or maybe he offers shampooing and a massage.

Consumers start switching to the deluxe experience barber. The other barbers are puzzled and ring up their clientele whom they'd wrongly assumed were "lifers." Their former customers spill the beans: "When *you* start tossing in a massage for free, we'll be back." Once again, our other two barbers must respond in kind if they want to stay in business. Their higher costs begin devouring profits they'd been earning.

Let's stack the deck in the cartelists' favor by making it unlikely that their cartel will unravel. Imagine that these aren't just any three barbers. They're brothers. It's easier for brothers to enforce a cartel agreement. Alienating a stranger is one thing, but vexing one's flesh and blood is much more costly. And imagine that, in this particular case, such brotherly bonds are sufficient to overcome the temptation the cartelists face to cheat on their agreement.

It works—for a minute. Until barbers from the next town over notice that their cosmetological brethren are earning huge profits relative to the pittance they've come to accept. One of them opens a shop on the same street as the cartel barbers, undercutting the cartelists by a buck or two.Consumers, fickle creatures that they are, switch allegiances again. From here, the story plays out like it did when there was an internal "cheater." A price war ensues. Successful cartels invite new competition.

Let's stack the deck in favor of the cartel again, and this time, we'll do so in a way that stretches all credibility. Even if our hypothetical barber cartel contained not merely these three barbers, but every barber in the world (!), it would still face stiff competition. After all, unlicensed folks may begin cutting hair under the table. At one of our institutions, students routinely provide trims for a few bucks (much to the chagrin of local barbers, who filed an official complaint with the college). Moms and grandmas have been known to be skilled with scissors. Furthermore, if the cartel contains only barbers, we might see more men in women's beauty parlors. Other men might begin shaving their heads, a task easy enough to perform independently. Some men might wear their hair longer and take more time between haircuts. The point is there are innumerable substitutes

—ways of adjusting—for those who don't wish to pay cartel prices. As a result, the barbers find that cartel membership isn't as beneficial as hoped.

Innovation also means competition. Imagine it's early September 1908 and America's horse-and-buggy makers have just created a cartel that will reduce buggy output and raise prices, which means profits for the cartel.

The first Ford Model T rolled off the assembly line on October 1, 1908. The world's best, most effective cartel arrangement would have done nothing to save buggy makers from Henry Ford's belief that average, everyday people would buy cars at low enough prices. The great economic theorist Joseph Schumpeter observed that "the competition from the new commodity, the new technology, the new source of supply, the new type of organization . . . strikes not at the margins of the profits . . . of the existing firms but at their foundations and their very lives."[22]

What, then, about real-world cartels that exist and persist? Something has to maintain them and restrict competition from within and without. Cartels rely on two tools: violence and government, though putting it this way is redundant since a state "is an organization with a comparative advantage in violence."[23]

First, consider naked violence. We'll explain in chapter 10 why black market producers face lower costs for using violence than their white market counterparts. The specter of violence certainly dampens the incentive to cheat on the cartel's agreement. Likewise, new entrants encroaching on an established seller's territory may be dissuaded by a hail of bullets.

Second, consider violence clothed in government garb. Governments themselves prop up many cartels with licensing requirements and other restrictions. The self-described "good liberal Democrat" and bureaucrat Alfred Kahn spearheaded American airline deregulation during the 1970s with economists' widespread support because he recognized that airline regulation had created a cartel.[24] The Civil Aeronautics Board (CAB) regulated commercial air travel between 1938 and 1985. The CAB forbade price-cutting competition and tightly regulated new entry, which meant higher profits for the protected airlines. The CAB oversaw routes and rates, ostensibly to prevent collusion, all while enforcing high prices and prohibiting competition along those routes. In other words, it required and enforced collusion. Adjusting for inflation, plane tickets have gotten much cheaper since the CAB's demise.[25]

Yet, even in these unlikely circumstances, competition is like a weed growing in a cracked sidewalk. It finds a way. Since they could not cut prices, airlines found other ways to compete. They offered delicious meals, lots of leg room, and frequent, not-always-full flights. Everything else about air travel changed to entice customers. These changes increased airline production costs and eroded cartel profits.

Aren't these innovations "good" for consumers? No, they actually wasted resources. If consumers had valued better food or more leg room so highly, they would have been willing to pay for these amenities through higher ticket prices and it wouldn't have been profitable for airlines to cut leg room so they could fit more passengers and reduce meal quality so they could cut prices. That they didn't is evidence that consumers were content with bad food in cramped quarters if it meant cheaper tickets. Thus, even the government cannot eliminate competition, no matter how hard it tries. The form competition takes depends on the rules—in this case, rules established by the CAB.

How Should We Then Live?

First, remember mere economics does not equate "big" with "bad" and seeks first to understand how companies like Walmart, Google, Amazon, and Standard Oil got that way in the first place. Almost all their growth happened because they gave people great deals. Big firms and big fortunes do not always (or even usually) mean big frauds.

Second, look for the source of the monopoly- and cartel-creating barriers to entry. Government itself is a monopoly on the legitimate use of violence and the fountainhead and lifeblood of smaller monopolies.[26] Ironically, antitrust has been used not to protect *competition* as a social process but to protect *competitors* from those who would compete with them.[27] Can't compete with your rivals through fair and open competition? An antitrust lawsuit is always an option. At least you can tie them up in court for a bit. As a matter of public policy, it would be wise to wrest power from governments, which are the world's biggest and most lethal monopolies, and transfer it to consumers.

It means demolishing government-created barriers to entry. The Federal Register is loaded with them, from licensing requirements and special set-asides to byzantine rules only a trade group lobbyist could love (chapter 12). Are we healthier because foreign-educated doctors are reduced to delivering pizzas in the United States on account of ineligibility for medical licensing? Safer because a building sits empty and decaying for a decade because no one can get a permit to refurbish or replace it?

Third, we should use what we know about decentralized cooperation with strangers (essentials 6, 8, and 9; chapters 4, 5, and 6) to understand that "corporation" is just another name for things we choose to do together. There is no such thing as a "faceless" shareholder. Shareholders include companies like State Street, Fidelity, and employee pension funds that serve real people like us. When a corporation maximizes profits, people you know who depend on their retirement accounts and pensions—or who will—can buy more food, clothing, and shelter.

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[1] Victor Keegan, "Will MySpace Ever Lose Its Monopoly?," *Guardian*, February 8, 2007, https://www.theguardian.com/technology/2007/feb/08/business.comment.

[2] This section is adapted from Caleb S. Fuller, "Will Google Ever Lose Its Monopoly? Substitutes Everywhere," *The Beacon* (blog), July 15, 2022, https://blog.independent.org/2022/07/14/google-lose-monopoly-substitutes/.

[3] George J. Stigler, *The Organization of Industry* (Chicago: University of Chicago Press, 1983).

[4] Thomas J. DiLorenzo and Jack C. High, "Antitrust and Competition, Historically Considered," *Economic Inquiry* 26, no. 3 (1988): 423–35. Also see Paul J. McNulty, "The Meaning of Competition," *Quarterly Journal of Economics* 82, no. 4 (1968): 639–56.

[5] To learn about how the nineteenth-century "robber barons" were hard at work expanding product offerings and lowering their prices, see Burton W. Folsom, *The Myth of the Robber Barons* (Herndon, VA: Young America's Foundation, 1991). Also see Thomas J. DiLorenzo, "The Origins of Antitrust: An Interest-Group Perspective," *International Review of Law and Economics* 5, no. 1 (1985): 73–90.

[6] Prov 14:31; Amos 5:11.

[7] Keegan, "Will MySpace Ever Lose?"

[8] Jacqueline Doherty, "Amazon.Bomb," Barron's, May 31, 1999, https://www.barrons.com/articles/SB927932262753284707.

[9] For our younger readers, each new MySpace member was immediately given one "friend." Enter the mysterious "Tom," who was actually "Thomas Anderson," cofounder of MySpace.

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[11] Luke 12:33.

[12] Steven C. Salop and David T. Scheffman, "Raising Rivals' Costs," *American Economic Review* 73, no. 2 (1983): 267–71.

[13] Caleb S. Fuller, "The Perils of Privacy Regulation," *Review of Austrian Economics* 30 (2017): 193–214.

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[15] For statistics on A&P, see Marc Levinson, *The Great A&P and the Struggle for Small Business in America* (New York: Hill and Wang, 2011).

[16] Keegan, "Will MySpace Ever Lose?"

[17] See John S. McGee, "Predatory Price Cutting: The Standard Oil (NJ) Case," *Journal of Law and Economics* 1 (1958): 137–69; Folsom, *Myth of the Robber Barons*.

[18] Robert W. Crandall and Clifford Winston, "Does Antitrust Policy Improve Consumer Welfare? Assessing the Evidence," *Journal of Economic Perspectives* 17, no. 4 (2002): 3–26.

[19] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. Edwin Cannan, vol. 1 (1776; repr., London: Methuen, 1904), 130–31, https://oll.libertyfund.org/title/smith-an-inquiry-into-the-nature-and-causes-of-the-wealth-of-nations-cannan-ed-vol-1.

[20] Armen Alchian and William Allen, *Universal Economics* (Indianapolis: Liberty Fund, 2018), 5, https://oll.libertyfund.org/titles/universal-economics.

[21] For more on cartels, see Murray N. Rothbard, *Man, Economy, and State: A Treatise on Economic Principles; with Power and Market: Government and the Economy* (Auburn, AL: Ludwig von Mises Institute, 2009); on barbers specifically, see Art Carden, "Abolish the Barber Board,"

American Institute for Economic Research, March 13, 2019, https://www.aier.org/article/abolish-the-barber-board/.

[22] Joseph Schumpeter, *Capitalism, Socialism, and Democracy*, 3rd ed. (New York: Harper, 1950), 84.

[23] Douglass C. North, *Structure and Change in Economic History* (New York: W. W. Norton & Company), 1981, 20.

[24] Adam Thierer, "Opinion: Who'll Really Benefit from Net Neutrality Regulation?" CBS News, December 21, 2010, https://www.cbsnews.com/news/opinion-wholl-really-benefit-from-net-neutrality-regulation/.

[25] For more on airline deregulation, see Fred L. Smith and Braden Cox, "Airline Deregulation," Concise Encyclopedia of Economics, accessed January 29, 2024, https://www.econlib.org/library/Enc/AirlineDeregulation.html; Derek Thompson, "How Airline Ticket Prices Fell 50 Percent in 30 Years (And Why Nobody Noticed)," *Atlantic*, February 28, 2013, https://www.theatlantic.com/business/archive/2013/02/how-airline-ticket-prices-fell-50-in-30-years-and-why-nobody-noticed/273506/; Steven A. Morrison and Clifford Winston, *The Economic Effects of Airline Deregulation*, Studies in the Regulation of Economic Activity (Washington, DC: Brookings Institution, 1986); Clifford Winston, "Economic Deregulation: Days of Reckoning for Microeconomists," *Journal of Economic Literature* 31, no. 3 (1993): 1263–89.

[26] See Harold H. Demsetz, "Two Systems of Belief about Monopoly," in *Industrial Concentration: The New Learning*, ed. H. Goldschmid, H. M. Mann, and J. F. Weston (Boston: Little, Brown Company, 1974), 164–83.

[27] DiLorenzo, "Origins of Antitrust."

9

Thou Shalt Not Bear False Witness

When Policies Make Prices Lie

Bear one another's burdens, and so fulfill the law of Christ. Gal 6:2

Bearing One Another's Burdens

Job is a computer programmer on his morning commute listening to a sermon podcast about bearing one another's burdens.[1] Glancing at the dash, he sees he is almost out of gas. He pulls into a gas station and is surprised to see the price has jumped a few cents compared to yesterday. He doesn't quite fill up and makes a mental note to take advantage of his job's flexible work-from-home policy tomorrow. He finishes the podcast, gets to work, and resolves to start bearing others' burdens. He doesn't realize he just did that.

How? The higher price tells Job that it's more important for him to conserve gas now than it was yesterday. He doesn't have to know why. Maybe a hurricane in the Gulf of Mexico disrupted oil wells and refineries.Maybe power outages elsewhere have meant more people running generators. What's important is that other people are having a hard time, and Job is doing something to help shoulder their burden, even without knowing he is. Working from home means Job burns less gas, which means there is more for people who really want it.

Having seen how voluntary cooperation makes people better off (chapters 4 through 8), we now turn toward ways governments tinker with peoples' choices. They are legion, so we will examine a few: price controls (this chapter), prohibition (next chapter), and taxes and subsidies (chapter 11). All the while, we'll ask whether government interference with cooperation makes people better or worse off. Does public policy generally push people up the "hockey stick of prosperity" (chapter 1), or does it scoot them closer to the living standards Adam and Eve "enjoyed" right after they were kicked out of the garden of Eden? Spoiler alert: the results are rarely pretty. We say this not as "free market ideologues," but rather as students of society who see how mere economics makes sense of the social world.

Free markets encourage us to bear one another's burdens—unless we use force and gum up the works. Death and taxes are the only sure things in life, but we suspect we could add a third: price-gouging prosecutions after natural disasters. In February 2021, a winter storm rocked New Braunfels, Texas (population roughly 100,000)—a place unaccustomed to winter weather extremes.[2] Thousands of people needed help, and fast. How did the world respond?

The entire world pitched in to help, many without knowing it. How? Prices guided our efforts. Reflect on the fact that, in the broadest terms, we know what people need after disasters. They need food, water, shelter, and fuel. These are vast categories, though. What kinds of food? In what quantities? Where, exactly? "Water" seems straightforward enough, but what sizes are appropriate to conditions in the affected area? Do people need cases of twenty-ounce bottles? Gallon jugs? Will five-gallon jugs work, or do their bulk and weight get in the way? Is it okay if the water isn't perfectly pure, or will that make people sick? Are people so desperate that it doesn't matter? Moreover, are there more pressing concerns, like warmth?

We could argue about it all day, and we're sure someone reading this is outraged that we are bringing the economic framework to bear on such conditions. If the actual flesh-and-blood New Braunfelsians mean anything to you, you ought to hope clearheaded economic thinking prevails. Prayers for victims are always appreciated, but even here, God usually works through ordinary means. People can't drink your sympathetic tears. They can't eat nasty internet comments. None of this kvetching fills bellies or washes away caked mud.

Prices, however, do. As countless economists have noted, high prices for water, gas, and building supplies are like signal flares to suppliers saying, "Send water, gas, and building supplies to New Braunfels, Texas, pronto!" Counterintuitively, high prices in the short run are the cure for high prices in the long run. Higher prices after a natural disaster tell people to flood the area with supplies, which they do. When the supplies flood in, prices come hurtling back to earth.

People's plans change when prices change. A higher price for bottled water in New Braunfels, Texas, raises the cost of selling bottled water in New Mexico, New York, or New South Wales (Australia). The relevant cost of selling bottled water in one of these places includes the now-higher price people in New Braunfels are willing to pay.

Slightly higher water prices tell us what to do: use less bottled water so it can go to where it's most urgently needed. We don't even need to know that New Braunfels exists or that there has even been a storm. Higher prices for bottled water mean that people in another state (New Mexico), another part of the country (New York), or on the other side of the world (New South Wales) pick up at least some of the burden resting heavily on the shoulders of people in New Braunfels. Without prices, New Braunfelsians go it alone.

And while all this cooperation we've been discussing sounds wonderful, it sadly happens too rarely. In New Braunfels, news stations reported about (so-called) price gouging on things like hotel rooms and milk, which sellers were offering at jaw-dropping prices to desperate buyers. Politicians and others got wind of this and were soon rattling sabers about businesses "taking advantage" of the vulnerable. To economists, the scene was all too predictable. You cannot conjure more gallons of milk into existence by capping milk's price.

Price gouging laws are "knowledge embargoes" that stop resources from flowing to their highest-value uses and prevent far-flung people from helping.[3] In fact, price-gouging laws force prices to "bear false witness" with mischief never lagging far behind. Specifically, the prices are being forced to lie about what, exactly, is available. We do well to remember this and even better to root out the forces replacing a world of truth with a world of lies. The results of such deceit are as varied as they are surprising. Consider housing.

Price Caps in the Big Apple

Whether they've paid any heed is another question, but people have had over four thousand years to survey the damage coming from price controls.[4] Ancient Babylon wrote price controls (e.g., minimum wages) into the Code of Hammurabi. India, China, and Mesopotamia experimented with them. So did the Roman Empire. As historian John Willis observes, "Caesar promulgated a law according to which landlords could never exact over 2,000 sesterces for villas in Rome."[5]

Perhaps no price control illustrates the disruption of lying prices better than Caesar's rent control, a policy dictating a maximum price for housing. Indeed, few policies better highlight the disconnect between meaning to help and helping. This disconnect helps explain why more than 95 percent of respondents to a survey of eminent economists opposed rent control.[6] Still, we ought to give municipal policymakers the benefit of the doubt. We'll suppose that by setting a “ceiling” on the rent, they intend to make housing more affordable for the “least of these.”

Imagine New York City when it began imposing rent control during the mid-twentieth century. The city’s population is growing, and so is housing demand. The city’s new rent control ordinance forbids landlords of low-income tenements from charging more than $100 a month. Envision an elderly couple in NYC who rents their extra room to young couples for $120 a month. However, maintaining the room means cleaning the carpet and repainting the walls before a new tenant moves in. Renters also mean less privacy. Under the new price control mandate, the old couple have a conversation. After deliberating, they decide to shut down their side hustle. The lower rent is no longer worth the trouble. Meanwhile, there is a newlywed couple living with their in-laws to save money. With the new law in place, they, too, have a conversation and decide to strike out on their own and move to New York City.

The lying prices say housing is more abundant than it is. At the very moment more people want to live in New York City, landlords are supplying less housing. Rent-controlled prices cause landlords and would-be tenants to bear false witness against their neighbors by treating housing as if it were relatively abundant when it’s not.

Without rent control, units go to those willing to pay the most, perhaps to a single mother who’s desperate for housing. Rent control deprives her of her best means of securing an apartment. She can no longer outbid the newlywed couple who could fall back on living with the mother-in-law. Under rent control, the unit goes to whoever reaches the leasing office first. Or whoever has the best connections to the owner of the building (hint: that’s not usually the down-and-out). The New York politician Charles Rangel, for example, “had four rent controlled apartments, one of which he used as an office.”[7]

Or buyers and sellers find ways to obey the letter of the law but not the spirit. With a long line of aspiring renters, a conversation might go like this:

"Sure, you can have legal title to the apartment for $100/month, just like the law says. But if you'd like to step inside, you'll pay an extra $20/month for the keys!" These workarounds show how exchange finds a way, but they tend to be swiftly banned. Some people turn to the black market. Others get creative. In New York City, people used to search the obituaries to find an available apartment. Their reasoning: if someone just died, perhaps a unit had opened up.[8]

Landlords also change how they pick renters. Remember, rent control means that more people want to rent an apartment than there are apartments available. What would happen in a free market? The price would rise. Rent control takes that option off the table. So, here's what happens instead. A landlord faces a hundred applicants for a single room. He runs credit checks and eliminates half of the applicants; he can't charge a higher price, but reliable payments are partial substitutes. A bigot might seize the opportunity to reject applicants of the wrong race or religion. Since he can't charge more, he can demand that the new tenant "pay" by not making him uncomfortable. In a free market, renting to an "Us" for $100 means giving up the $120 a "Them" would have paid, but not when prices are controlled.

The twentieth-century Russian writer Aleksandr Solzhenitsyn once observed that the line between good and evil runs through every human heart.[9] We agree. Jesus said that lustful or hateful inclinations make a person guilty.[10] Lustful and hateful actions are surely more destructive than lustful and hateful thoughts, though. Price controls make it harder for people to keep their sin to themselves. Rent control doesn't create prejudice, but it lowers its cost. Trying to "fix" one problem with rent control creates other problems like discrimination and lousy maintenance that, predictably, require new bureaucracies that create still new problems. It's a vicious cycle.

That's not the only way rent control injects conflict into the system. One type of rent "stabilization" grants landlords the right to increase their rent by (say) 10 percent each time a new tenant moves in. The predictable consequence?

A war on tenants. Landlords pack leases with vigorously enforced fine print. Do you have a goldfish? That might run afoul of the fine print no-pets policy buried deep in the leasing contract. You're evicted.[11]

Rent control is even more destructive over the long run. Chapters 5 and 6 describe how prices guide entrepreneurs. Rent control changes modest housing's return on investment. Some landlords abandon their buildings altogether. Some flee. Others turn to arson because the insurance payout is better than the "frozen" rents they can collect. Slowly at first, and then all at once, apartment buildings crumble. What landlord wants to throw good money after bad by maintaining buildings that lose money? As the economist Assar Lindbeck observed, rent control is "the best way to destroy a city, other than bombing."[12]

Making modest housing less attractive makes luxury housing relatively more attractive. Rent control creates a perverse spectacle: developers replacing crumbling, hard-to-find modest housing with luxury apartments and condominiums. It's now harder for the poor to find housing but cheaper and easier for the rich. In 1990s San Francisco, some landlords turned their rent-controlled apartments into condos or offices that are exempt from rent control.[13] Ultimately, 1990s rent control reduced the San Francisco rental housing stock by 15 percent.[14]

When the housing stock contracts, that's no boon to the poor. What about minimum wages? Surely, these are an unalloyed gift to the least of these among us, right? Well, think again.

What's the Real Minimum Wage? Try $0.00

"The fifteen dollar minimum wage," says US Representative Nancy Pelosi, "is a financial necessity for our families, an effective stimulus for our economy, and a moral imperative for our country."[15] Representative Alexandria Ocasio-Cortez is similarly passionate: “You should absolutely, 100 percent contact your senator and ask, ‘Why did you not vote to include the fifteen dollar minimum wage?’”[16] Besides, doesn’t Scripture itself say “the worker is worthy of his wages”?[17] It would seem that these politicians are on the side of the poor, and by extension, on the side of God.

But appearances are often deceiving, and the minimum wage illustrates one of Thomas Sowell’s maxims: “The first lesson of economics is scarcity: there is never enough of anything to satisfy all those who want it. The first lesson of politics is to disregard the first lesson of economics.”[18] Just because a policy is economically sound does not mean it is politically advantageous, and just because a policy is politically advantageous does not mean it is economically sound (essential 9).

Minimum wages make for superb political theater. “Elect me, and I will raise your wages” sounds good (error 7). So does “elect me, and I will protect those poor, helpless people over there.” Surveys indicate that the average American wants higher minimum wages. Who but a few God-hating sociopaths don’t sympathize with the plight of the poorest? But if a vote by Congress is enough to abolish the laws of economics, then 1938—the year the Fair Labor Standards Act created America’s first federal minimum wage—seems like an embarrassingly late start to begin painlessly raising the incomes of the “least of these.”

Employers don’t hire workers for fun or charity. Entrepreneurs demand labor(ers) for what they anticipate those workers will bring to the table. If hiring one more teenager will contribute an additional $10 of revenue every hour, an ice cream shop owner won’t be willing to pay more than $10 per hour for the teen’s services. Facing a minimum wage of $12 per hour, the owner might offer workers fewer hours, lay people off, or simply not hire anyone in the first place. A firm paying $12 to get $10 will not last long.

Common sense gets you this far. With a minimum price for broccoli, some consumers would look for substitutes like asparagus and brussels sprouts. Labor markets aren't different. When laws make labor more expensive, employers find substitutes. We believe that minimum wage advocates know this, too. How else to explain their cold, heartless refusal to lobby for a minimum wage of a hundred billion jillion dollars per hour?

That's the first lesson of the minimum wage. It doesn't stipulate that employers hire the same number of workers, only that the workers hired be compensated according to the law's dictates. Incidentally, this first lesson explains why the American teenage unemployment rate rarely dips below 10 percent. Teens (especially males) don't usually provide much value, so the minimum wage stops many youngsters from getting on the first rung of the employment ladder. It's a tragedy since so much learning happens on the job.

What's our ice cream shop owner to do? He begins substituting capital goods for labor. Rather than the personable experience of interacting with a flesh-and-blood server—quickly becoming the stuff of nostalgia—you instead punch your order into a (germy) computer interface or order ahead on an app. McDonald's and Panera are two of the most conspicuous cases. Out with the low-skilled, moody, and artificially expensive teenager; in with the sleek, shiny, and increasingly cheap gadgets![19] The real minimum wage, it turns out, is what you earn when you don't have a job: $0.00.

This isn't the wild speculation of economist make-believe. Economists studying Seattle's recent experiments with minimum wage hikes have found that when the hourly minimum wage increased from $11 to $16, hours worked in low-wage jobs fell by 6 to 7 percent. Wages in those jobs rose, but since hours of work fell, the poorest workers took home $74 less per month after the minimum wage hikes.[20]

Adjustments on the demand side aren't the whole story, though they usually grab most of the headlines. Fuller teaches at a college down the road from a large outlet mall. Suppose an outlet mall stock associate's wage is $6 per hour. If so, probably no college students seek weekend employment at the mall. They'd rather sleep in, socialize, or (optimistic, we know) study. At the same time, a single mom with a high school education might need to feed her kids. She picks up a third part-time job stocking the shelves or working the cash register.

Now assume a do-gooder politician (is there any other kind?) seeks to help this woman by raising the minimum wage to $7.25 an hour. At the barely higher pay, a few college students apply for jobs. The extra buck twenty-five is enough to incentivize Fuller's student to forgo whatever else she'd do on a Saturday morning. She now competes with the single mother, and the odds are that she will get the job as she likely has more skills and greater reliability because she doesn't have a family and two other jobs vying for her attention. In other cases, the minimum wage hike may not be large enough to induce new workers into the labor market. But even in these cases, it may cause those already looking for a job to intensify their job-searching efforts. Jobseekers increased their search time by an average of seventy-five minutes a day in the face of US minimum wage hikes between 2003 and 2016.[21] It pays to search harder when the payoff is higher.

Early twentieth-century economists who favored the minimum wage understood and affirmed everything we have said here. That's only puzzling until you grasp their sordid motives. The minimum wage was just the right tool for disemploying society's least skilled, and thereby decreasing their odds of successful reproduction. Consider the economist Royal Meeker, who viewed the minimum wage as a boon: "It is much better to enact a minimum-wage law even if it deprives these unfortunates of work."[22] The minimum wage would thereby prevent the "inefficient" from "bring[ing] forth more of their kind."[23] While Meeker's economics is correct—the minimum wage causes job loss—his ethics are despicable. What Meeker offered was nothing short of a kinder, gentler eugenics. To which we reply: "Whoever oppresses the poor shows contempt for their Maker, but whoever is kind to the needy honors God."[24]

We Look Not to the Things That Are Seen

Not so fast—hasn't just about everyone seen papers purporting to show that the minimum wage manifestly *does not* cause unemployment? It's true. Empirical work on the disemploying impact of the minimum wage does occasionally turn up empty-handed, though such findings are in the minority.[25] Still, why do any studies at all show no disemployment effect of the minimum wage if what we've been saying is true?

In a nutshell, it's because employers can adjust to the minimum wage on margins besides employment, just like landlords can adjust to rent control with lower quality or other workarounds. These adjustments may not cause employees to lose their jobs, but they do make workers worse off.[26]

First, imagine a free labor market wherein factory workers are soaking through their shirts on a hot summer day at Avarice Inc.[27] The CEO, Callous Cal, shuts off the AC to cut costs. Before long, the workers begin complaining—and threatening to vote with their feet. If the owner wants to keep these workers, he'll flip the AC back on—he doesn't want to lose them to a crosstown rival who offers comparable wages plus cooler air.

Does he face this constraint with a minimum wage? No. When Avarice Inc. shuts off the AC, and the workers begin complaining, Callous Cal responds: "You don't like it here, eh? Don't let the door hit you on the way out. There are a hundred other workers who'd take your place tomorrow." The point is that the minimum wage lies to workers and tells them to apply for jobs that aren't there. Disgruntled workers are less likely to leave and seek another job because the minimum wage has made jobs harder to come by. Employment numbers may not change, but employers can restore profitability by cutting their electricity bills, coffee in the break room, health insurance coverage, or by being less forgiving about goofing off or surfing the web on company time. Again, this isn't academic speculation. Between 2011 and 2016, employers slashed health benefits for the lowest-wage workers in response to state-level minimum wage increases.[28]

Oddly, the minimum wage can even increase the number of workers, all while slashing the total number of hours they work.[29] Suppose the restaurant Mammon Macaroni gets hit with a minimum wage. Initially, there is no minimum wage, and a teenager works at Mammon from 11:00 am to 7:00 pm. His busy hours are noon and six. For the rest of the shift, he stares at his phone. Under the minimum wage, the store owner no longer tolerates such shirking. Rather than monitoring this worker (there's not much for him to do anyway), Mammon's owner simply closes the store during the slow hours. Next, he rearranges Mammon's personnel. He hires a worker for the noon lunch and six o'clock dinner hours. More than likely, it's not the same worker for both hours, so the number of people working increases while the number of labor hours purchased falls. Remember what we said about really internalizing the law of demand? It's not "men," but "man-hours" that employers rent.

Usually, all these sorts of adjustments take time to implement. Determining which substitutes to use for labor, which perks to cut, or how to rearrange production are trial-and-error decisions that take time. Mid-twentieth-century American movie-theater ushers are an example—they'd escort patrons to their seats to prevent them from stumbling in the pitch-black darkness. Ushers are low-productivity workers whose labor became unprofitable due to higher minimum wages. Though this profession seems like ancient history now, these workers didn't all lose their jobs overnight. It took time for innovators to devise those little, red, light strips along the edge of the floor.

Our bottom line: when it comes to helping the poor, the minimum wage kicks the ladder out from underneath their feet. Pointing this out won't win you a popularity contest, but it's no less true: freer markets have done more to bolster the poor's prospects than all the world's laws combined. If you don't believe us, revisit chapter 1—or keep reading to chapter 13.

How Should We Then Live?

Look in the mirror and ask what you want. Which is more important after a natural disaster: getting gas and building supplies to people whose lives have just been turned upside down, or your self-righteous indignation? If you answered "getting gas and building supplies to people," then we should free the prices. Which is more important, opportunities for the least of these among us to work and make their way in the world, or you feeling good about yourself for telling the unemployed that they can't accept less than $15 an hour for the job they can't get? If you answered "opportunities," then we should free the prices.

Suppressing prices means less gas after hurricanes, fewer apartments, fewer entry-level jobs, and lots of waste as people "pay" by spending time searching instead of paying with cash. Costs are still there even if prices aren't. Strangers on the other side of the world might not be texting to ask if they can help us after natural disasters, but they listen to higher prices for water, gas, and building supplies telling them to make do with less. When they listen, they bear our burdens. Suppressed prices bear false witness and deny that there is a burden for anyone to bear.

People would get accurate messages loud and clear if we freed the prices. Some people might enjoy windfall profits in the short run, but these would evaporate quickly as people hustled to supply more of what had an artificially low price and demand more of what had an artificially high price. Profits would attract entry into where resources are most wanted, and losses would encourage exit from where resources are least wanted (essential 8).Freeing the prices doesn't mean resigning ourselves to high housing prices and poverty wages, either. To use just one example, taking the earlier chapters' lessons to heart and getting rid of many building restrictions would mean cheaper housing that would make it easier for people to move to opportunity.[30] Fuller has a friend who's joked about running for political office on a single two-word slogan: "Prices Matter." He wouldn't win, but he would have our vote.

We like free markets because they mobilize decentralized, unarticulated knowledge via clear signals (prices, profits, and losses).[31] We hear some of you saying, "Free markets also provide people with all kinds of things they *shouldn't* want, like drugs, pornography, and 32-ounce soft drinks!" This is a real challenge: are we willing to leave people alone, even if we vehemently condemn their choices? We confront it in chapter 10.

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[1] This section is adapted from Art Carden, "Prices Help Us Bear One Another's Burdens," American Institute for Economic Research, February 19, 2021, https://www.aier.org/article/prices-help-us-bear-one-anothers-burdens/.

[2] Olivia Aldridge, "Travis County Issues Warning against Price Gouging, Unnecessary Electricity Use during Extreme Cold Conditions," Community Impact, February 16, 2021, https://communityimpact.com/austin/central-austin/government/2021/02/16/travis-county-issues-warning-against-price-gouging-unnecessary-electricity-use-during-extreme-cold-conditions/.

[3] Art Carden, "Price Gouging Laws Are Knowledge Embargoes That Should Be Repealed," *Forbes*, August 31, 2019, https://www.forbes.com/sites/artcarden/2019/08/31/price-gouging-laws-are-knowledge-embargoes-that-should-be-repealed/.

[4] Robert L. Schuettinger and David L. Meiselman, *Forty Centuries of Wage and Price Controls: How Not to Fight Inflation* (Washington, DC: Heritage Foundation, 1979; repr., Auburn, AL: Ludwig von Mises Institute, 2009).

[5] John W. Willis, "Short History of Rent Control Laws," *Cornell LQ* 36 (1950): 59.

[6] "Rent Control," *Clark Center Forum* (blog), February 7, 2012, https://www.kentclarkcenter.org/surveys/rent-control/.

[7] Thomas Sowell, *Basic Economics: A Common Sense Guide to the Economy*, 5th ed. (New York: Basic Books, 2015), 49.

[8] Jakob S. Harle, "Challenging Rent Control: Strategies for Attack," *UCLA Law Review* 34 (1986): 153.

[9] Aleksandr Isayevich Solzhenitsyn, *The Gulag Archipelago, 1918–56: An Experiment in Literary Investigation, I–II* (New York: Harper and Row, 1975), 168.

[10] Matt 5:21–48.

[11] For more on how rent control changes tenant-landlord contracts, see this lecture by economist Joseph Salerno: Joseph T. Salerno, "Price Controls: Case Studies" (lecture), June 16, 2006, Mises Institute, https://mises.org/library/4-price-controls-case-studies.

[12] Assar Lindbeck, *The Political Economy of The New Left* (New York: Harper and Row, 1972), cited in Sven Rydenfelt, "The Rise, Fall and Revival of Swedish Rent Control," in *Rent Control:*

Myths and Realities, ed. Walter Block and Edgar Olsen (Vancouver: Fraser Institute, 1981), 213, 230.

[13] Rebecca Diamond, Tim McQuade, and Franklin Qian, "The Effects of Rent Control Expansion on Tenants, Landlords, and Inequality: Evidence from San Francisco," *American Economic Review* 109, no. 9 (September 1, 2019): 3365–94, https://doi.org/10.1257/aer.20181289.

[14] Diamond, McQuade, and Qian, "Effects of Rent Control."

[15] Nancy Pelosi, "Pelosi Statement on President Biden Raising Minimum Wage for Federal Contractors," press release, April 27, 2021, http://pelosi.house.gov/news/press-releases/pelosi-statement-on-president-biden-raising-minimum-wage-for-federal-contractors.

[16] Darragh Roche, "Alexandria Ocasio-Cortez to Take Minimum Wage Fight Directly to Joe Biden," *Newsweek*, March 12, 2021, https://www.newsweek.com/alexandria-ocasio-cortez-take-minimum-wage-fight-directly-joe-biden-1575614.

[17] 1 Tim 5:18 CSB.

[18] Thomas Sowell, *Is Reality Optional? And Other Essays* (Stanford: Hoover Institution, 2020), 131.

[19] In the last chapter, we said that the Industrial Revolution's machinery didn't increase unemployment on net. And we were right: look around you. Those machines created so much new wealth that could be invested in new business enterprises, which needed more employees. That is different, economically, from shifting to capital goods to avoid a minimum wage. In the latter case, certain skill levels are literally priced out of competition with machinery.

[20] Ekaterina Jardim et al., "Minimum-Wage Increases and Low-Wage Employment: Evidence from Seattle," *American Economic Journal: Economic Policy* 14, no. 2 (May 1, 2022): 263–314, https://doi.org/10.1257/pol.20180578.

[21] Camilla Adams, Jonathan Meer, and CarlyWill Sloan, "The Minimum Wage and Search Effort," *Economics Letters* 212 (March 2022): 110288, https://doi.org/10.1016/j.econlet.2022.110288.

[22] Thomas C. Leonard, "Retrospectives: Eugenics and Economics in the Progressive Era," *Journal of Economic Perspectives* 19, no. 4 (2005): 213–14.

[23] Leonard, 213–14.

[24] Prov 14:31 NIV.

[25] David Neumark and Peter Shirley, "Myth or Measurement: What Does the New Minimum Wage Research Say about Minimum Wages and Job Loss in the United States?," *Industrial Relations: A Journal of Economy and Society* 61, no. 4 (October 2022): 384–417, https://doi.org/10.1111/irel.12306.

[26] Adapted from Caleb S. Fuller, "Five Ways Minimum Wage Studies Fail," June 10, 2022, https://www.independent.org/news/article.asp?id=14204.

[27] Likely part of the oral tradition surrounding the economist Gordon Tullock. See https://marginalrevolution.com/marginalrevolution/2004/07/minimum_wage.html.

[28] Jeffrey Clemens, Lisa Kahn, and Jonathan Meer, "The Minimum Wage, Fringe Benefits, and Worker Welfare" (Cambridge: National Bureau of Economic Research, 2018), https://doi.org/10.3386/w24635; Jeffrey Clemens, "How Do Firms Respond to Minimum Wage Increases? Understanding the Relevance of Non-Employment Margins," *Journal of Economic Perspectives* 35, no. 1 (February 1, 2021): 51–72, https://doi.org/10.1257/jep.35.1.51.

[29] The economist Steven Landsburg makes this argument in the comments section of this blog post: Steven Landsburg, "Even More Thoughts on the Minimum Wage," *Free Advice* (blog), February 18, 2013, https://consultingbyrpm.com/blog/2013/02/even-more-thoughts-on-the-minimum-wage.html.

[30] Bryan Douglas Caplan and Ady-Sebastian Branzei, *Build, Baby, Build: The Science and Ethics of Housing* (Washington, DC: Cato Institute, 2024).

[31] This is one of the main messages in Thomas Sowell, *Knowledge and Decisions* (New York: Basic Books, 1980).

10

The Works of the Flesh

The Economics of Sin and Prohibition

Do not look at wine when it is red, when it sparkles in the cup and goes down smoothly. In the end it bites like a serpent and stings like an adder. Prov 23:31–32

The Works of the Flesh Are Evident

Exchange is great, many say, so long as it fills folks' shopping carts with apples and oranges, not needles and meth. "The works of the flesh are evident," says the apostle Paul: "sensuality," "drunkenness," and "things like these."[1] In this chapter, we examine what mere economic analysis has to say about using government to mortify sin. Economics per se can no more tell you which policies to adopt than physics per se can tell you whether to drop The Bomb, but in the same way physics can describe the explosion and its aftermath, economics can describe what happens when we act on our values in different ways—by, for example, banning sins. Economics cannot tell you how to negotiate the trade-offs, but it can show us that they are unavoidable. We think the prohibition debate should be grounded in as much wisdom as mere economics has to offer.

As we discussed in chapters 4 through 6, people generally advance one another's lives (and their own) when they pursue their own interests, but the poet William Wordsworth was on to something: "Getting and spending, we lay waste our powers."[2] A lot of "getting and spending" is dissipation, squandering our wealth on pursuits leading to death. The comedians John Belushi (1949–1982) and Chris Farley (1964–1997) weren't "flourishing" as they died of drug overdoses at age thirty-three. Once again, just because something is a good doesn't mean it's *good* (chapter 3). And just because a public policy tries to make people good doesn't mean it will (essential 9). People regularly ruin themselves physically, spiritually, mentally, or all three.[3] Surprisingly, paying a babysitter on date night illustrates one of prohibition's strange consequences.

How Date Night Explains Drug Overdoses

Where are you more likely to see parents dining sans kids: at a fancy restaurant or Taco Bell? And what do babysitters have to do with it?[4]

First, ask how many trips to Taco Bell the couple would have to give up going to a fancy restaurant (essential 3). If they would spend $25 at Taco Bell and $125 at a fancy restaurant, each fancy meal would cost them five trips to Taco Bell ($125 / $25 = 5). "Who is spending $25 for two people at Taco Bell?" you're asking. It's date night. They're splurging on taco supremes.

Second, add $25 for a babysitter. Now, Taco Bell costs $50 ($25 for food + $25 for the babysitter) and a fancy restaurant costs $150 ($125 for food + $25 for the babysitter).

Third, ask how this changes the "Taco Bell cost" of a fancy meal. Babysitting costs $25 whether you go to Taco Bell or a fancy restaurant. Since the $25 babysitter means a night out for a fancy meal that costs $150 and a night out for Taco Bell that costs $50, the fancy meal now only costs *three* trips to Taco Bell ($150 / $50 = 3).

Babysitters make dining out more expensive, but they make fancy meals *relatively* cheaper in terms of Taco Bell meals forgone. The law of demand implies that people will consume a greater share of fancy meals, holding everything else constant.

Avoiding the authorities so you can use or deal drugs is a lot like hiring a babysitter for date night. Both are costly. Suppose drugs are legal. A pocketful of powdered cocaine costs $1,000, or a pocketful of crack costs $2,000. The pocketful of crack costs two pocketfuls of cocaine ($2,000 / $1,000). Then we ban drugs, and it costs users and dealers $1,000 to keep from getting caught. What happens?

The "cocaine price" of crack falls. Now, each pocketful of crack costs $3,000 ($2,000 for the crack plus $1,000 to avoid getting caught), and each pocketful of coke costs $2,000 ($1,000 for the coke plus $1,000 to avoid getting caught). Each pocketful of crack now only costs one and one-half pocketfuls of coke ($3,000 / $2,000 = 1.5). People use fewer but more potent drugs: each pocketful of crack now costs fewer pocketfuls of coke, so people smoke more crack and snort less coke.

Data support the theory. Drugs get progressively more potent under prohibition, and between 1973 and 1984, the federal budget devoted to drug interdiction can explain over 90 percent of higher black-market cannabis potency.[5] Rising drug potency since the War on Drugs started simply repeats the pattern we saw during alcohol prohibition from 1920–1933. Before alcohol prohibition, Americans spent the same amount on beer and liquor. Under prohibition, their spending shifted away from beer and toward bootleg hard liquor.[6] If you know why parents generally don't pay babysitters and then go to Taco Bell, you know why drug potency rises under prohibition.

Fool Me Once, Shame On You; Fool Me Twice, Shame On Me

In 1982, seven people in metropolitan Chicago died from taking Tylenol laced with cyanide, and Tylenol's share of the over-the-counter pain reliever market fell from 35 percent to 8 percent.[7] Tylenol's price plummeted. Tylenol makers Johnson & Johnson took an extraordinary step and recalled all 31 million bottles of Tylenol on the market. They developed tamperproof packaging and the caplet, which was easy to swallow like a capsule but much more difficult to tamper with. Eventually, they recovered, and their efforts to protect the Tylenol brand earned a storied place in business history.

None of this happened because regulators waved a gun in the face of Johnson & Johnson shareholders. The FDA didn't issue tamperproof packaging guidelines until seven years later, in 1989. Tylenol worked ahead of the regulators because billions of dollars were at stake. There are a lot of over-the-counter pain relievers and, therefore, a lot of substitutes for Tylenol. Johnson & Johnson had to ensure people associated Tylenol with quality to keep old customers and win new ones.

Examples like these abound. In 2006, yard tool manufacturer Stihl Inc. launched an ad campaign loudly announcing that Lowe's and The Home Depot didn't carry their products, which were only available through their network of knowledgeable dealers. They weren't the only company to make a move like that, though it was unusual to advertise it. The July 24, 2006, *Wall Street Journal* quoted a Briggs & Stratton spokesman explaining why they stopped selling Snapper lawn mowers at Walmart in 2002: "We've always believed that selling premium lawn and garden equipment requires sales expertise best provided by a professional dealer."[8]

Meanwhile, the drug lord Pablo Escobar never issued a product recall that we know about, and we have never read an article in the *Wall Street Journal* about how the Sinaloa drug cartel is differentiating its product by only selling through expert retailers—but they're pursuing profits just like executives at Johnson & Johnson and Briggs & Stratton. Why the difference?

Legal and illegal markets create different incentives. Someone losing a finger using a shoddy chainsaw can sue Briggs & Stratton. Someone going blind smoking shoddy crack can't sue the Sinaloa Cartel or her dealer.[2] The rapper Young MC pitched Pepsi Cool Cans and Taco Bell MTV cups in 1990 and blurbed economist Scott Cunningham's *Causal Inference: The Mixtape* in 2021. He has yet to cut a commercial for the Sinaloa Cartel or its subsidiaries.

The mechanisms that make the market for the kind of Coke twelve-time Grammy winner Taylor Swift endorses work tolerably well are noticeably absent from the market for the kind of coke that killed seven-time Grammy winner Whitney Houston. If Snoop Dogg and Martha Stewart could launch branded pot like they could launch branded wine, it would address the quality control issues Snoop faced dealing drugs in the early 1990s. Brands link a producer's reputation with his fate. Buy moldy bread? You'll never buy that brand again. Buy tainted drugs? Well, how exactly do you trace down the person responsible based on the evidence of an unmarked Tylenol bottle or a clear Ziploc bag? For obvious reasons, no one underground wants to invest in flashy advertising or enlist the services of a celebrity endorser who would lead the police to their door.

Competition by Any Other Name

Everyone knows there are bad dudes in black markets. C-suite executives need to be figuratively ruthless. Drug lords need to be literally ruthless. We've read that many top executives are sociopaths, but we would rather have them running Johnson & Johnson than the Medellin Cartel. The explanation for this seems obvious, too. Drugs (or enough alcohol) make you crazy. Under the influence of drugs, people do unpredictable and violent things. There is certainly some truth to this. But we don't think it's the whole story.

A thought experiment sheds light on the question. Suppose that upon awakening tomorrow, you read that Heineken's CEO had successfully ordered a hit on Budweiser's CEO, who was gunned down in a drive-by shooting as he left his office.

Such a headline would be shocking—if we are talking about the modern world. Cast your mind back to a bygone era, though, where people made alcohol in "underground" bathtubs. The gangster Al Capone was an "alcohol company CEO," and he regularly, gleefully, and successfully ordered hits on rival producers. If the front page of the *Chicago Tribune* in 1925 proclaimed that Capone had once again hired a hitman to gun down a rival gang's leader, you'd probably shrug and think, "Just another day in Chicago." Why do today's brewers compete with boring price cuts, quality improvements, and ad campaigns—while Capone competed with a flurry of bullets?

The answer: prohibition changes the costs and benefits of violence. Imagine trading places with Heineken's CEO. We don't know anything about him, but he's probably an upstanding citizen who encourages responsible drinking. Maybe he's a sociopath who only cares about money. Regardless, ordering a hit on a rival would destroy his career. Not to mention his life. Capone's situation was different. He already risks imprisonment as a bootlegging executive. Ordering a hit costs him a lot less than Heineken's CEO. Violence is the most effective way to enforce contracts and police territory, so he uses it liberally. For Capone, the cost of ordering another hit is very low, and the benefits of violence may be large since Capone's profits are on the line. Additionally, people who just say no to lives outside the law likely have stronger consciences and more moral fiber than lawbreakers like Capone.

How Should We Then Live?

First, don't use drugs. Second, don't deal drugs. We agree with our pastors, our moms, the police officers who visited our classrooms as part of the DARE program, and *South Park*'s Mr. Mackey: drugs are bad.[10] They are devastatingly unhealthy, and they attack one of the ways you are most like God: your ability to reason. One-dollar cans of Coke are fine in moderation. One-thousand-dollar lines of coke are sinful in any quantity. Drugs are bad for you in the "don't even think about it" way, not in the "you shouldn't eat so much ice cream" way. Third, look out for people making poor choices. Welcome them into Christian community and love them (which is not the same thing as condoning their choices). When appropriate, suggest and secure professional help.

Fourth, recognize that just because people should not sell drugs doesn't mean they will not just because it's against the law. You don't solve a demand problem by restricting supply, and the restrictions bring a host of new problems. Drug use doesn't fall that much with prohibition. Meanwhile, there is a lot more money in the drug trade because of prohibition. Drug demanders are not as price-sensitive as (for example) yacht demanders. Since prohibition raises drug prices a lot and only lowers drug quantity a little, drug-trade revenue rises, often quite dramatically. We'll be as blunt as we possibly can be: prohibition bankrolls the worst people on the planet as they produce and sell the worst items on the planet. The piles of money available in the illegal drug trade invite corruption at all levels of government, among the police, and in the judicial system.

"The poor you will always have with you," Jesus famously told his disciples.[11] There's probably a biblical warrant to add: "And those struggling with substance abuse." No system is perfect in a fallen world.[12] The question isn't, Should we push a button to rid the world of drugs (or porn, or gratuitously violent movies, or any other soul-destroying thing) and make people stop wanting them? The button isn't there. The question is, Which rules facilitate flourishing and get real help to real people who struggle with the real temptations of the flesh?

Anyone considering drug policy should think in terms of imperfect real-world alternatives instead of comparing the real world to the best they can imagine. Think of incentives and constraints, not wishes and intentions. Think mere economics. Proverbs uses colorful language to warn about the consequences of drunkenness, of which drug use is a variety. Solomon says, “Do not look at wine when it is red, when it sparkles in the cup. . . . In the end it bites like a serpent and stings like an adder.”[13] To the surprise of many, prohibition makes the bites and stings more venomous.

Spiritual problems require spiritual solutions. Before drug prohibition, the institutions of civil society (churches and charities) treated the underlying spiritual problem. Churches, informed by the Christian view of humanity, have special insight into what’s “good” and what’s “bad” for people. Charities and other nonprofits can provide medical attention when it’s needed.[14] Cataloguing prohibition’s costs isn’t defending reckless hedonism. Rather, we like to think that economic analysis of prohibition is the sober-minded sort of thing that the apostle Peter exhorts.[15]

Echoing the thoughts of Augustine of Hippo, C. S. Lewis notes, “God cannot give us a happiness and peace apart from Himself, because it is not there. There is no such thing.”[16] Not one of Adam’s fallen descendants has found lasting joy at the bottom of a bottle, at the point of a needle, or in the arms of a prostitute. People tempted by drugs will benefit from contact with Christ’s visible expression on earth: the church. As a matter of public policy, we should all question whether the $51 billion of taxpayer money spent annually to prosecute a “war” on a faceless foe (“drugs”) has been effective. Mere economics helps us count the costs—all of them.[17]

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[1] Gal 5:19–21.

[2] William Wordsworth, “The World Is Too Much With Us,” Poetry Foundation, https://www.poetryfoundation.org/poems/45564/the-world-is-too-much-with-us.

[3] 1 John 5:19.

[4] For analyses of the economics of prohibition applied to drugs, boxing, guns, advertising, pornography, pharmaceuticals and devices, prostitution, gambling, organ transplants, and alcohol, see John Meadowcroft, ed., *Prohibitions* (London: Institute of Economic Affairs, 2008), https://www.iea.org.uk/sites/default/files/publications/files/upldbook429pdf.pdf.

[5] Mark Thornton, *The Economics of Prohibition* (Salt Lake City: University of Utah Press, 1991), 107.

[6] Mark Thornton, “Alcohol Prohibition Was a Failure,” Policy Analysis (Washington, DC: Cato Institute, 1991).

[7] Information about the Tylenol case in this section is from Dr. Howard Market, “How the Tylenol Murders of 1982 Changed the Way We Consume Medication,” PBS NewsHour, September 29, 2014, https://www.pbs.org/newshour/health/tylenol-murders-1982.

[8] Timothy Aeppel, “Too Good for Lowe’s and Home Depot?,” *Wall Street Journal*, July 24, 2006, https://www.wsj.com/articles/SB115369927780214907.

[9] Robert S. Hoffman and Bernard I. Reimer, “‘Crack’ Cocaine-Induced Bilateral Amblyopia,” *American Journal of Emergency Medicine* 11, no. 1 (January 1993): 35–37, https://doi.org/10.1016/0735-6757(93)90055-G.

[10] If you laughed at the reference to Mr. Mackey, you need to repent. *South Park* is hilarious, but it is hardly spiritually edifying.

[11] Matt 26:11 NIV.

[12] To see this argument fleshed out by an economist, see Harold H. Demsetz, “Information and Efficiency: Another Viewpoint,” *Journal of Law and Economics* 12, no. 1 (1969): 1–22.

[13] Prov 23:31–32.

[14] For more on the specifics, see David T. Beito, *From Mutual Aid to the Welfare State: Fraternal Societies and Social Services, 1890–1967* (Chapel Hill: University of North Carolina Press, 2000).

[15] 1 Pet 5:8.

[16] C. S. Lewis, *Mere Christianity* (New York: Macmillan, 1943), 50.

[17] Luke 14:28.

11

Rendering unto Caesar

Taxes, Spending, and Unintended Consequences

But when you give to the needy, do not let your left hand know what your right hand is doing. Matt 6:3

Selfishness has never been admired. C. S. Lewis[1]

Sticking the Landing

Having finished her paper on monopolies (chapter 8), Jane College Student is now facing the biggest monopoly of them all: government. She is burning the midnight oil to finish her taxes while she sips on a cappuccino to fuel her late-night and highly empirical excursion into the economic subfield of public economics. Jane isn't happy about her taxes.

What, exactly, is a tax? Jane is quickly learning that there's a world of difference between a "tax" and the "price" she paid for her cappuccino. Taxes aren't optional. They're not like prices. You don't have to buy Walmart's bananas if you don't like the price. And taxes aren't like "tithes" or "offerings," which are a matter between you and the Lord.[2] If you don't believe us, try "sitting out" your taxes next year.[3] Caesar will ensure you render unto him.

There's much more to say about taxes than simply "Jane doesn't like them." Governments provide many public services for which people don't pay at the point of use.[4] Governments also provide special benefits for favored groups. Sometimes, these are unmasked transfers from taxpayers to special interests (we're looking at you, US sugar and corn growers). In other cases, the government attempts to transfer resources to more understandable (but still special) interests. To do all these things, governments tax.

Governments seem to tax everything: corporate profits, labor income, hiring, buying, selling, dying. Grand Rapids, Michigan, requires people to buy a "going out of business" license before an inventory liquidation. That's a disguised way of taxing. Governments tax to raise revenue and change incentives. Tobacco taxes are supposed to reduce smoking. Taxes on carbon emissions are supposed to discourage polluting. As the former president Ronald Reagan wryly observed, the government's approach seems to be: "If it moves, tax it."[5] We might add that Reagan was insufficiently comprehensive. Land, which doesn't move, is almost always taxed.

Economists like teaching about taxes and subsidies because they don't "stick" where they "land." Some of a tax's burden or a subsidy's benefit passes from those who write or cash the check to other market participants because taxes and subsidies change people's behavior. Buyers might bear the brunt of a tax legally paid by sellers and vice versa. Who is legally responsible for writing the check doesn't matter. How suppliers and demanders respond to changing prices does. Cigarette buyers tend to be less price-sensitive than sellers. When "Big Tobacco" gets taxed, the cigarette supply shrinks. Smokers pay higher prices, but most don't cut back much because they aren't especially price-sensitive. Cigarette taxes land on huge corporations with gobs of cash but stick to disproportionately poor smokers.

And other poor folks, too. Consider what happens when Camel gets hit with a new cigarette tax. They produce fewer cigarettes and their demand for tobacco falls. Less demand for tobacco means less demand for workers who labor in tobacco fields to feed their families. Less demand for their labor means lower wages. The tax landed on Camel but stuck to poor Brazilian men trying to make ends meet.

Luxury tax burdens move in the other direction. At first glance, it seems as if taxing luxury goods like yachts is a great way to tax the rich. However, yacht buyers are more price-sensitive than yacht sellers because discriminating big spenders can take their spending elsewhere. Yacht taxes encourage rich buyers to spend instead on other luxuries like mansions, planes, and sports teams. Even conspicuous philanthropy is on the table for someone just showing off. If luxury goods are taxed, why not indulge yourself tax-free by paying for the new Yourname Lastname Library at dear old Ivy U?

Luxury taxes show how intentions don't equal results. Rich people buy yachts. The rest of us own stock in yacht companies (perhaps indirectly through a mutual fund or pension plan) and work in shipyards. In the early 1990s, a luxury tax on yachts destroyed so many yacht-making jobs that the US government paid more unemployment benefits ($24 million) than it collected in taxes ($16.6 million).[6] The tax landed on the rich. It stuck to the poor.

Subsidies follow the same logic. Whether the subsidy lands on the buyers or sellers is irrelevant. Where it sticks depends on price sensitivity. Food stamps raise demand for approved foods: browsing Amazon for foods people can buy with funds from the Supplemental Nutrition Assistance Program (SNAP), we find Corn Flakes, Corn Chex, Corn Nuts, Corn Pops, corn chips, corn tortillas, cornmeal, cornbread mix, corn salsa, canned corn, creamed corn, and popcorn, plus all sorts of other corn derivatives like corn-syrup-sweetened soft drinks and candy corn (first ingredient: sugar; second ingredient: corn syrup). The loud part of the food stamp program is that it helps poor people buy food. The quiet part is that it passes some of the taxpayers' money to corn farmers through the pockets of the poor. Once the dust has settled, corn products cost more. It's no accident that SNAP is funded through the Farm Bill and administered by the Department of Agriculture.

The Taxman Walks into a Bar

Taxes discourage trades that should happen, and subsidies encourage trades that shouldn't. By "should happen," we don't mean "God demands it." We mean "a buyer is willing to pay more than a seller is willing to accept." By "shouldn't happen," we don't mean "God forbids it." We mean "no buyer is willing to pay more than a seller is willing to accept."

Concretely, consider a market for something many Christians oppose: beer. Start by imagining there are no taxes, and consider two people: Toby, who would be willing to pay up to $5 for a beer, and Andrew, who would sell one for anything more than $3. They both win at a price between $3 and $5. Sometimes, our students ask, "Why wouldn't Andrew charge $5?" He would love to, but he has competitors who would also sell a beer for anything above $3 and will gladly charge $4.50 to attract Toby's business. Toby faces a similar constraint. He can't simply pay $3 because the next person to walk in might be willing to pay $4. Competing bids from prospective buyers and asks from prospective sellers determine prices in free markets.For simplicity, assume competition sets the price at $4. Now, add two more people: Maria, who is only willing to pay $4.01, and Olivia, who is willing to accept anything above $3.99. If the price is $4, they trade because even a penny is a gain from trade.

Suppose the government introduces a tax of $1 per beer that gets split evenly between buyers and sellers after the dust settles. Buyers pay an after-tax price of $4.50 per beer, and sellers get an after-tax price of $3.50 per beer. Toby pays a little more, and Andrew gets a little less, but Toby still buys a beer, and Andrew still sells one. They each gain less from trade because the government takes a cut, but they still trade, and they still gain.

Things are different for Maria and Olivia. Maria says, "not worth it" to a $4.50 beer. Olivia says the same to the $3.50 she would have earned from selling a beer. Without the tax and at a price of $4, they each would have gained from trade. The tax made that gain disappear.

The upshot: taxes change people's behavior. Between 1696 and 1851, Great Britain had a "window tax." The more windows in a building, the greater the taxes the occupant owes. Predictably, inhabitants began boarding their windows, which some historians believe worsened epidemics. Even today, you can still find many windowless dwellings throughout England and Scotland (essentials 4 and 5).[7]

Those buildings are monuments to a fundamental law of taxation. You get less of what you tax and more of what you subsidize. Tax windows? People board them up or leave them out of buildings in the first place. Tax labor? People work and produce less. Subsidize corn? People grow more. Subsidize schooling? People buy more.

But on top of that, taxes and subsidies change the size of the pie. Tax production? You get less production and, therefore, less pie. We can hear objections. But what about all the "stuff" taxes provide? The schools? The roads? The equality? If we get around to *More Economics*, we promise to write about those questions. Economics doesn't deny governments can shower benefits on citizens. The relevant question is always, At what cost? And are we really that virtuous if our willingness to pay for equality only manifests strongly when we're paying with other people's money?[8]

Paying People to Waste Resources

Subsidies encourage trades that shouldn't happen. Let's consider a good many Christians not only approve of but would die without: coffee. Jane College Student pulled an all-nighter finishing her taxes and stands, bleary-eyed, in the coffee line. She's willing to pay $4.99 for a cup of joe from Caring Coffee. Meanwhile, Caring Coffee will only part with it for $5. Suppose that, once the dust settles, a $1 unit subsidy to sellers lowers the price to $4.50. The producer is now willing to sell more coffees because they come with additional dollars attached. It's too many coffees because producing them wastes resources that would be better used elsewhere. With a large enough coffee subsidy, the world would produce coffee—and literally nothing else.

Just like with taxes, subsidies don't stick where they land. They're like rain. More rain after a drought will be good for corn farmers—we say things like "a farmer prays for rain," after all—but rain is also good for corn consumers who get cheaper corn. Just like rain's benefits don't stick where they land, subsidies don't stick where they land.

Here's how a subsidy works. Suppose that every time the farmer sells a bushel of corn, he gets what consumers pay, plus a check from the government. If each bushel of corn has a check attached to it, he produces more corn and reaps a bountiful harvest of government cash. You get more of what you subsidize, so corn subsidies mean more corn. More corn on the market, in turn, means cheaper corn. Cheaper corn benefits consumers . . .

. . . but it isn't free. Where did the subsidy money come from? And what about those resources that are now being bid into corn production? Where did they come from?

Even the benefits to corn farmers are transitory. Today's corn farmers' benefits will disappear because corn profits mean more people will want to become corn farmers. Some soybean farmers will switch to corn. Land that might have become a subdivision gets planted in corn. Land prices will rise to reflect the fact that subsidies have made it more "fertile." Corn production will expand until the return on investment in subsidized cornfields is no better than that in an unsubsidized alternative like a restaurant. As corn consumers, people are better off because they get more, cheaper corn. Ultimately, corn farmers are no better off than any other farmer (chapter 12's discussion of "the transitional gains trap" will explain why).

However, as taxpayers, people are unambiguously worse off because they don't get the soybeans and subdivisions the corn displaced—or the value of the resources wasted producing corn that costs more than anyone would have been willing to pay in a free market.

Some people accept this reasoning for producer subsidies. Subsidies to the poor, however, seem like obviously good (and Christian) public policy. Are they?

The Samaritan's Dilemma

"What shall I do to inherit eternal life?" the lawyer asked. He read the law correctly: "You shall love the Lord your God with all your heart and with all your soul and with all your strength . . . and your neighbor as yourself." "And who is my neighbor?" he asked. Then Jesus told the famous parable of the Good Samaritan.[9]

Doesn't it tell us how to live? Aren't food stamps, education subsidies, housing subsidies, Social Security, Medicare, Medicaid, and the rest of the welfare state just the parable of the Good Samaritan applied to create a Great Society?

No.

We think the Christian faith and mere economics help us get past the presumption that we can find a Great Heart that can figure out what is Right, a Great Mind that can figure out how to make it happen, and a Great Wallet to pay for all of it.[10]

The parable of the Good Samaritan, possibly Jesus's most famous parable, is probably his easiest to misapply. The Nobel Prize–winning economist and atheist James M. Buchanan used the parable to explain how "helping" can change people's incentives in ways that leave us all, including the poor, worse off.[11]

He called it "The Samaritan's Dilemma." His analysis is hardly scriptural commentary, but it should make us evaluate charity on more expansive grounds than good wishes and warm, fuzzy feelings. You've heard it said, "You get what you pay for." We agree, and that includes irresponsibility. If you pay people to grow corn, they will grow more. If you pay people to make poor choices—even inadvertently—they will make more.

Now, Buchanan may have been childless, but his argument resonates with parents. It's hard to enforce the rules when dinner needs to be fixed, a report needs to be on the boss's desk by 9:00 am tomorrow, or the game just went into overtime. The easy way out is tempting: forget the rules, say "be careful next time," and turn to whatever else calls for your attention. Maybe you tell yourself the kid is learning about grace and forgiveness and, realizing the error of his ways, will not do it again.

If only. Proverbs 22:15 says, "Folly is bound up in the heart of a child, but the rod of discipline drives it far from him." That child's folly-filled heart learns the rod of correction is a limp noodle, and he sins more boldly. The logic also applies to carelessness and other poor choices. How many people have you known who have been careless because they know their parents will bail them out? This won't be true of everyone, but some people will be more careless if they don't pay for their mistakes. Or, think of a world where superheroes keep a watchful eye. Why not take a nighttime stroll down a dangerous street if your friendly neighborhood Spiderman will protect you? Buchanan's point is that subsidizing carelessness encourages it even if we don't mean to.

The Dilemma is not as serious among family and friends, but knowing when it applies and when it doesn't requires wisdom born of fellowship with the Holy Spirit. Some people are brought to repentance after Daddy generously and mercifully pays for their crashed car. Some people aren't. Sometimes, you're helping friends and relatives who have drug issues. Sometimes, you're enabling them to get their next high. Knowing when and how to act requires wisdom, compassion, and difficult choices—not just moral fervor.

And while there might not be a Dilemma among close friends, it's serious among strangers. It might be nice to treat strangers like close friends and family members, but they're not, and we can't. During a discussion of education policy, former Texas Senator Phil Gramm said, "My educational policies are based on the fact that I care about my children more than you do." His interlocutor objected, "No, you don't." Gramm replied, "OK. What are their names?"[12] Parents do not just love their children more than strangers do. They know them better.

As the moral, social, and physical distance between people rises, the checks on opportunism weaken. People are more willing to take advantage of faceless strangers.[13] People who would never think of taking money from grandma's purse will shoplift from Walmart—perversely, some shoplifters claim they are virtuously "sticking it to the man." We've all known someone who brings a small bag of store-brand chips to a potluck and then eats all the pie.[14] That kind of bad behavior gets worse as anonymity increases.

It gets costlier, too. People compete to receive "free" money, and competition always uses resources. Free money isn't free, in other words (error 3). What would you expect if the government announced it would give away a million dollars to each of the first fifty people in a line? Many folks would drop everything in their lives and head for Washington, DC. In the best case, people would bribe others to let them jump the queue. In the worst case, fistfights would break out. People would spend a lot of time and energy jostling to seize the 50 million dollars, instead of spending time producing stuff. That's the cost of this free-money handout. Now, apply the same reasoning to "legitimate" handouts. How do people "compete" to be eligible for these funds?[15]

Many people "compete" for handouts in ways that destroy their lives. Beggars compete for prime begging spots and sometimes disable themselves to increase their haul. If you have seen *Slumdog Millionaire* (2008), you recall a horrific scene in which a child is blinded to increase almsgivers' sympathy. You can read about the same phenomenon in Salman Rushdie's classic novel *Midnight's Children*. It's no accident that panhandlers are more common at busy urban intersections than on lonely rural highways. Panhandlers account for the flow of passersby in picking where to set up "shop."[16] Of course, that's not everyone, but it is enough for us to notice.

Since intentions don't generate outcomes, caring for the poor means wisdom isn't optional. Scripture, for instance, distinguishes two broad categories of poverty, but the modern welfare state makes no such distinction.[17] Poverty may be "self-caused" by repeated bad choices.[18] Think, "Go to the ant, oh sluggard!"[19] Or, it may be due to calamity. Think, "There was a man in the land of Uz whose name was Job."[20] Wise Christians seek to discern the difference between self-caused and calamitous poverty on a case-by-case basis.

How then should we think about the parable of the Good Samaritan in light of the Samaritan's Dilemma? To begin, we must be clear on the situation. The Samaritan happened upon a man who had been badly beaten and left for dead. It wasn't the time to ponder how helping would affect his incentives. It was time to get to work. Load him on a donkey, take him to the inn, and save his life. If you encounter someone stabbed or shot, drop everything and call 911. A homeless person scrolling on a smartphone, however, is in a very different situation.

The atheist, utilitarian philosopher Peter Singer conducts a famous thought experiment where he asks if you are obliged to save a drowning child even if doing so will ruin your very expensive new shoes.[21] Most people,including us, agree the answer is yes. Singer concludes that the developed world should give much more of its wealth to the poor. Rich countries should play Good Samaritan to the drowning, underdeveloped world.

However, the situations are not comparable. In the case of rescuing a drowning child, the problem is clear, time is of the essence, and the solution is obvious: get the child. It's like the parable of the Good Samaritan in that it describes a dire and easy-to-solve emergency compared to problems of global economic systems that no individual mind can grasp.

As Singer would have us think about foreign aid in the context of the Samaritan's Dilemma, are the poor in impoverished countries really like the man lying beside the road? Today's developed countries became rich without foreign aid (and before you object that it was involuntary aid in the form of slavery or riches extracted from imperialism, you should know that these contributions were small or negative—see chapter 13). Logically, then, aid is no prerequisite to growth; otherwise, no countries would have ever traversed the narrow corridor from poor to rich.[22]

Empirically, foreign aid's track record is abysmal. Between 1958 and 2008, the international community poured $2.3 trillion (measured in 2006 dollars) into underdeveloped countries while the per capita economic growth rates have been largely stagnant in recipient societies.[23]

One reason for foreign aid's failure is that boondoggles follow closely behind. Will the marginal dollar given out as foreign aid go to install another golden toilet in the home of a "tropical gangster," which rules many an impoverished paradise?[24] Believe it or not, pure waste, like the golden toilet, might be the *best*-case scenario for aid. Too often, governments use aid to stabilize their rickety and thuggish regimes.[25] How many oppressive regimes have well-meaning Americans propped up with "generous" foreign aid?[26] How many people with the minds of Einstein or Mozart have died penniless and illiterate in one of these kleptocracies?

While questions like these might make the Samaritan's Dilemma seem depressing, they shouldn't. Yes, the world's problems are too much for a single mind to solve, and people who have tried to solve them have often done more harm than good.[27] Still, there is a case for optimism, because the Samaritan's Dilemma suggests that we are most effective when we concentrate our charitable firepower on situations where we have local knowledge and understanding that might not be available to anyone else. Charity begins at home.

The Samaritan's Dilemma suggests that we need wisdom, not just good intentions, in dealing with the less fortunate lest we unintentionally make them worse off in the long run. Indiscriminate giving to anyone who seems to need it risks rewarding vice and creating more dependents that, if simply saved, would have been available to finance businesses and other projects. Focused, intentional friendship and family ties are, we suspect, likely to be more effective, and as moral and social distance grows, the kinds of rules and norms that make intimate relationships work become less appropriate.

Economics shows how social benefits are largely unintended consequences of people pursuing their interests. Bill Gates's money is his to do with as he pleases, but he has likely done far more to help the world's poor by founding and running Microsoft—which still produces most of the world's productivity software—than he has done through the Gates Foundation. When considering any charitable undertaking, we should ask, How is this better than doing nothing? Merely describing results we might hope for is a poor substitute for understanding likely consequences—and we should entertain the possibility that we do more for people by leaving our money in the bank or expanding our enterprise (more, in chapter 14).

Sam Walton and his managers did this with Walmart.[28] Critics disdained the company for not having a social conscience, but Walton thought it was not his place to pick charities on behalf of his shareholders. Indeed, he understood what he did, understood that he did it very well, and he trusted his customers and shareholders to know better than him how to most effectively use the money he saved or earned them. The charitable causes they wanted to support were their business, not his; his job was to make their dollars go further so they could decide what to do with them. With apologies to C. S. Lewis, until we realize that "shareholders have faces," we'll keep trying to spend their money for them.[29]

How Should We Then Live?

First, recall Jesus's teaching about giving, particularly his command to "not let your left hand know what your right hand is doing."[30] Don't give in a way that draws attention to yourself, either from those who might pat your back for your generosity or from those who might stick a second hand out seeking more charity. Jesus tells us, "Let your light shine before others, so that they may see your good works and give glory to your Father who is in heaven."[31] People need to see the light and the good works. It doesn't mean they need to see us doing the works and then get impressed with God because they're impressed with us.

Second, think about what we mean by "needy." Again, we regularly see homeless people with smartphones and housing projects where everyone has DirecTV. There are numerous ministries and government offices within a short walk of where they hang out that will feed them, heal them when they are sick, train them with job skills, and take care of other needs. They are "needy" in nonmaterial ways that are hard to understand and hard to do anything about. If the homeless need anything, it is probably psychiatry and counseling more than the change in your pocket.

Algorithmic morality saying "always give" or "never give" leaves no room for judgment, fellowship with the Holy Spirit, or fear and trembling.[32] Generosity is not optional, and faithful stewardship requires us to be "wise as serpents and gentle as doves."[33] Giving discreetly, in ways that do not draw attention to yourself, can dampen people's incentives to feed themselves with alms rather than the fruit of their labor, and it can also help redirect attention back toward where it belongs: off of you and toward helping the poor. Give generously and give wisely.

Giving in this way also dampens envy. "I have never understood," says Thomas Sowell, "why it is 'greed' to want to keep the money you have earned but not greed to want to take somebody else's money."[34] We don't understand either. Such topsy-turvy "logic" belongs in a Lewis Carroll novel,but not, we think, in the household of God, where we learn that "a tranquil heart gives life to the flesh, but envy makes the bones rot."[35]

Third, remember that taxes and subsidies do not stick where they land. Taxing "corporations" doesn't mean taxing the rich, and in fact you're reducing the wealth of employees, shareholders, and customers, all of whom have "faces" (see chapter 8). There's no magic money tree out there just waiting for you to shake it down. Tax enough and you will crush all production. Just think: How much would people produce if the tax rate were 100 percent?

Fourth, remind yourself regularly that meaning well does not mean doing good. The long and checkered record of foreign aid shows us how "just rub some money on it" doesn't work. Use your local knowledge to assess where your dollars and efforts can do the greatest good and don't shirk your responsibility to the poor by simply shrugging, "Government's got this one." And if we want to learn more about "how certain schemes to improve the human condition have failed," we must now take a sobering look at the economics of government itself.[36]

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[1] C. S. Lewis, *Mere Christianity* (New York: Macmillan, 1943), 6.

[2] 2 Cor 9:7.

[3] Don't actually try this at home.

[4] Economist Luigi Zingales reports that the fraction of US GDP controlled by the government increased eightfold between 1900 and 2005. Luigi Zingales, *A Capitalism for the People: Recapturing the Lost Genius of American Prosperity* (New York: Basic Books, 2014).

[5] Ronald Reagan, "Remarks to State Chairpersons of the National White House Conference on Small Business," Ronald Reagan Presidential Library and Museum, August 15, 1986, https://www.reaganlibrary.gov/archives/speech/remarks-state-chairpersons-national-white-house-conference-small-business. Reagan continued: "If it keeps moving, regulate it. And if it stops moving, subsidize it."

[6] As George Will documents in the *Baltimore Sun*, the yacht tax generated $16.6 million in revenue for the government while the government lost over $24 million through unemployment benefits and lost income tax revenue. See George Will, "When a Luxury Tax Took Wind Out of Yacht Sales," *Baltimore Sun*, October 31, 1999, https://www.baltimoresun.com/1999/10/31/when-a-luxury-tax-took-wind-out-of-yacht-sales/.

[7] Wallace E. Oates and Robert M. Schwab, "The Window Tax: A Case Study in Excess Burden," *Journal of Economic Perspectives* 29, no. 1 (February 1, 2015): 163–80, https://doi.org/10.1257/jep.29.1.163.

[8] Joy A. Buchanan and Gavin Roberts, "Other People's Money: Preferences for Equality in Groups," *European Journal of Political Economy* 73 (June 2022): 102–24, https://doi.org/10.1016/j.ejpoleco.2021.102124.

[9] Luke 10:26–37.

[10] See James R. Otteson, "Adam Smith and the Great Mind Fallacy," *Social Philosophy and Policy* 27, no. 1 (January 2010): 276–304, https://doi.org/10.1017/S0265052509990112.

[11] James M. Buchanan, "The Samaritan's Dilemma," in *Altruism, Morality and Economic Theory*, ed. Edward S. Phelps (New York: Russell Sage Foundation, 1975), 71–85.

[12] Ben Shapiro, "Who Controls Your Kids' Lives?," RealClearPolitics, April 25, 2018, https://www.realclearpolitics.com/articles/2018/04/25/who_controls_your_kids_lives_136896.html.

[13] Joy A. Buchanan and Gavin Roberts, "Other People's Money: Preferences for Equality in Groups," *European Journal of Political Economy* 73 (June 2022): 102–24, https://doi.org/10.1016/j.ejpoleco.2021.102124.

[14] This should go without saying, but we'll say it anyway lest we be misunderstood: this is completely fine if you're like the woman with the two mites for whom a small bag of store-brand chips is the biggest contribution you can make. It's blameworthy if you make a habit of it despite a comfortable income.

[15] Yoram Barzel, "A Theory of Rationing by Waiting," *Journal of Law and Economics* 17, no. 1 (1974): 73–95.

[16] Peter T. Leeson, R. August Hardy, and Paola A. Suarez, "Hobo Economicus*," *Economic Journal* 132, no. 646 (July 2022): 2325–38, https://doi.org/10.1093/ej/ueab103.

[17] Everyone in the Bible was poor by modern standards, but there were still differences between the relatively rich and the relatively poor in biblical times. Job was richer than his servants.

[18] Prov 6:11; 12:27; 2 Thess 3:10.

[19] Prov 6:6.

[20] Job 1:1.

[21] Peter Singer, *The Life You Can Save: How to Play Your Part in Ending World Poverty* (New York: Palgrave Macmillan, 2010).

[22] Peter Bauer, *From Subsistence to Exchange and Other Essays* (Princeton: Princeton University Press, 2004); Daron Acemoglu and James A. Robinson, *The Narrow Corridor: States, Societies, and the Fate of Liberty* (New York: Penguin, 2019).

[23] William Easterly, "Can Foreign Aid Buy Growth?," *Journal of Economic Perspectives* 17, no. 3 (August 1, 2003): 23–48, https://doi.org/10.1257/089533003769204344; William Easterly and Tobias Pfutze, "Where Does the Money Go? Best and Worst Practices in Foreign Aid," *Journal of Economic Perspectives* 22, no. 2 (March 1, 2008): 29–52, https://doi.org/10.1257/jep.22.2.29.

[24] We borrow this term from economist Robert Klitgaard, *Tropical Gangsters: One Man's Experience with Development and Decadence in Deepest Africa* (New York: Basic Books, 2008).

[25] Easterly and Pfutze, "Where Does the Money Go?" 29–52.

[26] See here for a discussion of this question: Peter T. Leeson, "Better Off Stateless: Somalia before and after Government Collapse," *Journal of Comparative Economics* 35, no. 4 (December 2007): 689–710, https://doi.org/10.1016/j.jce.2007.10.001.

[27] Christopher J. Coyne, *Doing Bad by Doing Good: Why Humanitarian Action Fails* (Stanford: Stanford University Press, 2013).

[28] Sam Walton and John Huey, *Sam Walton, Made in America: My Story* (New York: Doubleday, 1992), 306.

[29] C. S. Lewis, *Till We Have Faces: A Myth Retold* (San Francisco: HarperOne, 1956).

[30] Matt 6:3. This section is adapted from Carden, "Improve Your Charitable Giving," apparently no longer available online.

[31] Matt 5:16.

[32] Phil 2:12.

[33] Matt 10:16.

[34] Thomas Sowell, *Barbarians Inside the Gates and Other Controversial Essays* (Stanford: Hoover Institution, 1999), 250.

[35] Prov 14:30.

[36] See James C. Scott, *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven, CT: Yale University Press, 1999).

12

Put Not Your Trust in Princes

Who Watches the Watchers?

Politicians and bureaucrats are no different from the rest of us. James M. Buchanan[1]

It's a Trap!

Remember the world before smartphones and ride-sharing? No Uber, no Lyft. Just boring, yellow, unchanging, regulated taxis. In New York City, taxis were expensive and hard to come by. The reason: decades earlier, the municipal government had implemented a "taxi medallion" system that restricted the number of taxis within city limits. Predictably, getting a taxi was expensive. To this day, operating a taxi in the Big Apple requires a medallion.

Do taxi owners reap ongoing profits from the medallion intervention? No. If the government simply distributed the medallions, the recipients would be like lottery winners. Those initial lottery winners are free to sell their medallions, but the price will reflect the medallion's tremendous value. How much will prospective taxi owners bid? They will raise their bids until the winner just breaks even. They'd like to spend less, of course, but they have incentives to spend more.

Suppose Alex offers a price that would leave him earning $100 more driving a taxi than he would earn doing his next-best thing. It would be to Bernice's advantage to offer a little more than Alex if winning would leave her with $99 more from driving a taxi than from her next-best thing. Carol would be willing to bid a little more if it means earning $98 more as a taxi driver than from her next-best thing. The offers continue until the winner breaks even: any price lower than the break-even price means people can earn profits above and beyond what they would get in their best alternative, and so they have incentives to offer more. The additional profit from the monopoly restriction evaporates in the competition for medallions. Before Uber disrupted this market, medallions went for around a million dollars each. Ultimately, the restriction raises prices but doesn't even benefit the people who have to buy medallions.

Taxi medallions illustrate why we get "stuck" with wealth-destroying policies. Why not just repeal wasteful public policy? Special interests are the answer. Having "bought in" with expensive medallions, taxi drivers stand to lose their shirts by allowing free entry into this market. Nixing the medallions would mean a higher supply, cheaper rides, and no possibility that owners would ever recoup their investment in a medallion, which they bought at a price reflecting expected revenues inflated by perpetual limits on competition.[2]

Unsurprisingly, then, incumbent producers often fight to preserve wealth-destroying public policy. They appear at city hall or testify before Congress when their privileges are up for a vote. This phenomenon is called a "transitional gains trap"—"transitional gains" because only the original recipients of the privilege benefit; later, people pay prices that have risen to reflect the value of the privilege. It's a "trap" because incumbents cling to the status quo. Typically, we break free because "evasive entrepreneurs" like Uber, which skirt the law via innovation.[3]

Remember error 1, "economics is only about money"? It's time to see why that's a mistake by applying the framework of economics to politics. In this chapter, we address a vexing question: If free markets work so well (chapters 4–8), why are they so rare? The answer in brief: once dug in, wealth-destroying policies, agencies, and bureaucracies are hard to displace. To see why, consider the fictional Edsel Bureau.

The Edsel Bureau

History is littered with entrepreneurs' mistakes, large and small, from the Ford Edsel and New Coke to the McDonald's Hula Burger. Consumers hated the Edsel so much so that it became the butt of endless jokes. Though it lives on in business histories and our imaginations, the Edsel's physical production run was very short: 1958 to 1960. It didn't last long because market forces replace losing products (like the Edsel) with winners (like the Ford Mustang, introduced in 1964).

We doubt that would have happened had the Edsel been a government project. First, an Edsel Bureau committee would spend decades designing it. It would only hit the streets after a series of production delays. Ten years after its release, a committee might poll consumers about their satisfaction and yet another committee would make some changes. All the while, the taxpayer is footing the bill. No need to worry about shareholders—there are none. Another decade later, Edsel 2.0 appears, and it somehow manages to be less safe and less fuel efficient. After a few wasted decades and a few million wasted dollars, someone proposes ending the Edsel program, but the proposal gets killed by representatives from districts that make Edsels and Edsel components.

"The Edsel is underfunded!" one of these representatives thunders from the House floor. And so Congress appropriates more money to the Edsel Bureau in the next budget. "Edsels are only available to the rich!" thunders another representative a few weeks later, and so additional money goes toward helping poor people buy Edsels. "We can't compete with Edsels," says a lobbyist for General Motors. And so Congress grants General Motors a subsidy. The next time a Michigan Congressman looks at his calendar, he sees that he has meetings with lobbyists from Ford and Chrysler. They can only be about one thing.

The story doesn't end there, but it's a look into the world of bureaucracy, lobbying, and politics—and it's the story of countless failed, redundant, or obsolete government projects and agencies that are "punished" with more funding year after year. As the Nobel Prize–winning economist Milton Friedman and his wife Rose put it, "Nothing is so permanent as a temporary government program."[4]

Why? Are representatives and regulators evil people? We doubt it. The problem: they aren't bound by the *regulation* competitive markets provide (revisit error 7). A classic Latin phrase asks *Quis custodiet ipsos custodes?*, "Who will watch the watchers?" Voters are supposed to in a democracy, but low voter turnout suggests many voters don't take that job seriously. This pushes the problem back a step: Who regulates voters when they regulate poorly from the voting booth? In any event, elections are infrequent enough that politicians have a lot of leeway—and that's before you even stop to consider the tens of thousands of unelected bureaucrats staffing operations like the Edsel Bureau.

Would the FDA Approve the FDA?

Consider a real government agency instead: the Food and Drug Administration (FDA), which is tasked with "protecting the public health by ensuring the safety, efficacy, and security of human and veterinary drugs, biological products, and medical devices; and by ensuring the safety of our nation's food supply, cosmetics, and products that emit radiation. FDA is responsible for advancing the public health by helping to speed innovations that make medical products more effective, safer, and more affordable and by helping the public get the accurate, science-based information they need to use medical products and foods to maintain and improve their health."[5]

The FDA makes us safer, right?

Actually . . . no. The FDA can approve dangerous drugs. They can also delay safe, lifesaving drugs. The first sort of mistake is all over the news. A medication kills dozens of patients. The president calls for an internal investigation. The FDA's disgraced director resigns. The FDA has a strong incentive to avoid this error. The incentive is so strong, in fact, that the FDA overavoids it and makes the other, no-less-deadly mistake—and persists because the links between delayed drugs and deaths are harder to see and don't make it into the headlines. They are real, though, and the FDA is at least dimly aware of them. Why else did it accelerate approval during the COVID-19 pandemic? In general, the approval process makes drugs more expensive and makes lifesaving medicines harder to get (essentials 4 and 5).[6] Additional testing might save the lives of sick people who react badly to a new drug, but at the cost of the lives of those for whom the delayed drug would have been a literal lifesaver.

This is why almost all economists favor looser FDA drug approval rules.[7] Perhaps we could allow dying patients to try new drugs that have not completed all the trials. Some economists favor abolishing the FDA altogether to let market forces and the tort system regulate the drug market (see chapters 5, 6, and 10 again). Would you take a drug that leading doctors and scientists didn't endorse? While not perfect (name something perfect this side of heaven), markets are better regulators than government agencies (chapters 5 and 6). That's not because government officials or agencies are inherently evil, but public officials do face different incentives than their market counterparts. And those pesky incentives make all the difference in the world. Given their dangerous track record, it's no exaggeration to say the FDA might not approve the FDA.

“Bootleggers and Baptists”

Politics makes strange bedfellows, and analyzing politics with economics shows that dismantling an agency like the fictional Edsel Bureau or the very real FDA is no easy task. They get support from special interests and moralists, and once they exist, government agencies tend to be dug in like ticks on a dog.

The Bureau of Prohibition (1920–1933) models many agencies' origin stories.[8] Two groups benefited from American alcohol prohibition (see chapter 10). On one hand, Baptists and groups like the Women's Temperance Movement (WTM) blamed society's ills on "demon rum." Booze made men beat their wives, profane the Sabbath, kick their dogs, and so on. The solution? Prohibition. But they are not the only beneficiaries. Bootleggers like Al Capone loved prohibition because it shut down their competitors. The economist Bruce Yandle drew on the history of prohibition to develop his "Bootleggers and Baptists" theory of regulation.[9]

Not many people would have listened to Al Capone had he gone to Congress and asked for prohibition because it would make him rich. They did listen to the bootleggers' teetotaling, moralizing counterparts' public interest argument for prohibition, and with enemies like the WTM, Capone and other bootleggers didn't need friends—and what "friends" Capone did need in the mayor's office and police force could be made with a few bribes and conspicuous charity. Conceivably, Yandle's Baptists could benefit from the bootleggers' financial clout—indeed, Al Capone funded a soup kitchen, and later, Colombian cocaine kingpin Pablo Escobar paid for hospitals and other public works. Ultimately, Baptists and bootleggers enjoy an uneasy (and usually unconscious) relationship based on mutual interests.

Almost a century after Prohibition, Baptists and bootleggers are still working together. Baptist and bootlegger coalitions are finding success in Arkansas, where some counties ban liquor.[10] Religious organizations in these "dry" counties and alcohol vendors in "wet" counties both want to keep things that way.

"Baptists" and "bootleggers" aren't only to be found in the Roaring Twenties and dry counties. We see them in environmental regulation. Beginning in the 1970s, the Environmental Protection Agency (EPA) regulated industrial pollution, which the Encyclopedia Britannica defines as "the addition of any substance (solid, liquid, or gas) or any form of energy (such as heat, sound, or radioactivity) to the environment at a rate faster than it can be dispersed, diluted, decomposed, recycled, or stored in some harmless form."[11] The "bootleggers" were special interests seeking a cost advantage over their rivals.[12] The "Baptists" were organizations like Greenpeace and the Sierra Club. A hypothetical Greenpeace plea might read "EPA regulation is necessary if we don't want to put our grandchildren's world underwater." Unwittingly, environmental groups linked arms with the nation's biggest polluters who wanted expensive regulation because it burdened rivals that might not have polluted as much but that were still subject to the 1977 Clean Air Act.[13]

Bootleggers and Baptists also protect the Transportation Safety Administration (TSA). The "bootleggers" are the TSA itself with its large, unionized labor force and its suppliers. The "Baptists" are people who support the TSA for moral reasons, believing it is all that stands between us and terrorism: the TSA fights terrorism, and fighting terrorism is good; therefore, the TSA is good. Meanwhile, some data show that the TSA may actively harm Americans.[14] The TSA's long lines made flying costlier and induced some people to drive rather than fly even though driving is far more dangerous. Economists who studied the effect of long airport security lines after the 9/11 attacks conclude, "While the effect of 9/11 weakened over time, as many as 2300 driving deaths may be attributable to the attacks."[15] As with the FDA, it's not clear that the TSA makes us safer.

Politics without the Sugarcoating

“Baptists and bootleggers” show us regularity amid seeming chaos. So here’s a puzzle: not only does the United States produce sugar, it produces a lot of it in North Dakota.[16] We’re not agriculture experts, but we find it hard to believe that sugar beet farming is the highest-value use of North Dakotan land.

And sure enough, it’s not. Brazil and other South American countries have climates much friendlier to sugar.[17] Yet, since 1789, Congress has provided a sweet deal to domestic producers by way of sugar tariffs and quotas, which make imported sugar more expensive and create space for higher-cost American producers.[18] The tariffs raise imported sugar prices, chiseling out an (inefficient) toehold for American sugar producers. They’re sweet for sugar producers but sour for the rest of us.[19] Estimates vary, but sugar tariffs may cost Americans over $2.5 billion a year.[20]

Why don’t politicians repeal tariffs if they make us poorer? To see why, divide $2.5 billion by 330 million Americans. The average American is only a few dollars poorer annually due to sugar tariffs. It doesn’t even pay to learn about the sugar tariffs, let alone lobby against them. What sugar tariffs cost the average American over a lifetime wouldn’t cover a flight to and hotel in DC. It’s not worth it even though the $2.5 billion consumers are losing could finance a lot of new businesses (chapter 14).

Then there are the sugar growers. Imagine all US-produced sugar comes from just ten family-owned businesses.[21] They would stand to lose millions from tariff repeal and thus have strong incentives to make sure it never makes it onto the legislative agenda. With hundreds of millions of dollars on the line, DC lobbyists are a good investment for the sugar barons. With not even tens of dollars on the line, it’s not worth sugar consumers’ while. Sugar tariffs cost American consumers more than American sugar producers gain, but since the benefits are concentrated and the costs are dispersed, they’re not going away anytime soon. Policies like sugar tariffs that concentrate benefits and disperse costs may be economic losers, but they are political winners.

Why Voting Is So Unlike Shopping

If "concentrated benefits" and "dispersed costs" weren't already bad enough, economics also explains why voters embrace policies that make us poorer.

An example will help us see why. Historians date the Chicken Sandwich War's beginning to a day in 2018 when Popeye's introduced a spicy chicken sandwich that could compete with Chick-Fil-A. Others followed suit swiftly, and spicy chicken sandwiches appeared on menus at Zaxby's, KFC, and elsewhere. Those Adam Smith might call "whining and melancholy moralists, perpetually reproaching us with our happiness" not content to see people enjoying something, complained it was a shame that people would line up enthusiastically for a chicken sandwich but won't line up with anything like that enthusiasm when it's time to vote.[22]

Mere economics shows that voting is very different from buying a chicken sandwich. You know what you're getting at Popeye's: chicken seasoned and fried to perfection, on a bun with sauce and pickles. At Walmart, you can tailor your purchases to your tastes. When you vote, you choose between opaque bundles of policies that cannot be "bought" *à la carte*. The shopping carts are filled for you. Voting pro-life (often) means voting for greater military adventurism abroad. Looser immigration restrictions (often) come packaged with abortion and welfare. You won't find free trade or credible commitments to shrink government in the red cart or the blue cart, and unlike in the marketplace, there aren't viable boutiques where you can get what you want. There's a green cart on the left and a yellow (libertarian) cart that's a bit hard to classify. They're full of things too, but neither has wheels. The purveyors of blue and red carts have seen to that.

We don't intend to suggest moral equivalency between the issues in the previous paragraph. That is for you to work out with careful study of Scripture, the guidance of Christian fellowship, and tradition, what G. K. Chesterton calls the "democracy of the dead." It's only that we wish to highlight the ways people of all beliefs hold their nose as they vote. They describe their selection as the "lesser of two evils." But only rarely do people describe their decisions this way after a trip to Popeye's or Walmart.

At Popeye's, you hand over your money and they hand a delicious sandwich to you, not to anyone else in the restaurant. If you don't like it, Chick-fil-A or Zaxby's would be thrilled to get your business. But when you vote, you're choosing to spend everyone's money for policies affecting everyone. Shopping for policies isn't like shopping for groceries, so much so that an entire academic field called "public choice" studies the differences.

But don't you have a responsibility to cast an informed vote? How would you do that? The average person barely has time to keep up with their responsibilities at home and work. Where are they to find the time to keep up with the thousands of books and articles about complex issues like immigration published every year? How many even have the specialized training they need to do so? Even we have trouble keeping up with the academic literature in our narrow fields of specialization within economics, and it's our job.

Add to that the hundreds if not thousands of pages of documents governments produce every day. On a random day (October 8, 2021), the US *Federal Register* offered 112 new documents, from fifty-one government agencies, totaling 464 pages.[23] It's more than any statesman or lawgiver—to say nothing of any voter—can keep track of. That day's *Register* included headings like "General and Plastic Surgery Devices; Reclassification of Certain Surgical Staplers," "Assistance to Eligible Individuals in Acquiring Specially Adapted Housing," and "Presidential Declaration Amendment of a Major Disaster for the State of Michigan."[24] Not even the most dutiful citizen can be more than superficially "informed." Do you know your representative's position on surgical stapler reclassification?

Even if voters could read and understand every page of every academic journal as well as the *Federal Register*, their incentives would stop them. You occasionally hear about local issues that come down to a single vote, but these exceptions prove the rule that you will almost certainly not cast the decisive ballot in any large election. You are more likely to die driving to the polls or win the biggest Powerball jackpot eleven times in a row than to cast the deciding vote for president.[25] With those odds, it's no wonder that voters aren't informed. Before you shake your head at their irresponsibility, do you know who represents you in your state legislature *and* all their votes from the last session? If a duty is literally impossible to discharge, is it a duty?

So, who *is* informed about surgical stapler reclassification? The manufacturers, for one, and their lobbyists, but even they don't have the knowledge or the incentive to understand how surgical stapler reclassification fits with the broader social interest. The problem is even bigger for voters. Hardly anyone with a strong opinion about the 2021 budget bill did what economist Casey Mulligan did and read the entire 2,465 pages.[26] That makes sense: it doesn't pass a cost-benefit test for . . . pretty much anyone.

"Rational ignorance" explains why voters are stubbornly uninformed (error 2). Given these incentives, it's surprising that anyone keeps up with anything politically, and it's not surprising that even the most informed among us are only superficially so. There's no incentive to know unless someone just enjoys politics like others enjoy sports. Indeed, it can be hard to tell whether a given comment is from Politico or ESPN.com.

Here's a good rule: every foible, failing, and flaw plaguing us at Walmart is ten times worse in the voting booth. People don't transform into omniscient angels when they pick up a ballot, and we are at the mercy of one another's lousy incentives. Think people are too ignorant to choose a doctor? Watch how they choose the politicians who regulate the doctors. Think they're impulsive when buying a new pair of headphones? What about when they're parroting talking points from their party's biggest donors? Think they don't do their homework before buying a new car? Ask them how much they know about their representative's voting record, if they even know who it is—statistically, they don't. People act one way when they enjoy the full benefits and pay the full costs of their choices and another way when they don't. Where do you think people have the strongest incentive to choose thoughtfully and responsibly—at Walmart or in the voting booth? When do people make better choices when they don't face consequences?

How Should We Then Live?

The idea that we bear the image of God defines how we can treat one another. C. S. Lewis explains:

> Christianity has not, and does not profess to have, a detailed political programme for applying 'Do as you would be done by' to a particular society at a particular moment. It could not have. It is meant for all men at all times and the particular programme which suited one place or time would not suit another.[27]

But, Lewis points out, Christianity's political independence has richer implications:

> And anyhow, that is not how Christianity works. When it tells you to feed the hungry it does not give you lessons in cookery. When it tells you to read the Scriptures it does not give you lessons in Hebrew and Greek, or even in English grammar. It was never intended to replace or supersede the ordinary human arts and sciences: it is rather a director which will set them all to the right jobs, and a source of energy which will give them all new life, if only they will put themselves at its disposal.[28]

It's a message that frees us from the burden of placing our hope in politics. The next time a friend or relative says Christianity demands a particular policy ("higher taxes and more spending because Jesus loved the poor"), ask whether it actually does. As ways to improve the world go, politics is an angry god demanding constant sacrifice and delivering little in the way of meaningful results. As the Christian economist Jennifer Roback Morse asks, "What could be a more minimalistic contribution to the poor than pulling the voting lever for a candidate whose speechwriter sounds compassionate?"[29] Can we get better results if we just vote the bums out? Unlikely: political institutions deliver wealth-destroying public policy precisely because that's what rulers have incentives to deliver (error 7). Better bums might help a little. Better rules will help a lot (chapter 13).

We don't know exactly how politically active you should be, but meditate and take seriously the possibility that the answer is "less."[30] Think about your next ("marginal") hour. Will you do more for the world by feeding the poor, playing with your kids, perfecting your craft, or campaigning for a politician?[31] Your answer will change depending on the hour, but it's a question you should ask regularly.

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[1] Peter Holle, "Interview with James Buchanan, 1986 Nobel Prize Winner in Economics," AIMS, October 26, 2001, https://www.aims.ca/op-ed/interview-with-james-buchanan-1986-nobel-prize-winner-in-economics/.

[2] For more on this logic, see Gordon Tullock, "The Transitional Gains Trap," *Bell Journal of Economics* 6, no. 2 (1975): 671–78.

[3] For more on evasive entrepreneurship, see Niklas Elert and Magnus Henrekson, "Evasive Entrepreneurship," *Small Business Economics* 47, no. 1 (June 2016): 95–113, https://doi.org/10.1007/s11187-016-9725-x; David S. Lucas, Caleb S. Fuller, and Mark D. Packard, "Made to Be Broken? A Theory of Regulatory Governance and Rule-Breaking Entrepreneurial Action," *Journal of Business Venturing* 37, no. 6 (2022): 106250.

[4] Milton Friedman and Rose D. Friedman, *The Tyranny of the Status Quo* (New York: Penguin, 1985), 112.

[5] Office of the Commissioner, "What We Do," FDA, November 15, 2023, https://www.fda.gov/about-fda/what-we-do.

[6] Casey B. Mulligan, "Peltzman Revisited: Quantifying 21st-Century Opportunity Costs of Food and Drug Administration Regulation," *The Journal of Law and Economics* 65, no. S2 (November 2,

2022): S355–87, https://doi.org/10.1086/721270.

[7] Daniel Klein, "Drug-Approval Denationalization," Econlib, April 6, 2009, https://www.econlib.org/library/Columns/y2009/Kleindrugapproval.html.

[8] The BoP was initially (1920) a division of the Internal Revenue Service until it became its own agency in 1927.

[9] Bruce Yandle, "Bootleggers and Baptists—The Education of a Regulatory Economist," *Regulation* (May/June 1983): 12–16.

[10] Jeremy Horpedahl, "Bootleggers, Baptists and Ballots: Coalitions in Arkansas' Alcohol-Legalization Elections," *Public Choice* 188, no. 1–2 (July 2021): 203–19, https://doi.org/10.1007/s11127-020-00822-5.

[11] Jerry A. Nathanson, "The Pollution Problem," Encyclopaedia Britannica, https://www.britannica.com/explore/savingearth/pollution-overview#:~:text=Pollution%2C%20also%20called%20environmental%20pollution,stored%20in%20some%20harmless%20form.

[12] Bruce Yandle, *The Political Limits of Environmental Regulation: Tracking the Unicorn* (New York: Quorum Books, 1989).

[13] Yandle, "Bootleggers and Baptists," 12–16.

[14] See chapter 4 of Richard B. McKenzie, Gordon Tullock, and Richard B. McKenzie, *The New World of Economics: A Remake of a Classic for New Generations of Economics Students*, 6th ed. (Heidelberg: Springer, 2012).

[15] Garrick Blalock, Vrinda Kadiyali, and Daniel H. Simon, "Driving Fatalities after 9/11: A Hidden Cost of Terrorism," *Applied Economics* 41, no. 14 (June 2009): 1717–29, https://doi.org/10.1080/00036840601069757.

[16] Ann Bailey, "North Dakota, Minnesota Sugarbeet Farmers Make Good Planting Progress in Late May," Agweek, June 2, 2022, https://www.agweek.com/news/sugarbeet/north-dakota-minnesota-sugarbeet-farmers-make-good-planting-progress-in-late-may.

[17] Most US sugar beet production occurs in Minnesota, Idaho, North Dakota, Michigan, and California. Most US sugarcane production occurs in Florida and Louisiana. Chris Edwards, "The Sugar Racket," *Cato Institute Tax & Budget Bulletin* 46 (June 2007).

[18] Edwards, "Sugar Racket."

[19] Art Carden, "Sugar Tariffs Are Sweet for Special Interests, Sour for the Rest of Us," *Daily Caller*, December 3, 2012, https://dailycaller.com/2012/12/03/sugar-tariffs-sweet-for-special-interests-sour-for-us/.

[20] John C. Beghin, "Recapping the Effects of the US Sugar Program," American Enterprise Institute, February 1, 2022, https://www.aei.org/research-products/report/recapping-the-effects-of-the-us-sugar-program.

[21] For an economic explanation of why family business is so prevalent in agriculture, see Douglas W. Allen and Dean Lueck, *The Nature of the Farm: Contracts, Risk, and Organization in Agriculture* (Cambridge: MIT Press, 2004).

[22] Adam Smith, *The Theory of Moral Sentiments and on the Origins of Languages*, ed. Dugald Stewart (London: Henry G. Bohn, 1759), 197.

[23] https://www.federalregister.gov/.

[24] Federal Register, "General and Plastic Surgery Devices; Reclassification of Certain Surgical Staplers," 86 Fed. Reg. 56195 (Oct. 8, 2021); Federal Register, "Assistance to Eligible Individuals in Acquiring Specially Adapted Housing," 86 Fed. Reg. 56213 (Oct. 8, 2021); Federal Register, "Presidential Declaration Amendment of a Major Disaster for the State of Michigan," 86 Fed. Reg. 56344 (Oct. 8, 2021).

[25] For mathematical confirmation, see Professor Bryan Caplan's lecture notes: https://econfaculty.gmu.edu/bcaplan/e410/pc2.htm.

[26] David Henderson, "Casey Mulligan Reads the Bill," *EconLog* (blog), October 5, 2021, https://www.econlib.org/casey-mulligan-reads-the-bill/.

[27] C. S. Lewis, *Mere Christianity* (New York: Macmillan, 1943), 82.

[28] Lewis, 82.

[29] Jennifer Roback Morse, "The Modern State as an Occasion of Sin: A Public Choice Analysis of the Welfare State," *Notre Dame Journal of Law, Ethics, and Public Policy* 11 (1997): 531–48.

[30] Consider some arguments philosophers have made, such as Jason Brennan, *The Ethics of Voting* (Princeton: Princeton University Press, 2011).

[31] Granted, any of these options probably beats posting on X (formerly Twitter).

13

Dominion and Domination

Solving the Progress Puzzle

The people who walked in darkness have seen a great light; those who dwelt in a land of deep darkness, on them light has shined. Isa 9:2

Once one starts to think about [growth], it's hard to think about anything else. Robert Lucas[1]

The People That Walked in Darkness Have Seen a Great Light

Louis XIV (1643–1715), France's Sun King, had no problem staying up late. He could have read by candlelight as late as he wanted because long-suffering French taxpayers paid for his candles and for servants to tend them. Electric lighting was "no great boon" to royals like Louis XIV and rich people like John D. Rockefeller.[2] It revolutionized life for average people who could enjoy extra hours of light every day.

William Nordhaus, who shared the 2018 Nobel Memorial Prize in Economics for his work on long-run economic growth and the environment, quantified the change with ingenious experiments to estimate the cost of a lumen-hour of light and found that it has fallen by orders of magnitude in the last few centuries.[3] For the first time in history, the lights are on for the average person, and we can do more than sit around in the dark. Johnny Cash sang about the problem in "Pickin' Time" in 1958: "It's hard to see by the coal-oil light / And I turn it off purty early at night / 'Cause a jug of coal-oil costs a dime / But I stay up late come Pickin' Time."[4] Today, we don't have to wait.

We come now to the "how?" of chapter 1's "what?" How did it come to be that the descendants of Louis XIV's candle-toting servants can get anything they want from Walmart's brightly lit cornucopia? What solves the Progress Puzzle and carries people from "the lowest barbarism" to "the highest degree of opulence"?[5] Adam Smith's answer: "peace, easy taxes, and a tolerable administration of justice."[6] This chapter solves the Puzzle as best we can using the tools we've forged up to this point.

Pieces That Don't Fit: Slavery, Imperialism, and Colonialism

Let's start with pieces that don't fit and aren't part of the Progress Puzzle. Our ancestors thought any gain came at someone else's expense: if some people got richer, they must have made someone else poorer. So do a lot of our contemporaries, and the effects are devastating.[7] Prometheus stole fire from the gods. The West stole prosperity from the Rest. There is no room for essential 6 (trade is cooperation). Error 8 (businesses profit by exploiting people) is not an error. It's the law of history.

But widely shared economic progress doesn't fit the zero-sum worldview. "Exploitation" does not explain widespread economic progress. Rape, pillage, and plunder enriched the Vikings in northern Europe and Genghis Khan in Asia, briefly. Slavery enriched enslavers. Colonialism enriched Belgium's King Leopold. Europe's crowned heads crown their heads with stolen gold and jewels. As horrible as royals' bloodsoaked opulence was (and is), it doesn't explain why the descendants of those they raped, pillaged, plundered, enslaved, and slaughtered can buy just about anything they want for mere minutes of effort at Walmart. Despite what some historians claim, exploitation contributed little or nothing to the wealth of nations.[8] Accounting profits from slavery, which do not even consider the foregone return on alternative investments, were a measly 0.005 percent of Dutch national income in the 1750s.[9] In sharp contrast to the 50 percent claimed by the Smithsonian, the enslaved produced about 12.6 percent of US output in 1860.[10] The way Southern agriculture recovered after the Civil War suggests that this output would not have disappeared had slavery been abolished peacefully.[11] Free labor would have done the job.

Clearly, conquest and enslavement aren't growth catalysts. Furthermore, if there were any economic profits to be earned in the slave trade—profits in excess of what could have been earned by redeploying the necessary capital and labor elsewhere—they were earned by indigenous Africans who captured other Africans in the African interior who did not then finance an African Great Enrichment.[12] And finally, when the slaves were emancipated in the United States, the American economy did not collapse. Rather, the value of emancipation's economic gains ranged from 7 percent to 35 percent of aggregate US productivity.[13] Thomas Sowell explains slavery's economic straitjacket: "What this means is that, whether employed as domestic servants or producing crops or other goods, millions suffered exploitation and dehumanization for no higher purpose than the transient aggrandizement of slave owners."[14] We should emphasize *transient*.

Pillage and plunder cannot explain why the average Briton, Belgian, or American is spectacularly wealthy by historical standards. The slave trade means lower incomes today in countries where it happened.[15] Despite claims that we prosper because of the legacies left by our ancestors' sins, slavery, imperialism, and colonialism made us poorer. Of the 10 to 16 million slaves brought to the New World, between 60 and 70 percent were shipped to Brazil or the Caribbean. Relatively few—6 percent—landed in what is now the United States.[16] If slavery could cause a Great Enrichment, it would have happened in Portugal and Brazil, not England and the United States. What's more, until the nineteenth century, slavery existed virtually everywhere, and more Europeans were sold into slavery in North Africa than there were Africans transported to North America.[17] Slavery did not spark a Great Enrichment 5,000 years ago or any time.[18]

As for colonialism, landlocked Switzerland is one of the richest countries in the world, and it never had colonies. Portugal, one of Europe's poorest countries, had an empire. And even colonialism's track record in explaining why poor countries are still poor isn't great. Hong Kong (rich) was a colony. Ethiopia (very poor) was not. The British never earned a profit on "investment" in the British Empire.[19] Colonization, or lack thereof, does not solve the Progress Puzzle.

Prometheus seized what wasn't his, but the mortal Thomas Edison turned "fire" into cheap light for the masses by market-tested innovation (see chapter 6). Then competition transformed electric light from a luxury into something we take for granted. Before long, everyone could see further and longer because they stand on the shoulders of flashlight-carrying giants. "The people who walked in darkness have seen a Great Light."[20]

Tools, Talents, and Technology

So, how do you get economic progress—more and better goods and services, year after year?[21] You need tools, talents, and technological knowledge. Tools include hammers, screwdrivers, computers, ovens, toasters, lawnmowers, computers, and so on. Economists call them "capital goods" or "physical capital." We create tools out of the income we save (i.e., don't consume). Secure property rights are crucial because people are not going to make and maintain tools and buildings that will likely be stolen.[22] A well-developed division of labor means people can specialize in making and maintaining tools while others specialize in using them. Remember what we said in chapter 3: "self-sufficiency" means poverty.

Talents and skills are bits of practical knowledge about how to do things. Economists call them "human capital" because they are the tools of the mind. It describes the ability to type quickly, code, or prepare accurate financial statements. Tools and talents differ from technology, which describes recipes for using tools and talents to turn raw materials into finished goods and services. A waffle iron is a tool (physical capital). Knowing how to use it is a talent (human capital). The waffle recipe is technological knowledge.

Tools, talents, and technology are not enough for progress. Hammers and timber don't just come together and begin producing homes. Someone must coordinate these ingredients and introduce new recipes, which is where entrepreneurship comes back into our story. The word "entrepreneur" is from the French for "undertaker," a term now unfortunately associated solely with funeral directors. The entrepreneur ventures irretrievable resources on a project and is rewarded with profits if he judges wisely and is punished with losses if he judges poorly (chapter 6). He bears the risks. A manager is an entrepreneur's assistant and carries out the plan. Entrepreneurs decide what to do. Managers decide how to do it.

"Combine tools, talents, and technology; manage wisely" seems like an easy recipe. It's the one development experts from organizations like the International Monetary Fund (IMF) and World Bank followed in the late twentieth century. As experts armed with elite credentials, money from wealthy governments, and appealing recipes for economic progress ("add tools and schools and stir"), they descended on poor countries and made a mess, propping up "tropical gangsters" running oppressive regimes and fattened their Swiss bank accounts.[23] "Rub some money on it" did not heal centuries of economic wounds and might have made them worse thanks to the Samaritan's Dilemma of chapter 12.

What's more, capital will not do much unless entrepreneurs invest it in response to market prices. A pyramid for the pharaohs—or a pyramid-shaped basketball arena in downtown Memphis—requires a lot of capital but does not create widespread prosperity. Most foreign aid and other government development projects are more like pyramids and terracotta armies for pharaohs and emperors than they are like the Ford Motor Company or Facebook. "Revitalization" projects like government-funded stadiums never deliver their promised "impact." The tongue-in-cheek "Baade Rule" says that when someone announces an economic impact number, you should move the decimal point one space to the left.[24] This might still be too optimistic. Even when money is dumped into schools, it's not clear that's what an emerging economy needs. Maybe it needs hospitals. Maybe it needs new businesses. Maybe it needs roads. And should those roads be built with asphalt, brick, or something else? Review chapter 6 and error 7.

So, how do we get progress if "throwing money at it" isn't the answer?

Rules Rule

Rich countries have a lot of tools, talents, and technological ideas because their rules reward people for investing in them. Tools, talents, and technology are the proximate causes of economic progress. They arise—or don't—in response to a society's rules. Following the Nobel Prize winner Douglass C. North, economists refer to the rules as "institutions."[25] Institutions can be formal and written (laws and rules governments and organizations make) or informal and unwritten (norms societies develop). Rules' enforcement characteristics also matter.

Rules can be written or unwritten. Governments promulgate written rules, though there are also rules written into firms' and churches' contracts, charters, handbooks, and bylaws. Most organizations have formal employment and conduct policies. Unwritten rules are social norms and conventions that might not have been proposed and passed by a simple majority of duly elected officials, directors, deacons, or elders, but that have become so widely accepted that they get recorded in an etiquette guide—"Men should remove their hats indoors," for example.

Changing rules changes incentives and constraints. When incentives and constraints change, actions change (essential 4). When actions change, outcomes change. As James M. Buchanan and Geoffrey Brennan put it, "The same individuals, with the same motivations and capacities, will interact to generate quite different aggregate outcomes under differing sets of rules, with quite different implications for the well-being of every participant."[26]

Rules determine whether progress is rapid, slow, nonexistent, or, worst of all, backwards. They are the essential pieces to the Progress Puzzle. Nothing in economic theory says progress is automatic, and a toxic mix of rules could set us back centuries. Look up a picture of North and South Korea at night. North Koreans walk in darkness, but South Koreans have seen a great light.

For the most part, North Korean rules encourage domination (the historical rule) while South Korean rules encourage dominion (the historical exception). North Korean domination led to starvation. South Korean dominion led to "Gangnam Style." Dominion gets a bad rap because people confuse it with "domination." For our purposes, dominion refers to the continuous, peaceful, and voluntary transformation of creation for our good and God's glory. Think Adam and Eve cultivating the garden on a commercial scale. Sin means we routinely exercise dominion badly—think drugs, pornography, and cable news—but thanks to God's common grace and redemptive work, we exercise it well sometimes.

Mountains of empirical evidence show that rules promoting economic freedom create prosperity.[27] This means that societies tend to prosper when people have strong private property rights and are free to trade those rights, when governments don't demand that people get their permission for things too frequently or unpredictably, when the legal system is reliable, when citizens don't have to worry too much about their money's value fluctuating wildly, and when taxes aren't confiscatory.[28] Economic freedom means people can expect their efforts to pay off when they delay gratification to make tools, acquire skills, and create new techniques. Rules are the oxygen that turns the entrepreneurial spark into a raging fire.[29]

Economists have paid the most attention to property rights, which are the rules defining who owns what and who, therefore, controls it.[30] The Presbyterian theologian Charles Hodge describes a property right "in an object" as "the right to its exclusive possession and use."[31] With what consequences?

One team of prominent economists puts it this way: "Property rights are fundamental: entrepreneurs will not invest if they expect to be unable to keep the fruits of their investment."[32] Data tell the story: these economists found more reinvestment in Poland than in Russia and Ukraine because Polish private property rights were more secure.[33] Their finding echoes Thomas Hobbes's language from a few centuries ago. As he describes the so-called state of nature, "There is no place for industry, because the fruit thereof is uncertain."[34] Where property rights are secure, the legal system is dependable, the government is honest, the political system is stable, and markets are open and free from government privileges, there *is* a "place" for industry because the fruit thereof is more certain.[35]

Rule enforcement clearly matters, too. A lot is internal: you don't deliberately break the law because you're the kind of person who doesn't deliberately break the law.[36] You're a rule-follower, not a rebel. You don't cheat on your homework because you're the kind of person who doesn't cheat. You tip at restaurants even when you know you will never return.[37] Perhaps the law of Christ is written on your heart.

In other cases, however, external enforcement matters. Written rules in most places prohibit jaywalking, but neither of us have ever seen this enforced. In a lot of places, the "real" speed limit is nine miles per hour above the posted speed limit ("nine you're fine, ten you're mine"). Other written rules (laws against theft and murder) are enforced more regularly and reliably. Norms work the same way. You've probably never been scolded for using the wrong fork at a formal dinner, but you've probably been told to tuck your shirt in. Rules that aren't enforced don't matter.

Still, well-enforced written rules aren't all. Imagine a society where buying low and selling high is perfectly legal and you can be virtually certain that any contract you write will be enforced impartially. There still isn't likely to be that much economic progress if just about everyone believes merchants are parasites and inventors are blasphemers trying to usurp God as creator. If you work day and night keeping careful accounts but can expect people to spit on you when they pass you in the streets, then you aren't as likely to become a merchant, a moneylender, or an inventor. Incidentally, this is one of the reasons despised minorities have tended to cluster in despised occupations like retailing and moneylending. They were already at the bottom of the social hierarchy and couldn't fall any further by doing the undignified jobs.[38]

This social milieu was the historical norm but started to change over about the last half-millennium. People began to embrace rather than disdain bourgeois virtues like prudence. Peoples' rhetoric, specifically their norms surrounding commerce, changed. They began to embrace innovators and merchants. They went from sneering at the bourgeoisie in plays like Theodore Dekker's *The Shoemaker's Holiday* to praising the bourgeoisie in plays like George Lillo's *The London Merchant*. People pursuing their own interests in the context of property, contract, and consent improve humanity, as Adam Smith explained, more effectively than when people are deliberately trying to make things better.[39] Mind your business. Work with your hands.[40] The "dishonor tax" on commerce shrank, and the world was greatly enriched.[41] Oxygen (formal rules) and kindling (resources) are insufficient for a fire. You need an entrepreneurial spark.[42]

The informal rules governing social interaction must ratify and legitimize the formal rules. If you have formal rules that respect property rights, but most people disdain trade, you won't flourish fully. Similarly, your society might have many well-trained policemen that protect person and property, but also many cunning and malicious thieves. Your society won't grow as quickly as if it were filled with virtuous citizens who respected others'right to say "no, thank you." Our economist friend Peter Boettke likes to say, "A free society works best when the need for policemen is least."[43] In such a virtuous society, people need not spend much time and money buying locks, guns, and bulldogs. Virtue reduces transaction costs.

A free and virtuous society relies on consent. People buy and sell voluntarily because they expect to be better off. You buy a house because you prefer shelter to whatever else you could have gotten for a few hundred thousand dollars. You buy a can of Coke because you're thirsty and don't want to be thirsty anymore. You buy a subscription to BritBox for your wife because she loves British crime dramas. In all these cases, you're making the world a better place however you choose to define "better." As the eighteenth-century philosopher David Hume put it, "Where possession has no stability, there must be perpetual war. Where property is not transferr'd by consent, there can be no commerce."[44] The rule of law and an ethical consensus are essential if property is to be transferred voluntarily and securely.

The rules perspective helps us make sense of economic progress, stagnation, and backsliding. Africa has been a development disaster relative to the rest of the world. But its problems are not genetic, geographic, or even (mostly) because of its (mostly old) encounter with colonialism. Rather, Africa's problems stem from one important fact: the world's worst, most expropriating governments are located in sub-Saharan Africa. Domination is the norm and the fruit of investment is uncertain. The world's least free economies—as judged by the size and capriciousness of government, tax rates, profligate money creation, and regulation—are clustered in Africa. Hobbes was right on this point. As nineteenth-century Baptist theologian, economist, and Brown University president Francis Wayland puts it, "Of all the destructive tendencies that can be brought to bear upon production, by far the most fatal, is public oppression."[45]

Growth hypotheses that ignore rules while attempting to explain economic progress don't stand up to scrutiny. What about geography? Well, navigable waterways and miles of coastline graced Europe for eons without leading to sustained economic expansion. Plus, landlocked Switzerland has one of the highest per capita incomes in the world. Some clever readers may think that natural resources are the key to prosperity. But there are resource-rich development disasters (Congo, Niger, Mozambique) and resource-poor success stories (Belgium, Japan, Singapore). You can have all the resources in the world, but without the right rules, your society will languish.

"How do we get there from here?" is the multitrillion dollar question. How do we get from a world where property rights are violated and commerce is held in disrepute to a world where property rights are secure and merchants are respected? How do we get people to discard envy, see their neighbor as a "thou" rather than an "it," and distinguish between "mine" and "thine"? We wish we knew. Replacing bad rules with good ones is a mighty challenge, and it's clearly much more complicated than "add private property rights and stir." When formal institutions don't gel with people's underlying informal norms about "mine and thine," top-down reforms usually fail to generate the hoped-for results.[46]

Ultimately, we think the Great Physician has ordered heart transplants. Imposing new and better rules (ones that protect private property rights)top-down rarely works. People must develop genuine and organic respect for their neighbors' property and choices. They must resist plunder and fraud and embrace the hard calling of an honest day's work. The Decalogue's second table is relevant here.[47] You can't have widespread economic progress when theft, murder, deceit, and envy run unchecked.

What we're really saying is that there is no substitute for the Light of the world.[48] Cheaper lightbulbs are one thing. Transformed hearts, minds, and affections are another matter. Here's where we think that economists can learn from the riches of the Christian faith. Christ writes his law on believers' hearts and shapes them more and more into his image. They covet their neighbors' possessions less and less and eventually rest content in his wise and gracious provision. Jesus did not come to make us rich and comfortable, but where the gospel takes root, peace and prosperity aren't usually far behind.

Dominion: Don't Listen to Thanos

"The universe is finite, its resources, finite. If life is left unchecked, life will cease to exist."[49] That's how Thanos, the "Mad Titan" and villain of *Avengers: Infinity War* (2018) and *Avengers: Endgame* (2019) describes his "simple calculus" to his daughter Gamora. After scouring the universe for Infinity Stones, Thanos secures them to his gauntlet, snaps his fingers, erases half the life in the universe, and saves life itself from itself—or so he thinks.

His idea is hardly original. Fears that overpopulation will doom us stretch back at least to Thomas Malthus's 1798 *Essay on the Principle of Population*.[50] Paul Ehrlich's 1968 book *The Population Bomb* is the most spectacular modern statement.[51] The primatologist Jane Goodall shares the view and says she "would encourage every single conservation organisation, every single government organisation to consider the absurdity of unlimited economic development on a planet of finite natural resources."[52] There is even a Subreddit called "thanosdidnothingwrong."

At the same time, the Bible's first command to Adam and Eve is "be fruitful and increase in number; fill the earth and subdue it."[53] The Septuagint is stronger. It renders Gen 1:28 as "fill completely so that nothing is left over."[54] Who is right? The omnipotent Creator of the universe or Thanos and Jane Goodall?

The population pessimists are grievously, tragically mistaken. Life does not need to be "checked" by anyone—not Thanos, not Paul Ehrlich, not Jane Goodall, not anyone. In this chapter's conclusion, we tackle two common questions about economic progress. But . . . won't all those additional people destroy God's good creation? Not if the rules are right. But . . . doesn't the earth have a "carrying capacity"? There might be, but at 8 billion people and counting, we're still nowhere close. Be optimistic: people have one mouth but two hands, two eyes, two ears, and importantly two hemispheres that make up an enormous brain equipped for problem-solving, innovation, and new ideas.

To pessimists like Goodall, resource depletion is unavoidable. It's simple arithmetic: if you divide *resources* by *population*, then a higher population must mean fewer resources per person.[55] But we don't think the math adds up, for two reasons. First, sunlight bathes us in over 430 quintillion joules of energy every hour.[56] Scientists estimate that people have expended about 22 zetajoules of energy since 1950. That means that the sun drenches the earth in as much energy as we have expended since 1950 every fifty-two hours.[57] To those who claim infinite growth is impossible in a closed system, blinding sunlight should convince you it's not a closed system.

Second, population pessimism fails again and again because it underestimates what economist Julian Simon called the ultimate resource: creativity.[58] An old proverb says, "necessity is the mother of invention." We say basically the same thing with essential 4: "incentives affect people's choices." When something gets more expensive, people look for substitutes. Pricier gas means people carpool, walk, combine trips (stopping at the store on the way home from the gym, for example), or work from home. In the long run, they move closer to work and buy smaller cars that get better gas mileage. In the *very* long run, they harness new power sources. We're still waiting for our "Mr. Fusion" from the *Back to the Future* movies, but breakthroughs in nuclear fusion technology over the last decade make us hopeful, and with the world's best minds working on the problem, we hope to see scalable solar power within our lifetimes.[59]

Prophecies about "the end of oil" never come true because, as Thomas Sowell points out, people seek and find oil when it's profitable to do so; hence, Corporate Average Fuel Economy (CAFE) standards and the Strategic Petroleum Reserve are unnecessary.[60] We are drowning the four horsemen of the apocalypse—death, famine, war, and pestilence—in cheap, abundant fossil fuel energy, and we can hasten their demise with further energy innovation.[61]

The "finite resources" argument also begs the question because it assumes we know which materials are "resources" and which are not. Something is only a *resource* insofar as we can use it to satisfy wants, and we figure this out through long processes of trial and error. Oil was just land-ruining sludge until we figured out how to use it.[62] Here's economist Michael Munger's useful test: if people will pay you for it, it's a resource. If you have to pay someone to take it, it's garbage.[63] Without private property rights and exchange-promoting rules, we can't know which is which.[64] What's more, we get pollution.

Pollution: Is There a Market for It?

Pollution is what economists call an "externality," which happens when an action produces costs or benefits that spill over onto third parties.[65] When factories belch too much smoke, water is poisoned, and fish are depleted, we need to ask, "Where is the missing market?" When there isn't a market where drivers and breathers can negotiate over the right to use the air, cars emit too much exhaust. This is another way of saying we have environmental problems because of incompletely defined and enforced property rights. When everyone owns something, no one does—and we can be sure it will be polluted and wasted. Why let your car get junked up with empty bottles and cans when you can just throw them out the window? That fish you just caught is a little small, but if you don't eat it now, someone else will.

People aren't very good stewards of what they don't own. This is ancient wisdom. Aristotle knew it. It's not that they are malicious. Rather, they do more of what costs less (essential 4) and, therefore, overuse what they don't have to pay for. For example, no one gets into a rush hour traffic jam because they want to inconvenience others by occupying part of the road. It's because they don't have to pay a price when the road is most demanded. Adam Smith's invisible hand (chapters 5 and 6) is broken when prices aren't allowed to do their jobs.

Traffic congestion and the condition of the lower Mississippi River are what you get when private ownership is absent or poorly enforced. Similarly, people in places with insecure property rights tend to plant quick-yielding crops rather than trees, which are too risky.[66] Audrey Hepburn, again: "To plant a garden is to believe in tomorrow." You don't plant when grabbing hands obscure the future. Someone else—the government or your neighbor—may come along and seize your land or the trees growing on it. Likewise, the skies and seas and forests turn into poorly stewarded communal garbage cans when they are unowned. Which is better and more carefully managed, a hotel swimming pool or Lake Erie? Where does Disney deploy armies of people with brooms and dustpans, their own parks or city parks around Orlando and Los Angeles?

In other words, people change their choices when private property rights become more secure. For instance, when a factory dumps ooze into its own stream, it bears the full costs of such actions. It only dumps ooze when the benefits truly outweigh the costs.

Dumping ooze into a stream? Many protest. Yet, if the factory is going to produce the good things we want, its waste must go somewhere. A problem arises when no one owns the stream because everyone has an incentive to treat a scarce resource as if it were superabundant when it actually has a lot of competing uses (dumping, swimming, drinking, laundry, etc.).[67] When a factory dumps ooze in someone else's stream (rights are ill-protected) or in a contested stream (rights are ill-defined), it dumps more ooze because it doesn't have to bear the full cost, which it can share with other stream users.

Even if the factory doesn't own the stream but wants to use it for ooze disposal, it's no problem as long as rights are well-enforced and well-defined. In that case, the factory owner could buy the right to dump ooze in the stream from the stream owner. In contested cases, courts can provide confidence to property users by enforcing the rights of first use. Who was there first? If the other party wants to use the resource more, they are free to buy it. Happily, we believe this approach dovetails with common sense and biblical notions of justice.

But what about that factory dumping its ooze in a stream it owns? For some, that just doesn't sit right, but believe it or not, a perfectly clean environment is unattainable and undesirable. That it's undesirable might be surprising, but scarcity (chapter 3) is why and we must remember essential 5: people make incremental choices. Everything could *always* be cleaner, so it's not even clear what a "perfectly clean" environment would look like. What would we have to give up scrubbing the earth until it glistened? What would we be willing to give up? Believe us when we say none of us want to live in a world where there is no garbage of any kind because it would mean there is no production and no wealth. We'd live our ancestors' solitary, poor, nasty, brutish, and short lives from chapter 1.

While making things cleaner is praiseworthy, think with us for a moment about the cost of a perfectly clean world. Suppose an industrial ooze has no redeeming qualities, is benign in trace amounts, and causes cancer in large amounts. You can imagine the headline: "Industrial Byproduct Linked to Cancer Found on Children's Playground." Outraged activists demand that every last molecule of ooze be eliminated. First, we should calm down because *everything* is dangerous in the right quantity. There is such a thing as "water poisoning" from drinking too much water.[68]

Second, we should count the cost. If we want to completely remove it from any and all possible ecosystems, we would have to blast it into space and fling it toward the sun—but getting anything into space is incredibly expensive, and scarce resources have alternative uses, such as treating cancer. There is also the risk that something will go wrong and the rocket explodes, spreading ooze over hundreds of miles.[69] Finally, we should consider trade-offs. Suppose it would cost 1 billion dollars to eliminate a single ooze-related cancer death. Meanwhile, it might also cost 1 billion dollars to prevent fifty deaths from diseased drinking water. Which do we do, given that "both" is not an option?

Pollution we will always have with us, so the relevant question is, Which rules mitigate it most effectively? Economists emphasize the harmony between property rights and a clean creation. By contrast, economists are suspicious of top-down, "command and control" approaches because brute-force solutions tend to produce cobra effects (essential 9). Mexico City's 1989 *Hoy No Circula* tried to address air pollution by saying people with odd-numbered license plates could drive one day and even-numbered license plates could drive the other. A lot of people ditched their newer, cleaner cars and bought two high-emissions clunkers so they could get to work; it's not clear air quality improved.[70] The Endangered Species Act of 1973 created the "Three S's Sequence" of Shoot, Shovel, Shut Up because the mere presence of protected species could halt multimillion dollar developments.[71] In North Carolina, commercial developers preemptively destroyed forests to keep red-cockaded woodpeckers, whose presence would have halted projects, at bay.[72]

How Should We Then Live?

First, breathe a big sigh of relief. In most places, your breath will be full of clean, fresh air—our planet is cleaner now than it was fifty, twenty-five, or even ten years ago. It's not crystal clear everywhere yet, but as economic progress through cooperation drives incomes higher, people demand cleaner air, workplaces, roadways, and riverways.[73]

Second, don't be too quick to invoke the Clean Air Act. It might have made the skies cleaner in American cities like Birmingham and Pittsburgh, but it pushed a lot of heavy industry to places that produce even more smoke and sludge per unit of output than the United States does. Economic progress also provides the resources to make the planet a cleaner place: new filtration technologies and other gadgets designed to clean up the messes we humans make.

There are even more reasons to relax. On average, you're making the world a better place when you have kids. You don't have to choose between caring for creation, having kids, and loving your neighbor. Here's one case where there really aren't tradeoffs. God designed the world so these things harmonize. Still, progress is never guaranteed. We can wreck creation by trampling private property rights, and we can lower fertility through a host of public policies that make children costlier.

People are poor because they produce little. If we want to enrich them, we should concentrate our moral and political firepower on the institutions—dare we say "structures of oppression"—that keep them unproductive. Specifically, we should examine the pieces of the Progress Puzzle and see how we can make them fit together better. We ought to embrace innovation, competition, sound money, and equal permission to start a commercial enterprise. As the biologist Matt Ridley puts it, "Innovation is the child of freedom and the parent of prosperity."[74]

Of course, we should also reject central planning, inflationary policies, licensing, price controls, and other obstructions that keep markets from operating dynamically, efficiently, and fruitfully.[75] And we should teach people that "loving your neighbor as yourself" includes respect for their person, property, and profession.

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14

Make More, Take Less

Meditations on the Extraordinary Business of Life

When a long succession of illustrious scholars assert that freedom and the general welfare are perfectly compatible with justice and peace . . . do they not have on their side . . . all that we know of the goodness and wisdom of God, as manifested in the sublime harmony of the physical universe? Frederic Bastiat[1]

You cannot make men good by law: and without good men you cannot have a good society. That is why we must go on to think of the second thing: of morality inside the individual. C. S. Lewis[2]

God and Man Walk out of a Bar

Thank you for sticking with us. We only want a few more moments. Most days, you wouldn't think twice about the introduction's burger and beer. If someone asked whether you know how to make a burger, you'd answer "yes" without hesitating.

But today, we hope you see the huge asterisk next to your "yes." Do you know how to make a burger? Yes, if you can secure the assistance of great multitudes you will never meet. They will help you by raising the livestock, growing the wheat, tilling the ground, designing trucks to transport the cattle, cultivating the tomatoes, pasteurizing milk for the cheese, training the developers who coded the logistics system which get trucks to their destinations before things spoil, and a million other things. You only "know" how to make a burger because you can cooperate with strangers on a global scale.

You could spend a lifetime trying, but you'd never make a burger as tasty as the one you had in the introduction if it was just you and the unsubdued earth. As we've argued, cooperation on this scale depends on free market institutions—property, prices, profit and loss—if it is to happen at all. These are all restricted (see chapters 9 through 12), but they are not destroyed—and they are responsible for our mindblowing prosperity. When was the last time you thanked God for the social institutions he designed that have been the founts of so many blessings? It is, after all, our Father's world.

None of this means things are perfect. They are improving, but we sympathize with the urge to "do something" about the almost 500 million people still living in extreme poverty. What's more, the news cycle chokes with the horrors that people who bear God's image inflict on others who bear God's image. Alas, however, efforts to "make men good by law" tend to end with bad men sitting atop mountains of corpses.[3]

So, what do we do?

As we wrote earlier, economics per se can no more tell us how to live than physics per se can tell us whether to drop an atomic bomb, but it can tell us when we are likely to be effective. People know they have responsibilities toward others and are biased toward action. However, loving the Lord our God with all our hearts and minds includes using the analytic faculties he has given us.[4] Perhaps we should reemphasize prudence and temperance and see how they can help us express faith, hope, and love while living lives of courage and justice.[5] Here are a few suggestions.

First, internalize the words of Reinhold Niebuhr's famous "serenity prayer," which asks God for the courage to change the things we can, the serenity to accept the things we can't, and the wisdom to know the difference. Economics helps us exercise that wisdom. As Carden's former dean once said, life is like pushing on a glacier—sometimes it moves, sometimes it doesn't. We need to know when our pushing is fruitless or even counterproductive, as in the case of (say) foreign aid (chapter 11).

Second, don't despair. No single mind can comprehend society in all its intricacies, but it "works" most of the time. Markets get resources to people who value them most highly and can use them most effectively, a result that should fill us with awe and wonder. As Friedrich Hayek argued, if it had been designed, the price system would be considered one of humanity's greatest achievements.[6] There is a humbling and awesome beauty in the fact that we live in a world designed to use others' knowledge for people they will never know and may not like.

As social phenomena, prices impress us with our insufficiency and God's sufficiency. Precisely how people will solve the problems they face is knowledge too high for us; however, the experience of the ages gives us faith in the power of free people with free minds in free markets.[7] When we leave people alone, they make us rich.

It's understandable, for instance, to ask what people who used to work in an obsolete industry will do. We don't know—and we should be wary of anyone who claims to. What we do know is that free prices guide them into occupations where they can best serve others. "Guide" is the operative word here. Notice how it's not "coerce" or "force" or "command." Free societies do not have common, articulated goals like "greatness" or "equality." Purpose is individual, and corporate purpose is consensual. Liberty gives people the space to self-author. As the economist James Buchanan has put it, "Man wants liberty to be the man he wants to become."[8]

Skeptical elitists see this as a bug rather than a feature and disdain markets because they give people what they want rather than what elitists think they should want. However, we find and form our own purposes in a free society; they are not imposed from above by someone who knows better. Finding and forming true purpose, though individual, requires fellowship with the Holy Spirit, God's guidance through His Word, and fellowship with God's people, the church.

We are making ourselves miserable, loading ourselves with unbearable burdens, and (ironically) making ourselves less effective by stopping at good intentions. Once we've made peace with our irremediable moral and intellectual limitations, we can focus on the settings where we can likely do the best, and frankly, we can revel in the abundance God creates systemically via social processes no one controls. We shouldn't stop there. If we became reacquainted with the seven deadly sins in this book's introduction, it's now time we get acquainted with seven lifegiving virtues in this book's concluding pages.

Bourgeois Virtues: Work Out Your Own Salvation with Fear and Trembling

The Nobel Prize–winning economist Edmund Phelps describes our innovative, commercial society as an "imaginarium" where we lift all boats on an ever-rising tide of new ideas.[9] Economist Deirdre McCloskey argues that changing habits of thought, word, and deed that embraced the bourgeois habits of incremental improvement, buying low, and selling high sparked the Great Enrichment. The result? Poverty is disappearing.[10]

Receding poverty provides reasons to rejoice, but a good life in a commercial society, McCloskey argues, requires more. It is the product of interwoven and balanced practice of the Christian virtues of faith, hope, and love as well as the cardinal virtues of courage, justice, temperance, and prudence. C. S. Lewis discusses these in *Mere Christianity*, albeit with slightly different terminology: faith, hope, and charity are the theological virtues, and fortitude, prudence, temperance, and justice are the cardinal virtues. Since this book is called *Mere*

Economics, we will use Lewis's terminology. How do we embrace and exercise these virtues in a commercial society? To what ends? With what effects?

The Christian or theological virtues are outward-looking. Faith looks upward to God and backward to the past where Christ paid our debt. Hope looks upward to God and forward to the future. Charity looks upward to God and outward to his creation. The Christian virtues are dispositional, addressing attitudes more than specific actions. The cardinal virtues are more inward-looking and action-oriented.

Faith is an epithet in some circles. Mark Twain allegedly said faith is "believing what you know just ain't so." It isn't, and is more than affirming a few doctrines. It is the virtue that overrides the sense of panic you feel when a plane takes off and you imagine a fiery death. Coupled with reason, faith helps you govern your imagination and emotions: "The battle is between faith and reason on one side and emotion and imagination on the other."[11] Faith is constancy in the face of the temptation to panic. It is, Lewis writes, "the art of holding on to things your reason has once accepted, in spite of your changing moods."[12] You train your heart, lungs, and muscles by walking at least 5,000 steps a day and doing strength training at the gym. You train your faith with "daily prayers and religious readings and churchgoing."[13]

Hope looks forward to eternity, and as Lewis notes, in looking forward to eternity we "will get earth 'thrown in.'"[14] Hope fixes our eyes on the ultimate—Jesus Christ—and properly orders our lives. The hopeful, eternal perspective, Lewis argues, motivated apostles and abolitionists to spread good news and stop great evil.[15] To concentrate our intellectual and moral firepower on saving civilization, however, would be a hopeless mistake. Lewis writes with the still-fresh memory of World War II: "You are only likely to get health provided you want other things more—food, games, work, fun, open air. In the same way, we shall never save civilisation as long as civilisation is our main object. We must learn to want something else even more."[16] And so we put not our hope in kings and princes and dollars and cents and kroner and pence but in Christ alone.

"Charity," Lewis writes, "means 'Love, in the Christian sense.'"[17] It is not, he argues, a mere feeling. It is dedication to the true good of oneself, another, and the rest of the world. It is a sincere dedication to others' *eudaimonia*, the Greek word difficult to translate but sometimes rendered "happiness" or "flourishing." Motivated by charity, we give. We listen "charitably." We make hard choices and embrace what Lewis teaches: "Do not waste time bothering whether you 'love' your neighbor; act as if you did."[18] Fake it 'til you make it? Yes, and with good reason: "As soon as we do this we find one of the great secrets. When you are behaving as if you loved someone, you will presently come to love him. If you injure someone you dislike, you will find yourself disliking him more. If you do him a good turn, you will find yourself disliking him less."[19]

You're not so much "faking it" as you're just doing the things the person you want to be does. Eventually, you become that person. In a passage that warms our economists' hearts, Lewis writes about how good (and evil) grow exponentially:

> Good and evil both increase at compound interest. That is why the little decisions you and I make every day are of such infinite importance. The smallest good act today is the capture of a strategic point from which, a few months later, you may be able to go on to victories you never dreamed of. An apparently trivial indulgence in lust or anger today is the loss of a ridge or railway line or bridgehead from which the enemy may launch an attack otherwise impossible.[20]

Sweat the small stuff. Sweat the margin. It matters.

We achieve small victories by exercising the cardinal virtues. Fortitude, according to Lewis, "includes both kinds of courage—the kind that faces danger as well as the kind that 'sticks it' under pain."[21] Without fortitude, he writes, you will abandon the other virtues.[22] We can't have a commercial society without it. Taking risks takes courage. Moving to a new state to take a new job? Abandoning the original formula for Coca-Cola? Admitting that abandoning the original formula for Coca-Cola was a mistake and going back to the original? Lending money to a son-in-law with a cockamamie idea about discount retailing in Arkansas? Fortitude all around.

Justice means more than "getting yours," and it means more than what happens in a courtroom. We also think the word is rarely improved by slapping culturally fashionable adjectives in front of it, such as in the cases of "social" justice, "environmental" justice, "distributive" justice, and so on. "It is the old name for everything we should now call 'fairness'; it includes honesty, give and take, truthfulness, keeping promises, and all that side of life."[23] In business, justice means "honest weights and measures," keeping your promises, and not defrauding your customers.[24] It also means not defrauding your employees.[25] And while Scripture warns against oppressing the poor, economic theory clarifies the list of actions that do and do not qualify as oppression. Minimum wages, far from helping the poor, oppress them (chapter 9).

Justice is also where we can (and should) practice being faithful in small things to be entrusted with much. Have you changed a social media profile picture or marched in the street to show that you support The Current Thing? Good for you, we guess. When's the last time you broke a promise? Told a "white lie" to safeguard your image? Said you would be there at 6:00 and didn't arrive until 6:15? Gossiped? Injustices all. Repent. Make amends with whoever you harmed by bending the truth or being tardy. Then go, and sin no more.

Some conservative Christians think they have temperance covered because they don't drink. As Lewis argues, however, "temperance referred not specially to drink, but to all pleasures; and it meant not abstaining, but going the right length and no further."[26] How many conservative Christians are overweight? Spending the equivalent of a full-time job every week watching TV or playing video games? Wondering what to do about their maxed-out credit cards? These are all failures of temperance, and they are especially noteworthy because every decision to consume is a decision to use our means to bid others' time, talent, and treasure into our service instead of someone else's. The intemperate turn God's good gifts into idols at the cost of their own souls and others' well-being.

> A man who makes his golf or his motor-bicycle the centre of his life, or a woman who devotes all her thoughts to clothes or bridge or her dog, is being just as 'intemperate' as someone who gets drunk every evening. Of course, it does not show on the outside so easily: bridge-mania or golf-mania do not make you fall down in the middle of the road. But God is not deceived by externals.[27]

Prudence is the virtue of bourgeois life lived well. It "means practical common sense, taking the trouble to think out what you are doing and what is likely to come of it."[28] It uses reason to balance out the other virtues. God, Lewis argues, "wants every bit of intelligence we have to be alert at its job, and in first-class fighting trim."[29] Prudence checks charity and directs it wisely: "The fact that you are giving money to a charity does not mean that you need not try to find out whether that charity is a fraud or not."[30] Prudence counts the cost before building a tower or fighting a war.[31] Prudence requires private property because it generates the prices, profits, and losses telling us what other people want and when we have chosen wisely.

In sum: the theological and cardinal virtues make commercial society vastly better. Punctual employees don't steal their employers' time or cause undue stress and worry for their coworkers, and thus they lower costs of coordinating production, which is no easy task for an organization like Walmart.Honest employees don't embezzle, so they lower their employers' security costs and free up resources to serve consumers. Courageous entrepreneurs make conjectures about what you and I want, not knowing whether it will pan out. We'd much rather live in a commercial society where these virtues are widespread than in one where they're rare.

But, and here's the part we think so many miss, the relationship between the virtues and commercial society is bidirectional. A commercial society's institutions are the wind beneath these virtues' wings. Want to love your neighbor as yourself? Respect his private property rights. Want dishonesty and deception penalized? The profit and loss system and the common law tradition are surprisingly good at it. Want industriousness rewarded and sloth punished? We know of no better social system than market competition. Want wise and prudent use of society's scarce resources rather than intemperate waste? Then you need to understand that profit and loss accounting helps us maximize value and minimize waste. We'll say it one more time with feeling: the virtues underpin and support commerce. Commerce, for its part, encourages and gives new expression to the virtues, both cardinal and theological.

Make More, Take Less: The Mundane Morality of Production and Saving

A question on a Principles of Macroeconomics exam at Samford University asked what someone needs to rebuild a destroyed house. The options are "thoughts," "prayers," "bricks," and "the other options are incorrect." We should empathize with someone who has fallen on hard times. We are to pray unceasingly.[32] But God typically works through ordinary means, suggesting that usually our prayers alone will not fix roofs, build bridges, or fill stomachs. We must produce. Here again is C. S. Lewis: "The two methods by which we are allowed to produce events may be called work and prayer."[33] You say you have faith? Show us your faith without your works. Faith without works is dead.[34]

By "works," we don't mean performances that make you feel good while inadvertently hurting people. We mean carefully considered, deliberately chosen actions based on epistemically justified, true beliefs that will lead to the results we want. God works miracles, but past performance is a good predictor of future performance. Weak faith that demands God perform tricks for us washes away swiftly when storms hit.

It does us no good to say, "Go, be warmed and filled," and not actually give someone what he needs to do so; however, indiscriminate giving can be destructive and insulting.[35] Perhaps the best advice in this regard comes from the apostle Paul: mind your own business and go about your work.[36] By doing so, you expand the supply of goods and services. Prices fall—or don't rise as rapidly—and life becomes more affordable for the masses. It's the market's general tendency when we leave people alone. As the economist Ludwig von Mises explained, capitalism turns luxuries into necessities.[37] If you're a professor and want a concrete suggestion, you can make higher education "more affordable" by teaching extra classes.

Grasping economics, then, should increase your serenity and your optimism. As the theologian Michael Horton has argued in his book *Ordinary: Sustainable Faith in a Radical, Restless World*, the calling for most Christians is to live a quiet life of service to one's family, church, community, and employer.[38] Most people are "ordinary," God calls them to ordinary, dignified lives, and they are at the heart of economics. Mere economics shows how living an ordinary, dignified life creates extraordinary results.

If the Reformation reasserted the dignity of ordinary work by ordinary people, economics provides a rigorous intellectual foundation for that theological insight. Business is one of the most effective ways for people to discover others' wants and meet them. We talk to many students concerned that working anywhere other than the nonprofit sector is unfaithful if not sinful. Once you understand profit (chapter 6, essential 8), such baseless fears evaporate.

There are, of course, two caveats. First, ask, "Am I creating new value through my vocation? Or am I merely transferring the value others have made by convincing the government to slice the pie differently?" If the latter, you're not making. You're taking. Your taking is a kind of theft, as we discussed at the end of chapter 3. A second question follows: "Am I catering to humanity's sinful preferences with what I'm producing?" If not, you're making the world a better place through your making.

Concretely, being a Walmart cashier is a dignified calling because you serve people while providing for your family. Win-win. Walmart logistics wizards likewise have dignified and dignifying careers. They create wealth by helping Walmart distribute more efficiently today than it did yesterday. That's wealth that can be used to enrich your community. It's wealth that can cure your child of illness or provide them with an education in a decade. And make no mistake, the logistics people create wealth. Thomas Sowell notes, "Inventory is a substitute for knowledge."[39] Having "stuff" on hand is necessary if we are going to meet consumers where (and when!) they are.

What do we do with what we produce? First, we can enjoy it for God's glory. Thoughtful, prayerful consumption is a form of worship. He gives good gifts to his children, and we are the unmeriting beneficiaries of his goodwill.[40] To enjoy goods for God's glory is not to live ostentatiously, extravagantly, or conspicuously. Rather, it is to live with hearts full of gratitude for God's gracious provision.[41]

Second, we can save an ever-growing share of what we produce. The more we save, the more resources we can direct toward producing *future* output. Savings sustain workers by providing wages before the final output is produced. You might hear on or read in the news that consumption drives economic progress. It has a certain appeal. Businesses will not produce what they do not expect to sell, and the individual businessman selling cars, boats, or groceries does well only as long as people buy his wares.

However, lowering consumption spending and replacing it with saving does not mean a reduction in business activity. It entails reformulation, and eventual expansion, of commercial affairs.[42] When people save, less labor and capital are needed in retail, and Walmart does not expand as rapidly as it typically has. Maybe it shrinks. This frees up resources that can be directed toward projects, like mining, that might not pay off for quite some time. Economics says that when we save more, we can eventually produce more. Do you really want that thing? If yes, then enjoy it to God's glory. If not, put it back on the shelf. Free enterprise does not "depend" on your mindless consumption, and you shouldn't listen to anyone who tells you it does. Want an easy way to help the poor? Save. Take less now so we can bake a bigger pie next year.

How Should We Then Live?

Our world would blow Joan of Arc's mind. Genghis Khan, Louis XIV, and Queen Victoria would be astounded by connected, rich, clean, peaceful, and long lives not only for their descendants but for the descendants of those they conquered and ruled. They might be more astounded by the fact that we prosper despite their conquests and are rich not because they ruled military and political empires but because we tolerated and even celebrated innovators like Sam Walton who created globe-spanning, consumer-ruled commercial "empires."[43]

But all is not well. Hundreds of millions of people still live in extreme poverty, even people who have escaped extreme poverty face daunting challenges, and nothing you can get at Walmart will satisfy your soul's deepest longings. What do we do about it?

At the end of chapter 1, we encouraged you to heed Scripture's admonition to "Get wisdom, and whatever you get, get insight."[44] Check our footnotes for all sorts of other things you can read to explore mere economics further and "get insight." We think studying the social world God has created is valuable for its own sake. German mathematician Johannes Kepler allegedly wrote, "I was merely thinking God's thoughts after Him. Since we astronomers are priests of the highest God in regard to the book of nature, it benefits us to be thoughtful, not of the glory of our minds, but rather, above all else, of the glory of God."[45] People debate whether Kepler actually wrote that, but we agree wholeheartedly with whoever wrote it and think it applies to mere economics if you replace "astronomers" with "economists" and "nature" with "society."

Mere economics helps us do more than contemplate God's good creation. It helps us participate actively, humbly, and effectively in restoration work. A lot of our "helping" doesn't, and in many cases, we could do the most good just by staying out of the way and attending prayerfully to our own affairs—not because we don't care but (once again) because we're likely to make things worse.

So how do we cooperate on God's restorative work? Ephesians 2:10 says, "For we are his workmanship, created in Christ Jesus for good works, which God prepared beforehand, that we should walk in them." We think our steps should be inconspicuous and we can't improve on Jesus's words in Matt 6:1–4:

> "Beware of practicing your righteousness before other people in order to be seen by them, for then you will have no reward from your Father who is in heaven. Thus, when you give to the needy, sound no trumpet before you, as the hypocrites do in the synagogues and in the streets, that they may be praised by others. Truly, I say to you, they have received their reward. But when you give to the needy, do not let your left hand know what your right hand is doing, so that your giving may be in secret. And your Father who sees in secret will reward you."

"Make More, Take Less" may not get you a chapter in a new version of *Foxe's Book of Martyrs*, but it is a good place to start.[46]

We won't always get it right. When asked why things aren't as good as they conceivably could be, Adam Smith famously wrote that "there is a great deal of ruin in a nation."[47] Looking at our own lives, we see that there is also a great deal of ruin in a Christian.[48] God created us for eternal paradise, our first parents fell, and we add to that original sin each day as members of Adam's fallen race.

In his goodness and mercy, however, God created a way for us to be redeemed through Jesus Christ's life, death, burial, resurrection, and ascension on our behalf. In his wisdom, he has created a world with principles we can understand and invited us to partake in his restoration work. We can do justice, love mercy, and walk humbly with our God by prayerfully and praisefully doing the work he has set before us.[49] We're with C. S. Lewis in adopting "the Christian view that this is a good world that has gone wrong, but still retains the memory of what it ought to have been."[50] And so we echo the apostle Paul's words: "Aspire to live quietly, and to mind your own affairs, and to work with your hands, as we instructed you."[51]

Soli deo gloria. Amen.

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[1] Frederic Bastiat, *The Collected Works of Frederic Bastiat*, vol. 3, *Economic Sophisms* (Indianapolis: Liberty Fund, 2011), 72.

[2] C. S. Lewis, *Mere Christianity* (New York: Macmillan, 1943), 73.

[3] Again, see R. J. Rummel, *Death By Government* (New Brunswick, NJ: Transaction Publishers, 1997). *Not* counting the wars, governments killed 262 million people in the twentieth century.

[4] James Porter Moreland, *Love Your God with All Your Mind: The Role of Reason in the Life of the Soul* (Carol Stream, IL: Tyndale House, 2014).

[5] Cf. 1 Cor 13:13.

[6] F. A. Hayek, "The Use of Knowledge in Society," *American Economic Review* (1945): 527.

[7] Ps 139:6.

[8] James M. Buchanan, "Natural and Artifactual Man," in *The Collected Works of James M. Buchanan*, vol. 1, *The Logical Foundations of Constitutional Liberty* (Indianapolis: Liberty Fund, 1979), 259.

[9] Phil 2:12; see also Deirdre N. McCloskey, *The Bourgeois Virtues: Ethics for an Age of Commerce* (Chicago: University of Chicago Press, 2006); Edmund Phelps, *Mass Flourishing: How Grassroots Innovation Created Jobs, Challenge, and Change* (Princeton: Princeton University Press, 2013).

[10] McCloskey, *Bourgeois Virtues*; McCloskey, *Bourgeois Dignity: Why Economics Can't Explain the Modern World* (Chicago: University of Chicago Press, 2010); McCloskey, *Bourgeois Equality: How Ideas, Not Capital or Institutions, Enriched the World* (Chicago: University of Chicago Press,

2016); Deirdre N. McCloskey and Art Carden, *Leave Me Alone and I'll Make You Rich: How the Bourgeois Deal Enriched the World* (Chicago: University of Chicago Press, 2020).

[11] Lewis, *Mere Christianity*, 139.

[12] Lewis, 140.

[13] Lewis, 141.

[14] Lewis, 134.

[15] Lewis, 134.

[16] Lewis, 134.

[17] Lewis, 129.

[18] Lewis, 131.

[19] Lewis, 131.

[20] Lewis, 131.

[21] Lewis, 79.

[22] Lewis, 79.

[23] Lewis, 79.

[24] Lev 19:35–36.

[25] Lev 19:13.

[26] Lewis, *Mere Christianity*, 78.

[27] Lewis, 79.

[28] Lewis, 76.

[29] Lewis, 77.

[30] Lewis, 77.

[31] Luke 14:28.

[32] 1 Thess 5:17. J. R. Clark and Dwight R. Lee refer to the market's "mundane morality." J. R. Clark and Dwight R. Lee, "Econ 101 Morality: The Amiable, the Mundane, and the Market," *Econ Journal Watch* 14, no. 1 (2017): 61–76.

[33] C. S. Lewis, *God in the Dock: Essays on Theology and Ethics*, ed. Walter Hooper (1970; repr., Grand Rapids: Eerdmans, 2002), 106.

[34] Jas 2:20.

[35] Jas 2:16.

[36] 1 Thess 4:11–12.

[37] Ludwig von Mises, *Economic Freedom and Interventionism* (Indianapolis: Liberty Fund, 1990), 35–36.

[38] Michael Horton, *Ordinary: Sustainable Faith in a Radical, Restless World* (Grand Rapids: Zondervan, 2014).

[39] Thomas Sowell, *Basic Economics: A Common Sense Guide to the Economy*, 5th ed. (New York: Basic Books, 2015).

[40] Jas 1:17.

[41] Eph 5:20.

[42] For a deep dive into what this process looks like, see Roger W. Garrison, *Time and Money: The Macroeconomics of Capital Structure* (London: Routledge, 2000).

[43] For more on the concept of "consumers' sovereignty," see W. H. Hutt, *Economists and the Public* (New Brunswick, NJ: Transaction Publishers, 1936 [1990]).

[44] Prov 4:7.

[45] "Johannes Kepler," Wikiquote, https://en.wikiquote.org/wiki/Johannes_Kepler, last accessed June 20, 2024.

[46] Foxe, *Foxe's Book of Martyrs* (London: Morgan & Scott, 1899).

[47] Adam Smith, *The Correspondence of Adam Smith*, ed. Ernest Campbell Mossner and I. S. Ross, Glasgow ed., Adam Smith 6 (Indianapolis: Liberty Fund, 2007), 536.

[48] Rom 7:14–25.

[49] Mic 6:8.

[50] Lewis, *Mere Christianity*, 42.

[51] 1 Thess 4:11.

GLOSSARY

Business firm: A group of productive resources owned by an entrepreneur engaged in production for sale

Capital goods: Durable goods people make in order to generate a stream of future goods

Capitalism: A social system where the means of production are privately owned

Cartel: A group of sellers attempting to coordinate their actions in order to maximize their collective profits

Command economy: An economy organized and directed by a central authority, like a planning board

Competition: Striving to meet the criteria by which a scarce resource is allocated

Complements (in consumption): Goods consumed in tandem

Consumer goods: Goods that satisfy a consumer's want directly, as opposed to capital goods, which produce additional goods

Cooperation: Interaction that benefits both parties

Corporation: A business firm owned by shareholders

Creation Mandate: God's command in Genesis 1 to be fruitful, multiply, fill the earth, and subdue it

Cronyism: A system of government favoritism toward certain firms

Demand: The inverse relationship between price and the number of units buyers wish to purchase, all else held constant

Division of knowledge: The coordinated division of production that harnesses the vast, dispersed, and often tacit knowledge of society's members in order to achieve more from working together than we could alone

Division of labor: The coordinated division of production into a number of different tasks in which people specialize in order to achieve more from working together than we could alone

Economic progress: Sustained increases in the quantity and quality of available goods

Economy: A social system for organizing production in order to satisfy human wants

Entrepreneurship: Acting on forecasts about future market conditions in hopes of profit

Equilibrium: A state of rest persisting because no one has an incentive to change what they are doing

Externality: When an action produces costs or benefits that spill over onto someone else; the party generating the spillover does not bear the cost or reap the benefit of the spillover

Factors of production: Land, labor, and capital goods which are used to generate other goods (either more capital goods or consumer goods)

Fixed cost: A cost of production that does not vary with the number of units produced

Formal institutions: Rules that are explicitly articulated and codified (e.g., the US Constitution)

Gains from trade: The benefits that buyers and sellers receive from exchange

Good: A scarce means for satisfying a human want

Great Enrichment: The dramatic increase in per-person living standards that began in Western Europe during the late eighteenth-century and which continues to spread around the world to the present moment

Informal institutions: Rules that are unarticulated and not codified (e.g., the practice of shaking hands upon meeting someone)

Invisible hand: Adam Smith's metaphor for describing how market institutions of property, prices, and profit and loss channel people's own interests toward socially productive outcomes

Law of demand: All else held constant, quantity demanded falls when the price rises

Law of marginal utility: Each unit of a larger stock has less value than each unit of a smaller stock, all else constant

Law of supply: All else held constant, quantity supplied rises when the price rises

Loss: Net deprivation from an action; in the pecuniary sense, the excess of costs over revenues

Market: A network of voluntary exchanges

Minimum wage law: A price floor in the labor market

Money: A commonly accepted medium of exchange

Monopoly: A grant of special privilege by the state (what we think is the most analytically fruitful definition); the single seller of a good or service (the way many people define the word)

Network good: A good which gains in value with the number of people who own a unit, all else held constant

Opportunity cost: The highest-valued alternative sacrificed when a choice is made

Price: What the buyer pays to the seller in a voluntary exchange, usually denominated in money but also expressible as exchange ratios between goods

Price ceiling: An upper limit, established by government, on legally allowable prices

Price floor: A lower limit, established by government, on legally allowable prices

Private property right: The exclusive right to the services of a resource and the right to exchange the resource on mutually agreeable terms

Production: Transformation of the physical environment so that it is more suited to satisfying human wants

Profit: The net gain from an action; in the pecuniary sense, the excess of revenues over costs

Rational choice: The framework built on the idea that people have goals and pursue those goals as effectively as they can given the circumstances they face; an implication is that people do more of something when it becomes cheaper and less of something when it becomes costlier

Rational ignorance: When the cost of becoming informed outweighs the benefit, people remain ignorant

Rules: Prescriptions that regulate and guide interpersonal interactions

Samaritan's Dilemma: A problem of charity wherein the recipient of aid may change his or her behavior in order to become eligible for more aid

Scarcity: Any good is scarce when the amount available is less than the amount freely available in nature

Shortage: Occurs when the price is low enough such that the quantity buyers wish to buy exceeds the quantity sellers wish to sell

Socialism: A social system characterized by government ownership of the factors of production

Specialization: Intentional production of more of a good than one consumes with the unconsumed product sold in a market

Subjective value: Each individual has their own preferences for objects and courses of action

Subsidy: A government payment rewarding a specific choice, funded by taxes

Substitutes (in consumption): Goods which consumers treat as rivals in consumption

Supply: The direct relationship between price and the number of units sellers wish to sell, all else held constant

Surplus: Occurs when the price is high enough such that the quantity sellers wish to sell exceeds the quantity buyers wish to buy

Tariff: A tax on imports

Tax: A coerced levy, paid to the government

Tort: A civil wrong, resulting from an action or a failure to act, that causes harm

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